

**POVERTY ALLEVIATION
IN SOUTH AFRICA:
CAN GOVERNMENT FISCAL EXPENDITURE
ON SOCIAL SERVICES MAKE A
DIFFERENCE?**

BY
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DECLARATION

I declare that the work presented in this dissertation is my own and has not been submitted to any other university for the purpose of a degree. Materials used from other sources have been duly acknowledged.



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Anima Dua-Agyeman

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DEDICATION

This dissertation is dedicated to my family and friends: thank you all for showing me the love, support and encouragement I needed to see me through this thesis.

ABSTRACT

This study examines how the South African government's expenditure on social services impacts on the poverty levels in the country. To provide a background on poverty, different concepts and views on the subject are reviewed and then the nature and distribution of poverty in South Africa are discussed.

In post-apartheid South Africa, the thrust of macroeconomic framework and corresponding policies implemented by the democratic government have been geared towards poverty alleviation, employment creation and national output expansion (economic growth). This study examines the trends in government expenditure on social services and uses econometric analyses to further investigate the effects of government spending on social services on the poverty levels in South Africa.

Economic growth and employment opportunities will have to exist and complement fiscal redistribution to enable the poor lift themselves out of poverty in the long run. Improved targeting methods that correctly identify the poor could also ensure that social spending reaches the intended poor, thus narrowing the gap between macro policies and the poor, and preventing a waste of resources.

Various poverty alleviation measures have been implemented, of which redistribution through the budgetary policy is an important one. As part of its package towards addressing the poverty problem, the post-apartheid government in South Africa has consistently been injecting considerable amounts of resources on *inter alia*, education, housing, welfare and health services. The initial results indicate that fiscal redistribution on its own is inadequate in combating poverty in South Africa. Models that incorporate economic growth and unemployment show that expenditure on social services do impact on poverty alleviation, in particular expenditure on housing, education and welfare. Further regression analyses show that poverty can be tackled through economic growth and employment creation. In short, there cannot be significant fiscal redistribution unless the South African economy registers high levels of economic growth and job creation.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
BIG	Basic Income Grant
CBO	Community Based Organisation
CCF	Country Cooperation Framework
CPI	Consumer Price Inflation
CPM	Capability Poverty Measure
CSG	Child Support Grant
CSO	Civil Society Organisations
EPWP	Expanded Public Works Programme
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution Strategy
HDI	Human Development Index
HDR	Human Development Report
HIV	Human Immune Virus
HPI	Human Poverty Index
HSL	Household Subsistence Level
HSRC	Human Science Research Council
IES	Income Expenditure Survey
IDP	Integrated Development Plan
IMR	Infant Mortality Rate
MDG	Millennium Development Goals
MLL	Minimum Living Level
MTEF	Medium Term Expenditure Framework
NGO	Non-Governmental Organisation
OLS	Ordinary Least Squares
OECD	Organisation of Economic Cooperation and Development
OHS	October Household Survey
PCA	Principal Component Analysis
PIR	Poverty and Inequality Report
RDP	Reconstruction and Development Programme
SA-PPA	South African Participatory Poverty Assessment
SARB	South African Reserve Bank
SETA	Sector Education and Training Authorities
SLL	Supplemental Living Level
SMME	Small Micro and Medium Enterprises
STATSSA	Statistics South Africa
TBVC	Transkei, Bophuthatswana, Venda and Ciskei
UBN	Unmet Basic Needs
UN	United Nations
UNDP	United Nations Development Programme
VIF	Variance Inflating Factor
WB	World Bank

CHAPTER ONE

INTRODUCTION

Poverty is a topical issue all over the world, affecting millions of people, especially in Africa and Asia. According to the World Bank (2001 :vi), of the world's six billion people, 2.8 billion live on less than \$2 a day, and 1.2 billion on less than \$1 a day. For a long time, poverty was described in terms of income inadequacy, but recently attempts have been made to incorporate broad social well-being and quality of life as indicators of poverty. Poverty exists "when an individual's or a household's access to income, jobs and infrastructure is inadequate or sufficiently unequal to prohibit full access to opportunities in society. The condition of poverty is caused by a combination of social, economics, spatial, environmental and political factors. Due to the multiplicity of causal factors and their spatial dynamics, individuals and households may move in and out of poverty depending on stages in life-cycle and shifting political economy patterns. Poverty is therefore much more than a lack of adequate income" (Parnell and Pieterse, 1999; cited in Pieterse and van Donk, 2002:20).

South Africa is classified as a middle income economy, yet it is plagued with high levels of poverty and inequality as a substantial proportion of its population is characterised by various deprivations while a small percentage enjoys standards of living comparable with those in developed countries. Since 1994, the government has been striving to address these poverty issues. Fiscal allocations to social services are made each year to address the needs of the poor.

This study will examine the extent of poverty in South Africa in recent times and analyse the responses (in terms of programs and frameworks) that have been implemented in the country in an attempt to tackle different forms of poverty. The econometric study focuses on the South African government's redistributive measures and assesses how government's expenditure on social services contributes to the alleviation of poverty over the period 1983-2001.

This first chapter gives an overview of the study and outlines the contents of the subsequent chapters. The next chapter discusses some concepts and theories relating to poverty as well as its measurement and causes. Chapter three looks at the nature and distribution of poverty in South Africa. Chapter four focuses on strategies that tackle poverty and examines the policy framework that addresses poverty in the country. The incidence and trend of government fiscal expenditure on social services is also examined. Chapter five makes use of econometric analyses to determine the extent to which redistribution (in real terms) through the fiscus has contributed to the alleviation of poverty in South Africa in the past two decades. Chapter six concludes the study with some policy recommendations.

1/10/19

CHAPTER TWO

LITERATURE AND THEORY ON POVERTY

2.1 Introduction

Over the past few years considerable efforts have been made in the research and policy circles to increase knowledge and understanding about poverty and how to combat it. Poverty is a widespread and multifaceted problem, particularly in the African countries. It has relative and absolute dimensions and can mean different things to different people. In its simplest form, a household can be regarded as being poor if it lacks the resources to satisfy the most basic needs. This problem of poverty is highly linked to inequality in the distribution of income and a prolonged lack of income also leads to chronic poverty. This chapter will discuss the nature of poverty, address the different approaches to its measurement and also look at some of its causes and consequences.

poverty is linked to inequality.

2.2 Conceptualising Poverty

2.2.1 Definitions and Views on Poverty

Poverty is a multidimensional phenomenon that manifests itself in a number of ways, such as lack of income, insufficient resources and vulnerability to social, political, environmental and economic shocks. Individuals and households become vulnerable because they lack the assets and resources that can enable them to cope with or manage the negative effects of external shocks (Mokate, 1999:187). Poverty means different things to different people and it shows itself differently. Thus its definitions and measurement are ever-changing.

Even though there are different approaches to the understanding of poverty, it can be generally defined as the inability of individuals, households or entire communities to command sufficient resources to satisfy a socially acceptable minimum standard of living (May, 2000:5).

According to Jeffrey Sachs (cited in Time, 2005:31), when it comes to defining poverty, three degrees can be identified: extreme or absolute poverty, moderate poverty and relative poverty. Extreme poverty, defined by the World Bank as managing on an income of less than US\$1 a day, describes a situation whereby households cannot meet basic needs for survival. They are chronically hungry, unable to get health care, lack safe drinking water and sanitation, cannot afford education for their children and may also lack adequate shelter and basic articles of clothing and shoes. Extreme poverty can be described as "poverty that kills." Moderate poverty, defined as living on US\$1 to US\$2 a day, relates to conditions where basic needs are met, but just barely. Lastly, relative poverty, defined by households whose income level fall below a given proportion of the national average, means lacking things that the middle class would take for granted.

The World Bank

The World Bank defines poverty as the inability of people to attain a minimum standard of living. This World Bank definition classifies a person as being **extremely poor** if he/she earns **an income of less than US\$ 1 per day**. This figure is adjusted for purchasing power parity to allow for an international comparison of poverty across countries. To classify the total poor, the World Bank identifies an upper poverty line of US\$370 and a lower poverty line of US\$275 per person a year, under which people are considered to be extremely poor (World Bank, 1990:27).

The United Nations

The United Nations, on the other hand, characterises poverty by concentrating not only on the income levels of a population; rather it also takes into account social indicators such as life expectancy, health provision, education. The UNDP (United Nations Development Programme) developed the Human Poverty Index (HPI) and the Human Development Index (HDI) as alternative indices that incorporate social indicator variables; these indices can be used to compare the level of development and progress of countries.

There is a clear difference between the main indicators and measures of poverty and development used by the World Bank and the UNDP, the former concentrates on income measures while the latter has a broader view of poverty (and development) as multi-dimensional. As a result, policies emphasized by the two organisations differ; whereas the World Bank stresses labour-intensive economic activities, the UNDP would give more emphasis to developments in the social services like education and health (Thomas, 2000:16; Thirlwall, 1999:21,30). The different measurements of poverty will be tackled in subsequent sections of this chapter.

The Capability Perspective

Sen's approach to poverty argues that the goal of human development and poverty reduction should be to expand the capability that people have so that they have the freedom to choose and enjoy options they regard as being valuable. Human development is defined by the expansion of capabilities and deprivation, on the other hand, is characterised by the lack of basic or essential capabilities. Sen agrees that a lack of adequate income is a strong predisposition to an impoverished life but argues that poverty arises from more fundamental deficiencies, and thus must be seen as the deprivation of basic capabilities instead of a mere lowness of incomes (Sen, 1999:75&87).

Addressing poverty would thus require an expansion of capabilities and the following have been identified as important elements in the expansion of individual, household and community capability:

- Availability of assets, claims and resources;
- Activities that can be undertaken to generate a sustainable livelihood;
- Commodities and services that are required by people for an acceptable standard of living (Sen, 1984: 509-510; cited in May, 2000:8).

Four broad categories of assets, claims and resources can be identified and they are: human capabilities, natural resources, social and institutional assets and human-made assets. These assets can be used for development and Table 2.1 summarises the components of a potential "asset portfolio" of individuals and households.

Table 2.1 Wealth Base

WEALTH OR "ASSET PORTFOLIO"			
Human Capabilities	Social & Institutional assets	Natural resources	Human-made assets
Labour	Legal claims on state and private sector (pensions)	Land	Finance (savings and access to credit)
Technical, administrative & entrepreneurial skills	Legal and moral claims on household and community (maintenance, charity)	Ground and surface water	Machinery and tools
Health & nutritional status	Access to individual and community decision-making power and structures	Common property (communal grazing land and woodlots)	Crops and livestock
Knowledge/Education	Access to horizontal and vertical networks and institutions	Ground cover and its bio-diversity (forest and wildlife)	Housing and other buildings
Capacity to adapt and cope	Norms and values (trust, altruism or rule breaking)		Productive infrastructure (roads and dams)
			Domestic infrastructure (schools and energy or water reticulation)
			Social infrastructure (community halls)

Source: May, 2000:10

Poverty and vulnerability are created by interrelated factors and the absence of certain forms of wealth, as shown in the above table, may undermine the position of individuals and households, leading to a reduced ability to recover from shocks and negative long term trends. The factors highlighted in Table 2.1 constitute different dimensions of poverty that could be addressed in any anti-poverty initiative (May, 2000:8-10; Mokate, 1999:188).

The classification of individuals, households and entire nations as being poor is a complex issue due to the various aspects of poverty. What is regarded as poverty may differ relative to the norms of each particular society and also different measures of poverty may capture different elements of poverty. The following section highlights some of these dimensions of poverty.

Dimensions of Poverty

Alkire (2002:182), describes a dimension as "any of the component aspects of a particular situation." The condition of poverty manifests in various ways and although it has come to be defined as a lack of income by many organisations and writers due to ease of measurability, it is widely accepted that the concept of poverty extends beyond low levels of income. The World Bank's Sourcebook for Poverty Reduction Strategies (Klugman, 2002:2) considers the following as dimensions of poverty:

- Lack of opportunity - concerns low levels of consumption and income that is usually relative to a national poverty line. This is generally associated with the level and distribution of human capital and social and physical needs, such as land and market opportunities that determine the returns to these assets.
- Low capabilities - concerns low or no improvements in health and education indicators among a particular socioeconomic group.
- Low level of security - concerns the exposure to risk and income shocks that may arise at the national, local, household or individual levels
- Empowerment - this is the capability of the poor people and other excluded groups to participate in, negotiate with, change and hold accountable institutions that affect their well-being.

The analysis of poverty using multiple dimensions highlights the fact that poor individuals suffer from multiple deprivations. The expanded view of poverty is widely supported as it is more encompassing of the various facets of poverty. However, it is important to note that the broader dimensions are more difficult to measure than the more conventional and standard measures.

The dimensions identified above indicate that poverty has both material and non-material dimensions and these can be expressed at three levels, the community, household and individual.

- (a) For communities (shortage of social collective infrastructures, urban infrastructures, violence, unequal status of women, etc.);
- (b) For households (insufficient access to social services, inadequate responses to basic needs, difficult access to lodging and to potable water, insufficient health coverage and unprotected health situations...); and
- (c) For individuals (unemployment, malnutrition, absence of social recognition, marginalisation and exclusion, absence of actual citizenship and political power...) (AFRICAUCUS, 1999:3)

Literature on poverty also identifies the extent to which individuals and households are caught up in poverty traps over time. Poverty traps occur when certain factors have the potential to lead households into poverty; these factors include ill health, death, business failure, natural disaster and family breakdown. The existence of poverty traps without adequate measures to enable households escape from poverty can lead to persistent poverty.

Persistent poverty, which is poverty experienced over long periods, is usually referred to as chronic poverty and according to Hulme and Shepherd (2003:404), chronic poverty occurs "when an individual experiences significant capability deprivations for a period of five years or more." The length of time is arbitrary because the chronically poor are those who remain poor for most of their lives. Aliber (2003:476), adds that "chronic poverty is often conceptualised as poverty that is transmitted from one generation to the next, usually meaning that children from poor households are likely to become poor adults, whose children will in turn risk remaining in poverty." Owing to the past policies of apartheid and colonialism, most of the poverty in South Africa has been intergenerational. Poverty was transmitted not only through consecutive generations of households that were faced with a lack of opportunity to accumulate human and other

capital but also at the community level as there was a deprivation of infrastructure and amenities. Further, such communities were often situated in remote, marginal areas without economic prospects. The constant constraint on assets and resources allowed forces to act and react with one another in a recurring cycle, an occurrence usually referred to as a vicious cycle of poverty. This is also characterised by low levels of productivity, low income, low savings and low levels of investment.

Transient poverty, on the other hand, refers to a situation whereby there is a movement in and out of poverty over time; people experience poverty for short periods of time due to temporary shocks. The experience of poverty indicates that poverty is not a static condition. Some individuals, households and communities may be permanently poor but others may move in and out of poverty. The risk that a household will be unable to recover from shocks and thus experience highly stressful declines in income, consumption and/or capabilities, leading to poverty or extreme poverty, is referred to as vulnerability. May (2000:7) also refers to vulnerability as "the negative outcomes of processes of change. These may be economic, social, environmental or political and may take the form of long-term trends, "shocks" or cyclical processes such as seasonality." Measures that address vulnerability require the examination of assets that enable people to mitigate the impact of threats as the accumulation of assets reduces insecurity, vulnerability and the associated poverty (May, 2000:7). The distinction between chronic and transient poverty is thus important for policy purposes as different policies will be appropriate for each (McKay and Lawson, 2003:425).

2.3 Measuring Poverty

The World Bank, which defines poverty as the inability of people to attain a minimum standard of living, has estimated that the total number of people living in extreme poverty is about 1.1 billion (Time, 2005:31). The analysis of well-being and thus the computation of a poverty measure require three components:

- Choosing a relevant dimension and indicator of well-being - This concerns how standard of living is measured in a society. It can be done using monetary

measures/indicators such as income, expenditure or consumption. Alternatively, well-being can be measured using non-monetary indicators, such as health, nutrition and literacy.

- Determining a minimal living standard - once a measure is chosen a poverty line has to be defined. This gives an indication of what is meant by a minimal standard of living and it separates the poor from the non-poor. Multiple lines can be used to distinguish among different levels of poverty and the absolute and relative poverty lines are the two most commonly used. The choice of a poverty line is arbitrary however to ensure wide understanding and acceptability of a poverty line, it is important that the chosen line aligns with social norms so that there is a common understanding of what represents a minimum.
- Depicting the extent of poverty in a single index - poverty measures have to be chosen and estimated to provide an indicator of household and individual well-being. Many measures exist but those most commonly used are headcount index, which measures the incidence of poverty; poverty gap, which measures the depth of poverty; and squared poverty gap, which measures the severity of poverty (Thirlwall, 1999:20; Klugman, 2002:30-35).

The World Bank's definition requires an income approach to the measurement of poverty though living standards can be measured in a variety of ways. Before discussing the various approaches, it is perhaps important to highlight some poverty-related concepts that are often used in the literature in development economics.

Poverty line - is calculated and taken as an arbitrary per capita income figure that is sufficient to provide a minimum acceptable level of consumption. This is done to help measure poverty and make comparisons. It is important and interesting to note that in South Africa there seems to be no nationally accepted poverty line and thus various research papers have computed/used poverty lines aimed for a specific study.

Headcount index - measures the number of people who fall below the poverty line (sometimes expressed as a proportion of the population). One weakness of the headcount

index is that it ignores the extent to which the poor fall below the poverty line and thus crude comparisons between countries can be misleading.

Poverty gap - is used to overcome weaknesses in the headcount index; it measures the transfer of income required to bring the income of every poor person up to the poverty line (Thirlwall, 1999:21).

The poverty line is a cut-off point that separates the poor from the non-poor, while the headcount index measures the incidence of poverty. The poverty gap measures the depth of poverty in a society. The following section will discuss a few different approaches to the measurement of poverty.

2.3.1 The Income or Expenditure Approach

The income approach is based on an individual's (or household's) real income or expenditure. This method classifies a person as being poor if his or her income or expenditure is below a particular value or level i.e. the poverty line. There are three different types of poverty line.

Absolute Poverty Line

The absolute poverty line is fixed at a value of income or expenditure that is necessary to acquire goods and services regarded as essential for a minimum standard of living. According to Joshi (1997;cited by Ngwane et al, 2001:202), the criteria that can be used to derive the poverty line are the proportion of expenditure taken up by specified essential items; the calorie value of food, the cost of a balanced diet and the cost of essentials for a tolerable human existence. The absolutely poor people in the society are thus characterised by an inability to attain minimal standards of consumption to satisfy basic physiological needs, like food, shelter and clothing. Absolute poverty is measured as the proportion of a region's population with real incomes below the poverty line; the actual number of people who fall in this category are thus classified as being absolutely poor (Todaro, 2000:49).

Relative Poverty Line

A household is defined as "poor" in relation to the overall distribution of income or consumption in a society or economy. This line may be set at 50% of the country's mean income or consumption, and any household that falls below this value is regarded as poor (Klugman, 2002:33).

Subjective Poverty Line

According to Seoane (1997; cited by Ngwane et al 2001:203), subjective poverty lines are based on households' perception of their needs. The advantage of these poverty lines is that even though they use income as a monetary indicator of standard of living, they do not require the use of equivalency scales as the households take size into account when providing the information on income.

Income measures of standard of living do not take into account certain factors, such as different levels of nutrition, life expectancy, infant mortality and schooling, which are essential determinants of standard of living. Thus, to capture multiple dimensions of poverty, income measures are usually supplemented by other measures. Some other measures of living standards include the purchasing power parity (PPP) method and the food energy method. Apart from the income measure of poverty developed by the World Bank, other alternative indices/measures have been developed and these take into account social indicators such as life expectancy, health provision and education etc (Thirlwall, 1999:20). The approaches discussed below take some of these aspects into consideration to allow a more "holistic" measurement of poverty.

2.3.2 The Unmet Basic Needs (UBN) Method

Millions of people around the world are characterised as being poor because their "basic needs" are not adequately satisfied. Basic needs refer to conditions necessary to achieve a full and healthy life. Basic needs, as referred to by many writers, include a basic level of literacy, an adequate level of nutrition, safe drinking water, satisfactory sanitation, access

to health care and freedom from preventable diseases as well as the prospect of acceptable and reasonably fulfilling employment (Ingham, 1995:237).

The UBN approach is thus concerned with how a household satisfies its needs by analysing the products consumed by the household. A unit is regarded as poor if the thresholds for all or some of the different basic needs are not reached. This method does not only focus on food and non-food/subsistence items, it also concentrates on the lack of access to basic aspects such as safe drinking water, health and education (Ngwane et al, 2001:203).

The specification and quantification of basic needs poses as a potential problem because the notion may vary across cultures and societies. To develop a cross cultural classification of basic needs, it has been suggested that instead of going for a specific bundle of goods and services societies should aim to provide appropriate thresholds for people based on data generated by sociobiologists on human needs. Four thresholds that have been identified are as follows:

1. The heat-retention threshold, which requires certain levels of shelter, clothing and energy, depending on the physical and economic characteristics of a specific society.
2. The crowding threshold, which raises the need for standards of space and shelter to avoid certain negative behaviours and attitudes e.g. aggression
3. The social interaction threshold, which calls for a minimum provision of places and institutions for sociality that would allow individuals and households to exercise their need to communicate, cooperate and establish relationships.
4. The access threshold, which enables people to see themselves as individuals refers to the minimum provision of conventionally defined basic needs i.e. health, education, employment (Weigel, 1986; cited by Ingham, 1995:237).

Weigel's attempt to develop a cross-cultural approach to human needs and move from a "goods-centred" approach of traditional economics provides important insights for policies that address basic needs because the threshold concept takes a broader view of

human communities as it focuses on a core set of attributes that constitute defining features of human life (Ingham, 1995:237).

An empirical investigation of the fulfilment of basic needs by Hicks and Streeten (1979:578, cited in Ingham, 1995:237), suggests certain basic needs indicators and these are listed in Table 2.2.

Table 2.2 Core Basic Needs Indicators

Basic Need	Quantitative Indicator
Health	Life expectancy at birth
Education	Literacy Primary school enrolment as percentage of population 5-14
Food	Calorie supply per head or as percentage of requirements
Water supply	Infant mortality (per 1000 births) Percentage of population with access to sanitation facilities
Housing	None

(Hicks and Streeten, 1979:578; cited in Ingham, 1995:238)

The work of Hicks and Streeten, and other subsequent writers, highlighted that basic needs fulfilment and income levels are closely related; however the relationship is non-linear but rather structural. As income per capita increases, basic needs satisfaction increases less and less steeply (Ingham, 1995:238).

The Unmet basic needs approach (UBN) enables the poor to be analysed in terms of their basic needs and also allows for them to be profiled according to thresholds identified by societies. The poor can then be targeted and appropriate policies implemented to establish suitable thresholds for all members of the community. The work of Hicks and Streeten have provided measures for core basic needs and Goldstein (1985:598; cited in Ingham, 1995:239) has shown that increases in basic income can contribute towards the fulfilment of these basic needs in poor countries.

2.3.3 The Capability Approach

Sen's perspective on poverty as deprivation has influenced the United Nations as the concept of the Capability Poverty Measure (CPM), designed to monitor human deprivation, has been introduced in the Human Development Reports (HDRs) by the United Nations Development Programme. The annual HDRs currently provide data on the nature of deprivation in different parts of the world (Sen, 1999:318). The CPM measure focuses on capability poverty as opposed to income poverty.

The CPM index is obtained by a simple arithmetic mean of three indicators: the percentage of children under five who are under- weight (C_1), the percentage of births unattended by trained health personnel (C_2) and the percentage of women aged 15 years and older who are illiterate (C_3).

$$\text{CPM index} = (C_1 + C_2 + C_3) / 3$$

The three variables of the CPM cover considerable ground, they provide indications of health and nutrition for the population as a whole (underweight children), access to reproductive health services and a test of people's access to health services in general (unattended births), and basic educational attainment plus information on gender inequality (female adult illiteracy). A distinguishing feature of the Capability Poverty Measure is that it is a 'people-centred' index of deprivation. It attempts to define poverty in terms of lack of basic capabilities and does not focus on lack of access to services, facilities, assets and commodities, which are more characteristic of the Basic Needs approach. It also does not emphasize lack of access to an indirect means to human well-being, such as income, which represents the conventional method of gauging poverty (McKinley, nd).

2.3.4 The Human Poverty Approach

The UNDP developed the concepts of the Human Poverty Index (HPI) and the Human Development Index (HDI) which tend to measure multidimensional poverty at the

national level. The HPI and the HDI give alternative measures of the economic well-being of nations that do not necessarily accord with the usual measure i.e. the level of per capita income. The UNDP's approach to the measurement and reduction of poverty transcends economic growth to human development, which it defines as a process of enlarging people's choices. Human development is seen to depend not only on income but also on social indicators such as life expectancy, education, literacy and health provision (Thirlwall, 1999:30).

The HDI measures a country's economic and social wellbeing and is a composite index of three equally weighted indices:

- life expectancy index,
- educational attainment index and
- gross domestic product (GDP) index.

The index is measured on a scale of 0 to 1, with 0 being the lowest level of development and 1 the highest level. According to the UNDP's South African Human Development Report (2003:44), the South African HDI showed signs of gradual improvement between 1990 and 1995, but thereafter the index declined steadily. In 2002, the HDI value for South Africa was 0.680, indicating a medium level of human development. The decline in South Africa's HDI index has been largely influenced by a declining life expectancy, because even though the GDP index and the education attainment index have shown general positive trends since 1990, the rapid decline of life expectancy after 1995 has been greater than the combined effect of the increase in the GDP and education indices (UNDP, 2003:44).

The Human Poverty Index (HPI) also looks at the distribution of national achievements in human development. It reflects the distribution of progress and measures the backlog of deprivation that still exists. Deprivation is measured in three dimensions of basic human development (same as those in the HDI): longevity, knowledge and a decent standard of living. The notations P_1 , P_2 , P_3 can be used to measure these dimensions, as follows:

P₁: Percentage of people not expected to survive to the age of 40

P₂: Percentage of adults who are illiterate

P₃: The measure of a decent standard of living is based on the average of three indices:

P₃₁: Percentage of people without access to safe water

P₃₂: Percentage of people without access to health services

P₃₃: Percentage of moderately and severely underweight children under 5 years old

$$P_3 = (P_{31} + P_{32} + P_{33}) / 3$$

$$\text{Thus the HPI} = [(P_1^3 + P_2^3 + P_3^3) - 3]^{1/3}$$

Low HPI implies low deprivation in the combined index of the three dimensions. South Africa's HPI was 16.4 in 1995 and in 2001, the value of the index increased to 22.3, indicating a worsening of human poverty as measured by the index during this period. The main contributing factor to South Africa's deteriorating HPI is due to the fact that there has been a reduction in the probability of people surviving to the age of 40 (Ngwane et al, 2001:204; Thirlwall, 1999:30; UNDP, 2003:44).

It is important to note that different measures of poverty give different pictures about the number of people who live in poverty. Poverty can be "viewed narrowly or broadly, however the broader the view, the more encompassing yet the more difficult it is to measure (White and Killick, 2001:10). The above measures each cover different aspects of the many facets of poverty, and they highlight the fact that different measures will portray different features of the poverty issue. Various characteristics of poverty are highlighted in the section below.

2.4 Some Causes and Consequences of poverty

Poverty is a multicausal phenomena and according to White and Killick (2001:xvii), "there is no established theory of poverty, a conceptual framework that allows the identification of the major causal factors in a particular setting." The sources of poverty

may differ from society to society, however the effects of poverty may manifest or show in similar ways. Causes and effect of poverty tend to interact and therefore they are not always easy to distinguish. This section identifies some major causes of poverty and also highlights the consequences thereof in a society.

2.4.1 Causes of Poverty

The following section highlights some major sources of poverty in societies. However it must be mentioned that these factors may not adequately capture all the complexities of poverty in an economy.

2.4.1.1 Lack of Economic Growth

The growth of an economy is linked to the economy's ability to reduce poverty, especially when this economic growth translates to an increase in the incomes of the poor. With economic growth, income poverty falls and with economic contraction, income poverty rises. Poverty can then be said to increase as economic performance declines, as was in the case of many African countries in the mid-1970s (White and Killick, 2001:xvii; World Bank, 2001:35). Factors that hinder growth in an economy will also have implications for the reduction of poverty; some of these are highlighted below.

Inequalities of income and wealth

It is important to note that even though economic growth is associated with poverty reduction, the rate at which growth translates into poverty reduction depends on the initial level of inequality in the distribution of income and wealth and how this distribution changes over time (White and Killick, 2001:xviii; World Bank, 2001:35). In a growing economy, persistent levels of high inequality may exacerbate the poverty problem or at best leave it unchanged. With pro poor growth, the poor stand a chance of benefiting from a redistribution of income and wealth.

[^] Low productivity

Productivity refers to the relationship between real output and the quantity of input used to produce that output and according to Barker (2003:122), "productivity is of critical importance for the long-term well-being of any country". This is because increases in productivity can bring about increases in the real incomes of workers, increased economic growth as well as an increased standard of living for the economy as a whole.

Low productivity leads to low income levels and this can result in lower levels of savings and investment which further hamper future productivity. According to Thirlwall (1999:160), low productivity is seen as a source of the "vicious circle of poverty" because it slows down economic growth and living standards of people in an economy and ultimately this leads to increased poverty levels.

Political Instability

Growth - and its effectiveness in reducing poverty - also depends on sound and stable governance. Macro and political instability as well as conflicts can and have undermined economic performance. Confronting socioeconomic inequalities, building sound institutions and developing effective policies can be important both for providing a socially sustainable basis for overall growth and for ensuring that poor people gain substantially from that growth (White and Killick, 2001:xviii; World Bank, 2001:35).

According to White and Killick (2001:xix-xx), the political context can hold back poverty reduction in four ways: (i) the absence of a stable framework for growth, including the collapse of the state into conflict; (ii) poor service delivery and skewed distribution of services; (iii) the absence of a poverty reduction strategy; and (iv) the inability to target. Governments sometimes act in ways that restrict economic activity and this adversely affects the poor. The state's failure at poverty reduction would thus require that the poor be empowered. However, this empowerment would have to be accompanied by building coalitions for poverty reduction and extending state responsiveness beyond the central level.

2.4.1.2 Lack of Employment and Income

The lack of employment and income is highly linked to low economic growth. However sometimes people in an economy may be faced with limited access to adequate job opportunities and a limited source of income in spite of a growing economy, a phenomenon sometimes referred to as jobless growth. This situation can arise due to the economy's inability to create adequate jobs to match the skills of people in the economy; the situation could also be the result of utilising more capital intensive methods for economic activities.

There is a potential to use the labour market as a tool for the reduction of poverty if an environment is created that allows for the provision of adequate jobs and income for people in an economy. Nevertheless, policies and structures in an economy could also lead to a shedding of jobs and the rise in unemployment and the resulting loss of incomes can contribute enormously to an increase in poverty.

In theory, there should be no unemployment in the labour market when the demand of labour equals the supply of labour in an economy. High wages can contribute to reduced demand for labour, this is because an increase in wages unmatched by an increase in productivity leads to increased cost of production that may cause firms to reduce labour in an effort to save costs. However, when increases in wages are matched by equivalent increases in productivity then cost of production will not increase (Barker, 2003:6&136).

If market forces are allowed to work then wages would be determined by demand and supply of labour. In practice, wages in an economy or market are determined in various ways. According to Barker (2003:104), the most important methods of determining wages are via contracts of employment between an individual employer and an individual employee, through collective bargaining, at times through government involvement and influence, as well as other methods that link wages to productivity or profitability.

Government influences wage determination by setting minimum wages and the main argument in favour of this method of wage determination is that every worker should be paid an income that enables minimum subsistence levels. Unfortunately this method of wage determination interferes with market operations and price of labour becomes distorted as compared to capital. Workers are then replaced with capital equipment and this results in higher unemployment (Barker, 2003:114).

With a rise in unemployment there is a reduction in the number of people who receive wages. The reduced income levels in the economy then leads to a possible increase in poverty levels as people may not be able to have a means of satisfying their basic needs. Employment is recognised as a fundamental economic opportunity as it provides people with incomes that enable them to purchase a range of goods and services to enhance their standard of living. Employment is seen as the bridge between economic growth, poverty eradication and opportunities for human development. According to the May (1998:6), unemployment is a significant contributor to poverty in South Africa. The broad unemployment rate was estimated to be about 42.1% in March 2003. The high rate of unemployment in South Africa shows that the problem of poverty cannot be addressed unless the unemployment issue is also dealt with (UNDP, 2003:19&76).

2.4.1.3 Inadequate Capital

Poor people in most societies usually have limited access to assets and capital, e.g. human, natural, social and institutional etc (as highlighted in this chapter in Table 2.1 above). Financial services and credit facilities available to the poor are usually limited. Land is another important asset, yet access to it is greatly limited in many parts of southern Africa, and South Africa is no exception in this regard. For a long period, a large percentage of the South African population, especially the poor, have been excluded from accessing and benefiting from fertile land. Sometimes assets owned by the poor may also be unproductive due to certain factors such as geographical location and quality of asset, such as soil (White and Killick, 2001 :xx & 67; World Bank, 2001:36).

2.4.1.4 Weak Provision of Social Services

Poor social services tend to aggravate the plight of the poor. Sometimes infrastructure investments in areas highly populated by the poor tend to be limited and government expenditures on education and health services, which contribute to human capital development, may be lower than the level required to bring about increases in the living conditions and possibly the productivity of the poor. Improvements in health, education and water supply all have an enormous potential to contribute towards the reduction of poverty, both directly by improving the well-being of the poor and indirectly by supporting growth. White and Killick (2001:xxii), argue that these improvements in the provision of social services can only occur in the context of economic growth, which provides a tax base to finance state provision as well as increase private consumption.

2.4.1.5 Geographical and Societal Factors

Poor people who live in remote areas usually have a limited ability to access facilities that may be available. Gender inequality can also be a source of poverty; women in most societies face limitations in accessing land, labour and the credit markets and thus they are unable to command adequate inputs and actively participate in decision making in a society. This has the effect of restricting a society's development and generally discrimination based on ethnicity, religious beliefs, social status and race has similar effects (White and Killick, 2001:xx; World Bank, 2001:36).

Awareness and concern about environmental degradation have grown around the world over the last few decade and unfortunately, the poor are more affected by the negative impacts of environmental degradation. The poor often rely on natural resources to meet their basic needs through agricultural production and gathering resources essential for household maintenance, such as water, firewood, and wild plants for consumption and medicine. As a result, the depletion and contamination of water sources directly threaten the livelihoods of those who depend on them.

Natural disasters such as hurricanes and earthquakes have devastated communities throughout the world. Poor communities often suffer much more extensive and severe crises at the hands of natural disasters, because limited resources inhibit the construction of adequate housing, infrastructure, and mechanisms for responding to crises (<http://www.wid.msu.edu/Temp/studyabroad/studyabroad3.htm>, June 2005).

2.4.1.6 Historical Background

The history of South Africa is identified as an important contributor to the current poverty situation. The system of apartheid implemented laws which defined a binary caste system that assigned different rights (or lack thereof) and social spaces to different race groups and skin colour was used to automatically determine opportunities available to individuals within each group.

The policies of the apartheid system allowed for lack of uniformity in development and the provision of basic infrastructure in different areas and this forced certain communities, particularly the blacks, to develop and exist on inadequate resources and thus become impoverished

(<http://www.wid.msu.edu/Temp/studyabroad/studyabroad3.htm>, June 2005).

2.4.2 Some Consequences of Poverty

As mentioned earlier, poverty manifests in many different ways and according to a South African Participatory Poverty Assessment (SA-PPA), poverty is seen to include the following:

- Alienation from the community - the poor can be isolated from their families and communities.
- Food insecurity - the inability to provide sufficient or good quality food for ones family is a reflection of poverty.
- Crowded homes and poor housing standards - poor people tend to live in overcrowded conditions and in homes in need of maintenance.

- Usage of basic forms of energy - the poor lack access to safe and efficient sources of energy and therefore tend to use basic forms of energy e.g. firewood.
- Lack of adequately paid and secure jobs - lack of employment opportunities, low wages and lack of job security are all seen by the poor as factors contributing to their poverty.
- Fragmentation of families - poor households tend to split up as a survival strategy. These households are characterised by absent fathers or children living apart from their parents and it is hoped that via this strategy, pressures in these households will be reduced, remittances will be sent back to families or both (May, 2000:5).

Apart from the above there are many other indicators of poverty in an economy. Health and wealth are important factors that are related to poverty (Shinns and Lyne, 2004:76):

- Low levels of economic wealth - in times of hardships, households draw on their economic wealth to smoothen consumption and maintain a certain standard of living (usually for a time period). Economic wealth usually consists of assets that can be used to generate income and overcome liquidity constraints (Shinns and Lyne, 2004:76). Poor households tend to lack economic wealth and may deplete their limited resources fairly quickly in times of adversity.
- Low levels of health - high levels of death and infant mortality are often the result of poor nutrition and inadequate health care. Individuals with low levels of health absent themselves frequently from employment, tend to have low productivity and earn low levels of income, which in turn makes them vulnerable to poverty. In South Africa, AIDS has compounded these problems (Shinns and Lyne, 2004:76). Apart from absenteeism, the HIV/AIDS pandemic in South Africa also increases health costs and this further reduces the resources available to individuals, families and entire communities.

Most of the factors related to poverty interact with one another, thus making it difficult to determine exactly what is cause and what is effect (White and Killick, 2001:28). There are many symptoms or consequences of poverty in any particular society, however since the objective of development is to improve the quality of life, it is important that when

measuring levels of poverty, a distinction be made between the causes and symptoms, as it is the treatment of root causes rather than the symptoms that will alleviate poverty in the long run. Treatment of the symptoms is, however, necessary to improve households' living conditions in the short run (Shinns and Lyne, 2004:76). Differentiating between causes and effects enables policy makers identify and implement well-targeted policy reduction strategies that have the potential to bring about the desired impact.

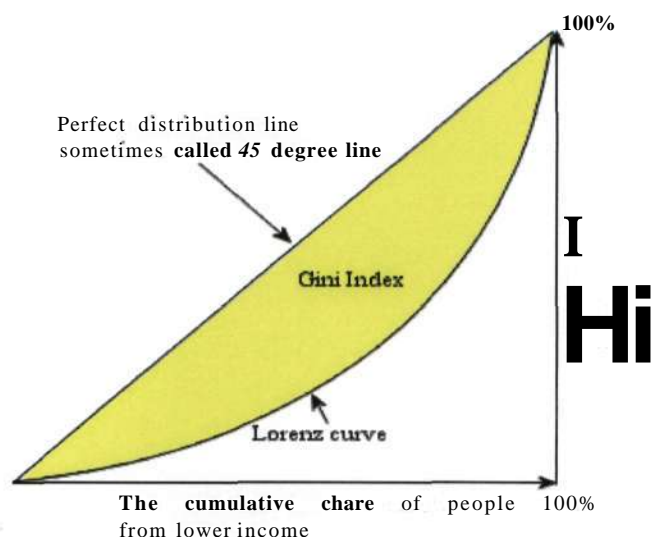
2.5 Inequality and Poverty

Inequality and poverty are sometimes used interchangeably and even though they are related there is a difference between them. Inequality occurs when people have unequal access to resources and opportunities, and the degree of inequality is measured by the Gini coefficient. It serves as an indicator of the distribution of income.

2.5.1 Gini Coefficient and Lorenz Curve

The Gini coefficient is a ratio that measures income inequality in a country and it can be calculated using by the Lorenz curve, illustrated in Figure 2.1.

Figure 2.1 The Lorenz Curve



Source: http://en.wikipedia.org/wiki/Image:Economics_Gini_coefficient.png (July 2005)

The number of income recipients is plotted on the horizontal axis in cumulative percentages. The vertical axis represents the share of total income received by each percentage of population. It is also cumulative to a 100%. At every point on the diagonal, the percentage of income received is equal to the percentage of income recipients, thus at the halfway point of the diagonal, 50% of the income is being distributed to exactly half the population - in effect the diagonal line in Figure 2.1 represents perfect equality in size distribution of income (Todaro, 2000:156).

The Lorenz curve shows the actual quantitative relationship between the percentage of income recipients and the percentage of the total income received in a given period. The more the Lorenz Curve moves away from the diagonal, the greater the degree of inequality. Perfect inequality, an extreme case whereby one person receives all the national income and all others receive nothing, would be represented by the congruence of the Lorenz curve with the bottom horizontal and right-hand vertical axes. No country exhibits either perfect equality or perfect inequality in its income distribution; thus the Lorenz curves for different countries will lie to the right of the diagonal in Figure 2.1 (Todaro, 2000:156).

The Gini coefficient is calculated as the ratio of the area between the diagonal and the Lorenz curve divided by the total area of the half square in which the curve lies. The measure can vary from 0 (perfect equality) to 1 (perfect inequality) (Todaro, 2000:160). In most developing countries, not only is there a low average per capita income, in addition the distribution of income is usually unequal, more unequal than in developed countries. South Africa is regarded as one of the countries with the highest unequal distribution of income and according to the Human Sciences Research Council (2004:2), the Gini coefficient for South Africa rose from 0.69 in 1996 to 0.77 in 2001, which reflects a rise in inequality between the rich and poor. This also indicates that poorer households have not shared in increases in economic growth over this period.

2.5.2 Differences Between Poverty and Inequality 4 iJ

The existence of high levels of inequality intensifies the effects of poverty within a society and even though the two tend to go hand in hand they are not one and the same thing. According to literature by Landman *et al* (2003:5), the following have been cited as differences between the two issues:

- A society with low levels of poverty may still have high levels of inequality.
- A fairly equal society may have a high level of poverty. Many developing countries may have lower Gini coefficients than South Africa, indicating lower levels of inequality in these countries. However, (income) poverty is much worse in some of these countries and this could partly explain why citizens from those countries migrate to other parts of the world in search of higher income jobs.
- As economies take-off, there will be a transition period whereby people in the economy will move from being poor to being less poor and during this period the society will experience rising inequality. In this case there is a trade-off, as progress is made towards poverty reduction on a macro level, inequality could become worse in the initial stages.
- In the South African situation, the goal of transforming the ownership and composition of the economy to reflect the country's demographics more accurately has the potential to bring about worsening inequality within particular racial group e.g. the black community.
- Poverty and inequality will respond differently to growth. As high growth occurs, poverty may be reduced, but at the same time inequality may be exacerbated and this makes the choice of policy a challenging one. For instance, under socialism the priority was equality, however it ended with people becoming equally poor and the collapse of societies e.g. the Soviet Union and some countries in Eastern Europe. On the other hand, some economies such as China, Korea, Taiwan and Malaysia followed extensive growth strategies with a focus on combating poverty (Landman, 2003:6).

From the issues raised above, it is evident that even though poverty and inequality tend to be related, they do differ and in an attempt to combat one problem, the other may be adversely affected. It is thus important for policy makers to correctly identify the sources of inequality and poverty in an economy, set up structures and implement well-targeted policies as well as monitor the progress and impact of implemented programs so as to amend policies and programs and correct any deficiencies and oversights that may occur. This will ensure that eventually the problem of poverty is well addressed and well catered for, to increase the standard of living for all in the society.

2.6 Some Comments on Previous Literature on Poverty in South Africa

To adequately measure poverty and draw up policies to tackle this issue, it is important that adequate information and data that capture all the complexities of the problem are gathered. This would also serve to enhance our understanding of the phenomenon and evaluate the extent to which policy measures are addressing this social problem.

1B { In South Africa, prior to 1994, little national data was collected on poverty in the whole of South Africa. Official statistics excluded the TBVC countries - the former "homelands" of Transkei, Bophuthatswana, Venda and Ciskei - as these were considered as "independent states." This therefore, automatically excluded a large proportion of the poor from official statistics (May et al, 2000:20), making the extent of poverty appear smaller in absolute terms than in reality.

After the democratic elections in 1994, the Office of the Deputy President, Thabo Mbeki, commissioned the Poverty and Inequality Report (PIR) in 1997. This report has been perceived to be the most comprehensive documentation and analysis of poverty and inequality that has been undertaken in South Africa since the University of Cape Town-led Second Carnegie Inquiry into Poverty of 1984 (May, 2000:viii). Indeed after 1994, there have been more studies on the issue of poverty in South Africa, especially on a micro/household level. In addition, the government has been injecting a considerable amount of resources in its annual budget to address the problem of poverty in the country.

2.7 Conclusion

This chapter looked at some of the general theories on poverty. The different views on the measurement of poverty arise from the fact that poverty is multidimensional and thus no one measure can adequately capture all the complexities associated with poverty. The traditional view of poverty as a lack of income has given way to other definitions that place more emphasis on human development and thus provide a more holistic view on poverty. The causes of poverty are wide-ranging and the interrelation between cause and effect sometimes makes it difficult to distinguish between the two. Poverty is highly related to inequalities and even though there are differences between them, the existence of one exacerbates the other. The next chapter gives an overview of the specific nature and distribution of poverty in South Africa.

CHAPTER THREE

POVERTY IN SOUTH AFRICA

3.1 Introduction

Although South Africa is a well-endowed middle-income country, a large proportion of its population continues to live in poverty. According to the Committee of Inquiry into a Comprehensive System of Social Security for South Africa (cited in Pieterse and van Donk, 2002:3), between 45% to 55% of the population (between 20-28 million) are living in poverty.

The magnitude and extent of poverty in a country usually depends on the average level of national income and the degree of inequality in its distribution. Generally, for any given level of national per capita income, the more unequal the distribution, the greater the incidence of poverty. Likewise, for any given distribution, the lower the average income level, the greater the incidence of poverty (Thirlwall, 1999:49).

This chapter discusses the nature and extent of poverty in South Africa. The study concentrates mainly on post apartheid South Africa, the period after 1994 because there is very little reliable poverty data on the whole of South Africa prior to this period. The next section looks at the features of the poverty situation in South Africa as well as its scope and magnitude throughout the country. The section thereafter looks at aspects of poverty related to human development. The last section will conclude this chapter by summarising the main points.

3.2 Extent of Poverty in South Africa

South Africa is characterised by high levels of poverty, and the dimensions of poverty are complicated further by issues of race, gender, location, HIV/AIDS, high income inequalities and high unemployment levels. This section will look at the characteristics and distribution of poverty in South Africa, it will also highlight the groups most affected by poverty.

3.2.1 Defining a Poverty Line

A common approach for assessing the extent of poverty in a country, is to define a poverty line which identifies the levels of income or expenditure below which a person is considered to be poor. There is no uniformly agreed poverty line in South Africa and thus different studies tend to use different definitions for their poverty lines. For instance, the KwaZulu-Natal income dynamics study (May et al, 2000:576), defined a poverty line of R237 (in constant 1993 Rand) per person per month; if in a particular year the monthly per adult equivalent expenditure for a household fell below this figure then it was defined as poor. In another study the minimum living level was taken at about R 319 (adjusted to rand values for 2000) per person per month (Landman, 2003:4). According to Woolard and Leibbrandt (1999:11), the two most widely used South African poverty lines are the Household Subsistence Level (HSL) calculated by the Institute for Planning Research and the Minimum Living Level established by the Bureau for Planning Research. Table 3.1 below shows several possible definitions of a poverty line and includes lines based on both absolute and relative poverty definitions.

Table 3.1 Comparison of Selected Poverty Lines for South Africa (1993)

<i>Types of Poverty Lines</i>	<i>R. Amount/Month Cut-Off</i>	<i>%of population below poverty line</i>
1. Population cut-off at: - 40 th percentile of households ranked by adult equivalent expenditure - 50% of national per capita expenditure	301.70 201.8	52.8 46.9
2. Minimum per capita caloric intake (at 2000 Kcal per day)	143.20	39.3
3. Minimum caloric-adjusted per capita intake(at 2500 Kcal per day)*	185.40	42.3
4. Minimum and supplemental living levels per capita set by the Bureau of Market Research, University of South Africa** - Supplemental Living Level (SLL) - Minimum Living Level (MLL)	220.10 164.20	56.7 44.7
5. Per adult equivalent household subsistence level (HSL) set by The Institute for Development Planning Research, University of Port Elizabeth***	251.10	45.7
6. International poverty line of US\$ 1 per capita per day (1985 prices)	105.00	25.6

"The adjustment takes into account the energy requirements by age and gender as in the calculations for the adult equivalence figures, but does not include adjustments due to economies of scale (of items consumed within the household).

** For the minimum and supplemental living level, the values given for a family of five (the average family size in South Africa) were used.

*** The HSL is an 'absolute poverty' line that provides many lines according to geographical location and household composition. The line used here is that for urban areas where the minimum level of welfare required by a family of 2 adults and 3 children was set at R 825.10 per month in September 1993.

Source: World Bank (1995:8) and Woolard & Leibbrandt (1999:11)

From the above table, the proportion of the population who are poor ranges from about 24% to about 57%. If the absolute poverty line is taken as the level of consumption consistent with a minimum level of food intake (caloric consumption), then between 39.3% to 42.3%) of the people would be considered poor.

By using a relative definition of poverty, the poorest groups in the country are identified using a cut-off point, for instance, Table 3.1 shows that the poorest 40% of households constitute about 52.8% of the population and the percentage of the population that falls below a poverty line set at 50% of the national per capita expenditure is about 46.9%.

Table 3.1 also shows that according to the international poverty line of \$1-a-day, about 25.6% of the South African population were considered poor in 1993 and the figure could be much higher now, given the fact that unemployment since then has increased significantly. The official rate of unemployment was 20% in 1994 and in March 2003 it was estimated at about 31.2% or 42.1% when the expanded definition is used (UNDP, 2003 20; STATSSA, 2004:67).

3.2.2 Distribution of poverty in South Africa: Where and who are the poor? ✓ AD

It is an absolute fact that over a quarter of the population is living under poverty conditions in South Africa and according to the HSRC (2004:1), new estimates of poverty show that the proportion of people living in poverty in South Africa has not changed significantly between 1996 and 2001. However, poverty does not affect all groups uniformly. Apart from constructing a poverty line, it is important to determine the groups within the economy that are mostly affected by poverty. As Table 3.2 below shows, the majority of people living in rural areas are poor.

Table 3.2 Rural/Urban Distribution of Poverty

Location	Population Share (%)	Poverty Share (%)	Poverty Rate (%)
Rural	50.4	71.6	70.9
Urban	49.6	28.4	28.5
All	100	100	49.9

Source: (1995 Income and Expenditure Survey, CSS) cited in May, 1998:27

The poverty share of rural areas (the percentage of poor individuals that live in rural areas) is 71.6%. The poverty rate in rural areas (percentage of individuals classified as poor) is about 70.9%, compared with 28.5% in urban areas (May, 1998:27).

The incidence of poverty also varies between provinces. Apart from Gauteng and Western Cape, over half the population in all other provinces live in poverty, as can be seen in Table 3.3. The table indicates that the Limpopo Province and the Eastern Cape have the highest proportion of poverty, as they have a poverty rate of 77% and 72% respectively.

Table 3.3 Poverty Indicators by province

Province	Number of poor persons (million)	% of population in poverty	Poverty gap (R billion)	Share of poverty gap
Eastern Cape	4.6	72%	14.8	18.2%
Free State	1.8	68%	5.9	7.2%
Gauteng	3.7	42%	12.1	14.9%
KwaZulu-Natal	5.7	61%	18.3	22.5%
Limpopo	4.1	77%	11.5	14.1%
Mpumalanga	1.8	57%	7.1	8.7%
North West	1.9	52%	6.1	7.5%
Northern Cape	0.5	61%	1.5	1.8%
Western Cape	1.4	32%	4.1	5.0%
South Africa	25.7	57%	81.3	100%

Source: HSRC (2004:2)

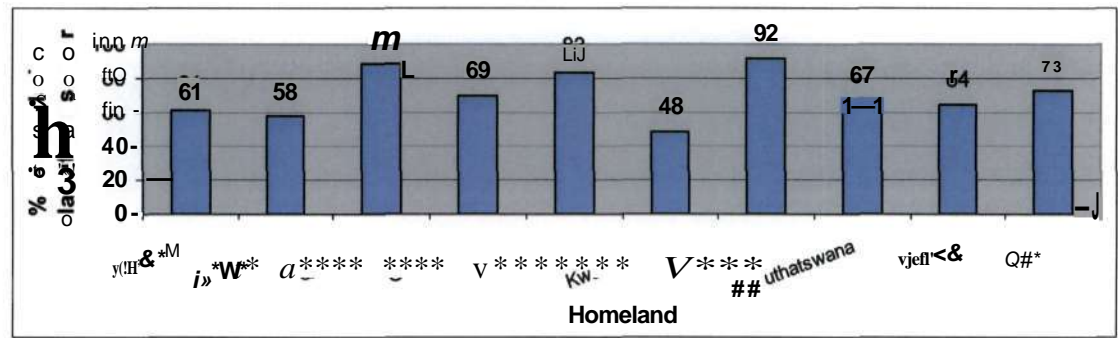
According to the above Table 3.3, approximately 57% of individuals in South Africa were living below the poverty income line in 2001, and the HSRC (2004:1) indicates that this estimated figure is unchanged from 1996. The table also shows that other provinces with relatively high poverty rates are the Free State, KwaZulu-Natal and the Northern Cape, where the percentage of the population living in poverty is 68%, 61% and 61% respectively.

Even though the poverty rate measures the proportion of a region's population living below the poverty line it does not indicate how far below the poverty line poor households are. The HSRC uses the poverty gap to measure the annual income transfer required to bring all poor households out of poverty. According to the HSRC, the poverty gap has grown from R56-billion in 1996 to R81-billion in 2001 indicating that poor households have sunk deeper into poverty over this period.

KwaZulu-Natal has a large population of poor people and as can be seen from Table 3.3, it also has the biggest poverty gap (R18 billion). The Eastern Cape (R14.8b) and Gauteng (R12.1b) follow KwaZulu-Natal (R18.3b). Gauteng's poverty gap grew faster between 1996 and 2001 than all other provinces and this is probably a result of its population growth rapidly exceeding economic growth. Among municipalities, Durban has the largest poverty gap, followed by Johannesburg and East Rand. The poverty gap has grown faster than the economy indicating that poor households have not shared in the benefits of economic growth. In 1996 the total poverty gap was equivalent to 6.7% of gross domestic product (GDP); by 2001 it had risen to 8.3% (HSRC, 2004:2).

It is important to note that the high poverty rates in the Eastern Cape and the Northern Province are closely linked to the very high poverty rates that existed in the former homelands and former self-governing states. Figure 3.1 below shows that, with the exceptions of KwaNdebele and KaNgwane, the poverty rates in all former homelands exceeded 60%. The poorest former homeland was the Transkei, with a poverty rate of 92%.

Figure 3.1 Poverty Rates in the Former Homelands
(% of population of former homelands who are poor)



Source: World Bank, 1995:11

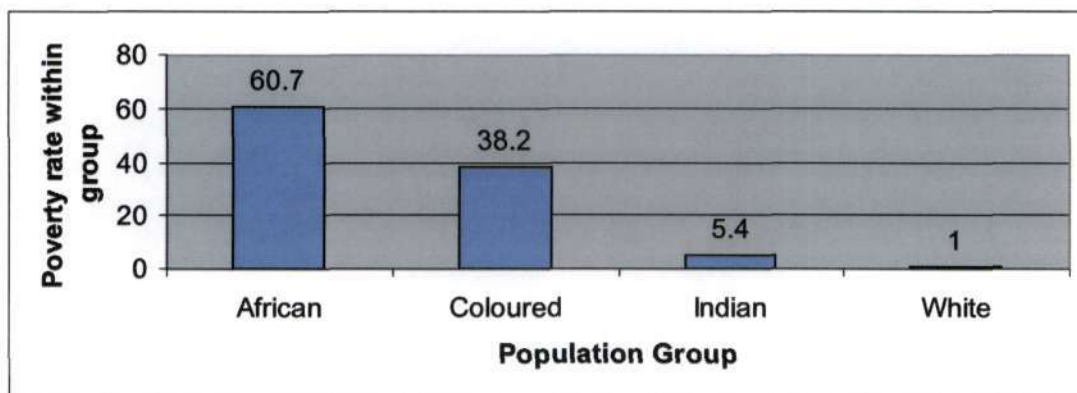
Overall, nearly 70% of the poor lived in the former homelands. Since women outnumbered men in the former homelands, they are particularly vulnerable to the high rates of poverty prevailing in these areas (World Bank, 1995:11).The demarcated

provinces of the new South Africa incorporates the former homelands and thus the poverty that currently exists in some provinces correlates with, and is indicative of the poverty that existed in the former homelands/self-governing states.

3.2.3 Poverty and Race

Living standards in South Africa are closely linked with race. Although poverty is not confined to one particular racial group in the country, it is concentrated among black indigenous South Africans. Figure 3.2 below shows poverty rate by racial background; according to the graph about 61% of black South Africans live in poverty. The coloured population contains the next highest proportion of people living with poverty (38.2%), followed by the Indian population (5.4%) and the white population with the smallest amount of people living with poverty (1%). Woolard (2002:3) notes that even though the South African population is divided into only four race groups it "obscures that fact that there are some small ethnic minorities (such as the San) who live in extreme poverty. These groups are not adequately captured in household surveys."

Figure 3.2 Poverty Rate by Population Group



Source: May, 1998:29

The above figures clearly indicate that poverty reduction resources in the country should be absorbed mainly by the black African and coloured population, as these groups house the highest number of poverty in the country.

3.2.4 Poverty and Inequality

According to Woolard (2002:6), "South Africa is one of the most unequal societies in the world, with measured inequality levels similar to Brazil". High income inequalities have existed in the country for decades and continue to persist post-1994.

Even though the post-apartheid economy has grown, South Africa has been experiencing an increase in the poverty gap. This rising inequality between the rich and the poor indicates that poorer households have not been able to share in the proceeds of economic growth. According to the HSRC (2004:2), South Africa's Gini coefficient rose from 0.69 in 1996 to 0.77 in 2001, and while historically South Africa has had one of the most unequal distributions of income in the world this rise is likely to place it at the top of the world rankings. In the past, inequality in South Africa was largely defined along race lines however, recently it has become increasingly defined by inequality within population groups as the gap between rich and poor within each group has increased substantially. Table 3.4 shows that the Gini coefficient for the African population rose from 0.62 in 1991 to 0.72 in 2001; a level of inequality comparable with the most unequal societies in the world.

Table 3.4 Gini coefficient by population group

	1991	1996	2001
African	0.62	0.66	0.72
White	0.46	0.50	0.60
Coloured	0.52	0.56	0.64
Asian	0.49	0.52	0.60
Total	0.68	0.69	0.77

Source: HSRC, 2004:2

Table 3.4 shows the white population had a Gini coefficient of 0.60 in 2001; an estimate that is extremely high for a group whose education and occupational profile matches that of societies in highly industrialised countries (HSRC, 2004:2). Generally, it is shown that

overall inequalities have increased in South Africa. It can also be seen that between 1991 and 2001, inequalities within groups also increased.

3.2.5 Poverty, Household Size and Structure, Gender and Age

Poverty in South Africa also has dimensions on a household's size and structure. In addition, a person's age and gender further complicates the poverty situation.

Household size and structure and gender

Household size and poverty are closely related as large households with many dependents are more likely to be poor. According to the World Bank's Key Indicators of poverty in South Africa (1995:12), the average household size is 5.9 among the poor and 3.5 among the non-poor. The dependency ratio, i.e. the sum of the number of children below 16 and individuals above 64, divided by the number of people aged between 16 and 64, is more than twice as high among the poor than the non-poor; it is 1.1 among the poor and 0.5 among the non-poor.

Household structure is also closely linked with poverty and South African surveys indicate that households headed by women are more likely to be poor than those headed by men. According to Woolard (2002:3), a household headed by a resident male has a 28% probability of being poor while a household with a *de jure* female-head (female-headed legally) has a 48% chance of being poor and a household with a *de facto* female head (female headed in practice since official male head is absent for most of the year) has a 53% chance of being poor. This occurrence is explained by four factors; firstly, female-headed households are likely to be in rural areas where poverty is concentrated; secondly, female-headed households tend to have fewer adults of working age; thirdly, female unemployment rates are higher; and lastly, the wage gap between male and female earnings persists (Woolard, 2002:3).

Female-headed households tend to be more heavily reliant on remittance and state transfer income (pensions and grants) than male-headed households. The irregular and

uncertain nature of remittance income tends to increase the vulnerability of female-headed households. Average wage income in these households is about a one-third of average wage income in male-headed households. These aspects of poverty indicate the need to target women (especially in rural areas) in community-based public-works programmes, SMME development and training programmes (May, 1998:31).

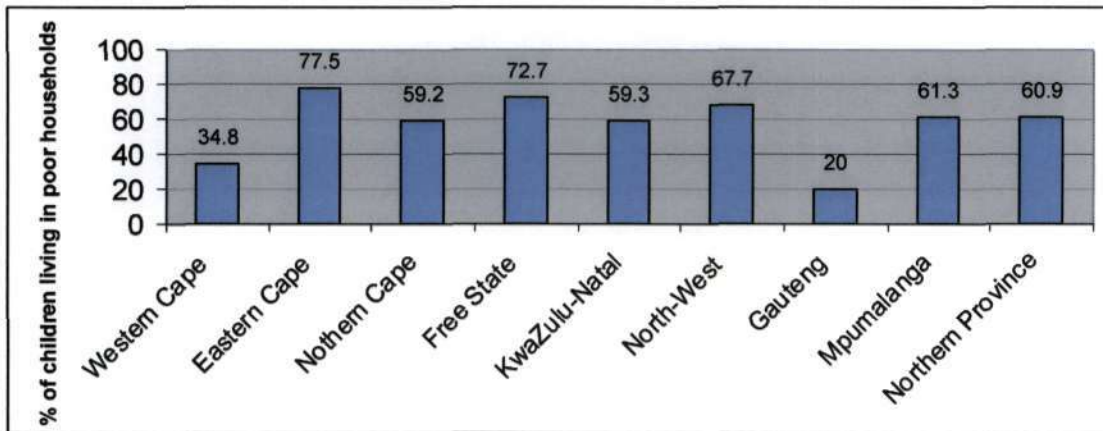
Age and gender

Since household surveys collect information at the household level, it cannot indicate the inequalities in resource allocations within households by age and gender. For instance, surveys can only tell how many women and children live in poor households but in reality, there could be many more women and children living in non-poor households who could be considered as poor as a result of inequalities in the intra-household resource allocation (Woolard, 2002:3; World Bank, 1995:13).

The Poverty and Inequality Report (May, 1998:30), states that "three children in every five live in poor households" and these children are faced with fractured and unstable families and are vulnerable to physical and sexual abuse. These children are usually undernourished and have little or no support from home and thus many tend to leave home and live on the streets. Pensions received by grandparents are usually the source of survival for such children and generally, women have to bear the responsibility of caring for children in the face of extreme poverty.

Children in some provinces are also more likely to be poorer than others. The following Figure 3.3 shows the distribution of children living in poor households in the different provinces.

Figure 3.3 Percentage of Children Living in Poor Households, by Province



Source: May, 1998:30

Figure 3.3 shows that at 77.5%, the Eastern Cape has the highest proportion of children in live in poor households. Gauteng, on the other hand has the lowest proportion, 20%.

According to the World Bank's Key Indicators of poverty in South Africa (1995:13), a comparison of poverty among the different age groups, in Table 3.5 below, indicates that about 61% of children live in poverty (the summation of the poverty rates of children between 0 and 15 results in a poverty rate of 60.9%).

Table 3.5: Age and Poverty

Age groups	Population Share	Poverty Share (%)	Poverty Rate (%)
0-5	12.7	14.5	60.0
6-15	25.5	29.6	60.9
16-64	57.0	51.5	47.1
>64	4.8	4.8	52.2
TOTAL	100	100	52.5

Source: World Bank, 1995:13

Among Africans, the poverty rate among children is worse, over 70%. It is also important to note that there tends to be high child poverty rates among large families with many children. Table 3.5 shows that about 44.1% of the poor are children below 16 although they make up 38% of the population.

Table 3.5 also shows that at 41.7%, working adults have a lower than average poverty rate however, while 42% of working-age men live in poor households, the corresponding figure for women is 48%. This supports the argument on gender difference.

The poverty rate among the elderly (52.2%) is similar to the national average (52.5%): about 61% of the poor elderly are female. Less than 5% of the poor of all ages are above 64 years (poverty share of the elderly is 4.8%), since the elderly make up only a small part of the population (World Bank, 1995:14).

3.3 Poverty and Human Development

Sen (1999:41&144) describes human development as the process of expanding education, health care and other conditions of human life. He argues that human development is an ally of the poor because it creates social opportunities that make a direct contribution to the expansion of human capabilities and the quality of the life. There is evidence that with relatively low income, a country that guarantees health care and education to all can achieve remarkable results in terms of the length and quality of life of the entire population.

The rewards of human development go beyond the direct enhancement of quality of life as it includes the impact on people's productive abilities and thus on economic growth on a widely shared basis (Sen, 1999:144). The process of human development allows people in a society to participate more fully in economic activities and thus people are able to contribute to and gain from a country's prosperity.

This section discusses the plight of the poor with respect to social services and how these hinder the quality of their lives and thus prevent them from achieving adequate and acceptable levels of human development. It is acknowledged that efforts have been made to improve people's capabilities in post apartheid South Africa and where there is adequate information, changes that have occurred in the poor's well being will also be discussed.

3.3.1 Education

There is a strong link between educational attainment and standard of living. People with little or no education tend to be worse off than those with higher levels of education as the latter have better access to better paying and more fulfilling jobs. According to the 1998 IES and OHS (cited in Woolard, 2002:3), 58 % of adults with no education are poor; 53% of adults that have less than seven years of (primary) education are poor; 34% of adults with incomplete secondary schooling are poor; and also poverty rates drop significantly with the attainment of matric and further qualifications. 15% of those with completed high school are poor and only 5% of those with tertiary are poor (Woolard, 2002:3).

There is not a large difference in poverty rates between those individuals that have no education and those that have less than seven years of (primary) education and together, these two groups are more prone to poverty. However, the severity of poverty is seen to be worse for the group with no education. The incidence of poverty amongst those with some tertiary education is largely accounted for by young adults that are still studying and thus not yet reaping the financial rewards of their education (Woolard & Leibbrandt, 1999:32).

Access to good quality education is judged by the poor as being highly relevant to one's ability to obtain employment in the future. The principal asset of the poor is labour time, and thus education increases the productivity of this asset (Woolard & Leibbrandt, 1999:34).

The history of lack of access to basic education for Africans and large differences in the quality of schooling has led to significant differences in the educational attainment of the various racial and income groups. According to the World Bank's Key indicators of poverty in South Africa (1995:20), post 1994, about 50% of the poor had no education or only uncompleted primary education and only 7% had completed secondary or higher

education. In contrast among the richest quintile, 62% had at least completed secondary education. These large discrepancies in educational attainment would have a major impact on the differences in employment opportunities and wages between the rich and poor.

The rural poor also have considerably lower educational achievements than the urban or metropolitan poor. Post 1994, more than half of the rural poor had less than primary education, compared to 41% for the urban and 31% for the metropolitan poor. Also a much higher share of the metropolitan poor had some secondary education (59% as compared to 41% in rural areas) (World Bank, 1995:21).

Educational attainment of the total population is an important factor affecting current employment and wage inequality. Net enrolment rates at tertiary institutions give an indication of future income-earning opportunities of today's youth. According to the World Bank's report on Key Indicators of poverty in South Africa (1995:21), people from high income households tend to have higher net enrolment rates (about 90%) at the primary level than those from poorer households (about 85%), but in South Africa, these differences are not very large, suggesting that there has been a considerable expansion of education at the primary level in recent years. Secondary and tertiary enrolment rates are closely associated with income, showing that educational opportunities at these levels continue to be very uneven. The report by the World Bank (1995:21) also highlights that "there are no significant differences in the school achievement and school enrolment by gender. In fact among the poorer quintiles, girls have higher primary and secondary enrolment rates." This is echoed by Woolard (2002:4) in a more recent article, which states that enrolment rates in South Africa are high and do not reflect gender bias: in 2000, 94% of boys and 95% of girls aged 8-16 were enrolled in school.

Since 1996, there has been a marked improvement in educational attainment throughout South Africa. Table 3.6 compares the level of educational attainment in 1996 to that in 2001 (Bhorat et al., 2004:11).

Table 3.6 Educational Attainment of Population over 20 years old, 1996 and 2001

	<i>1996</i>	<i>2001</i>	<i>1996</i>	<i>2001</i>	<i>1996</i>	<i>2001</i>	<i>1996</i>	<i>2001</i>
	Gauteng (%)		KwaZulu-Natal (%)		Limpopo (%)		National (%)	
Higher education	8.4	12.6	4.8	6.9	4.5	6.8	6.2	8.4
Std 10/Grade 12	23.6	28.0	15.9	19.8	14.0	14.0	16.4	20.4
Some secondary	40.2	34.3	31.8	28.8	26.6	26.1	33.9	30.8
Complete primary	6.7	5.5	6.7	5.7	5.9	5.5	7.5	6.4
Some primary	11.7	11.2	17.9	16.9	21.1	14.1	16.7	16.0
No schooling	9.5	8.4	22.9	21.9	36.9	33.4	19.3	17.9

Source: (Census, 1996; Census, 2001) cited in Bhorat et al, 2004:11

Table 3.6 shows that there has been a distinct decrease in the proportion of individuals with no schooling and a significant increase in the proportion of individuals with Grade 12 or higher education. However, Bhorat et al (2004:11), point out that these figures do not reflect differences or improvements in the quality of schooling, which is a key concern. At individual level, better education leads to better job and thus better income. At the aggregate level, a better educated population leads to higher economic growth (May, 1998:34).

3.3.2 Health

Health outcomes are both a cause as well as a consequence of poverty. Poor people have worse health due to reduced access to health services and inadequate sanitary conditions, as well as inadequate income for transport, food and basic clothing, all of which lowers their productivity even further. Diseases most prevalent among lower income groups include tuberculosis, diarrhoea and fever. The poor also have much higher rates of mental disability, giving an indication of poor mental health facilities as well as the likely influence of violence and trauma on many poor people (Klasen, 1996; cited in Woolard & Leibbrandt, 1999:34; World Bank, 1995:22).

There are clear differences in the type of treatments available for different expenditure groups. Richer segments of the population tend to rely mostly on private doctors for

treatment while the poor have much more limited options: 26% seek no treatment at all. A major reason cited by many of those who do not seek treatment for their illness is that treatment and transport costs are high, this suggests there is a lack of affordable health care for the poorest segments of the population. Another 40% rely on health centres and hospitals, while less than a quarter seek help from a private doctor. The heavy use of hospitals suggest low availability of quality primary health care at the level of clinics/health centres; consequently this is a major cause for very high health care costs to the State, since hospitals use their expensive and specialised facilities for primary health care for the poor (World Bank, 1995:22).

South Africa has one of the highest per capita HIV prevalence and infection rates in the world. The percentage of adult deaths that could be attributed to AIDS-related diseases increased from about 9% in 1995/1996 to about 40% by 2000/2001. HIV/AIDS is impacting negatively on human capital realisation, skills availability and skills shortages in South Africa. The pandemic has dire consequences for the country as a whole as well as for household income and expenditure patterns (Woolard, 2002:4).

In South Africa, life expectancy decreased from 60.8 years in 1996 to 53.5 years in 2001; a trend that is expected to continue till 2015. The Infant Mortality Rate (IMR) is another health indicator, which refers to the number of children below one year old who die in a year, per 1000 live births in that year. The IMR is a traditionally accepted indicator of health status and in South Africa, it is more related to health care services than life expectancy, thus a relatively high IMR would suggest that the level of health care may not be optimal. The IMR for South Africa increased from 56.1 deaths per 1000 live births in 1996 to 59 deaths per 1000 live births. In spite of this national increase in IMR, some provinces, such as Gauteng, have recorded improvements in the IMR indicating that the provision and access of health care services are better in some provinces than in others (Bhorat et al, 2004:19).

Day and Gray (2002:428; cited in Bhorat et al, 2004:18), state that "a high prevalence of disease and poor health in a country harms economic performance while higher life

expectancy, a key indicator of health status, stimulates growth." In the case of South Africa, the increase in IMR, the inadequate access to health care and the decreasing trend in life expectancy have negative consequences for the country. According to the UNDP's South Africa Human Development Report (2003:27), there continues to be major differences between the life expectancy of black Africans and other racial groups. In 2001, the life expectancy of black Africans was eighteen years lower than that of white South Africans. The worsening health situation among a large proportion of the people in the country, especially the poor, indicates that there will be enormous losses in human capacity in the future and in addition, the high incidence of HIV/AIDS will put enormous pressure on the provision of health services by both the public and private sectors.

3.3.3 Unemployment and Income Among the Poor

Poverty and unemployment are closely linked because a lack of income renders one incapable of having a means to satisfy or access one's basic needs. As mentioned earlier, South Africa has a current unemployment rate of about 40%. This reflects that vast numbers of the economically active population are unable to find paid work and "clearly, income poverty will be severe for many households to which the unemployed are attached" (Bhorat et al 2004:15).

The unemployment data in South Africa varies depending on which definition is used. The naiTow definition regards the unemployed as those who would like to work and are actively seeking work, while the broad definition considers **all** those who would like to work, whether they are actively seeking work or have become despondent. The high unemployment rate in South Africa comes with consequences, especially for the poor. Woolard (2002:13), uses data from the Income and Expenditure survey and the October Household Survey of 1995 to show the unemployment rate among the poor and this information is replicated in Table 3.7 below.

Table 3.7 Unemployment by Race, Gender and Location (%)

Unemployment rates	Ultra-poor	Poor	Non-poor	All
(Broad) unemployment rates by race:				
African	59.4	52.7	24.5	36.9
Coloured	46.1	36.7	7.0	21.8
Indian		67.5	12.8	13.7
White		75.0	4.5	4.7
Gender:				
Female	65.9	59.1	25.3	37.4
Male	51.6	44.0	12.9	22.4
Location				
Rural	56.3	48.8	22.4	36.7
Urban	65.7	57.5	16.8	24.0
Total broad unemployment rate	58.7	51.1	18.4	29.3
Total narrow unemployment rate	34.9	30.6	11.0	16.4
Labour force participation rate	43.4	45.8	61.6	55.3
Share of adults 16-64 working	17.7	21.9	48.3	37.9

Source: Woolard, 2002:13

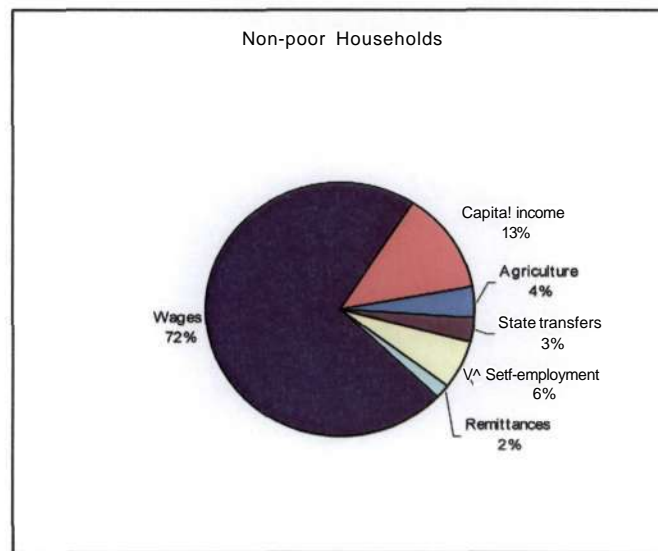
Table 3.7 shows that poor households have an unemployment rate of 51.1% in comparison with an overall national rate of 29.3%. The ultra poor simply refers to the "poorest of the poor" which would be the bottom half of those poor group. Labour force participation is lower in poor than non-poor households as it is shown that more than half of the working-age poor (about 5 million adults) are outside of the labour market. As a result, the percentage of working individuals from households below the poverty line that are actually working is significantly lower than average. In 1995, only 21.9% of poor adults were employed, compared with 48.3% from non-poor households. This indicates that poverty would be more prevalent among the unemployed than the employed individuals. The gender dimensions of poverty are also highlighted. As shown by Table 3.7, in 1995, unemployment among poor females (59.1%) was not only higher than the average for all females (37.4%) but it was also higher than the rate of poor males (44.0%). The table also shows that unemployment differs for the different racial groups.

As a result of these high unemployment and low labour force participation rates the patterns of income differ substantially among the poor, ultra poor and the rest of society.

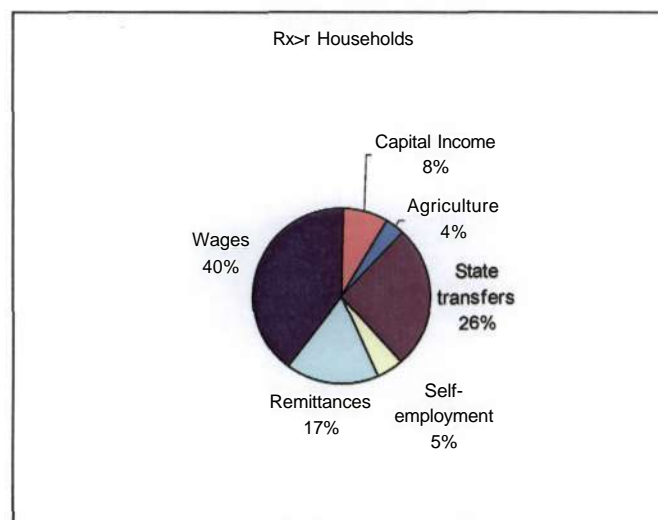
Figure 3.4 below shows the difference between the sources of income for poor and the non-poor households.

Figure 3.4 Sources of Income Among Poor and Non-Poor Households

A



B



Source: Woolard, 2002:14

The poor are more dependent on remittances and state transfers than the non-poor and they rely on multiple sources of income as a coping strategy in case there is a sudden loss

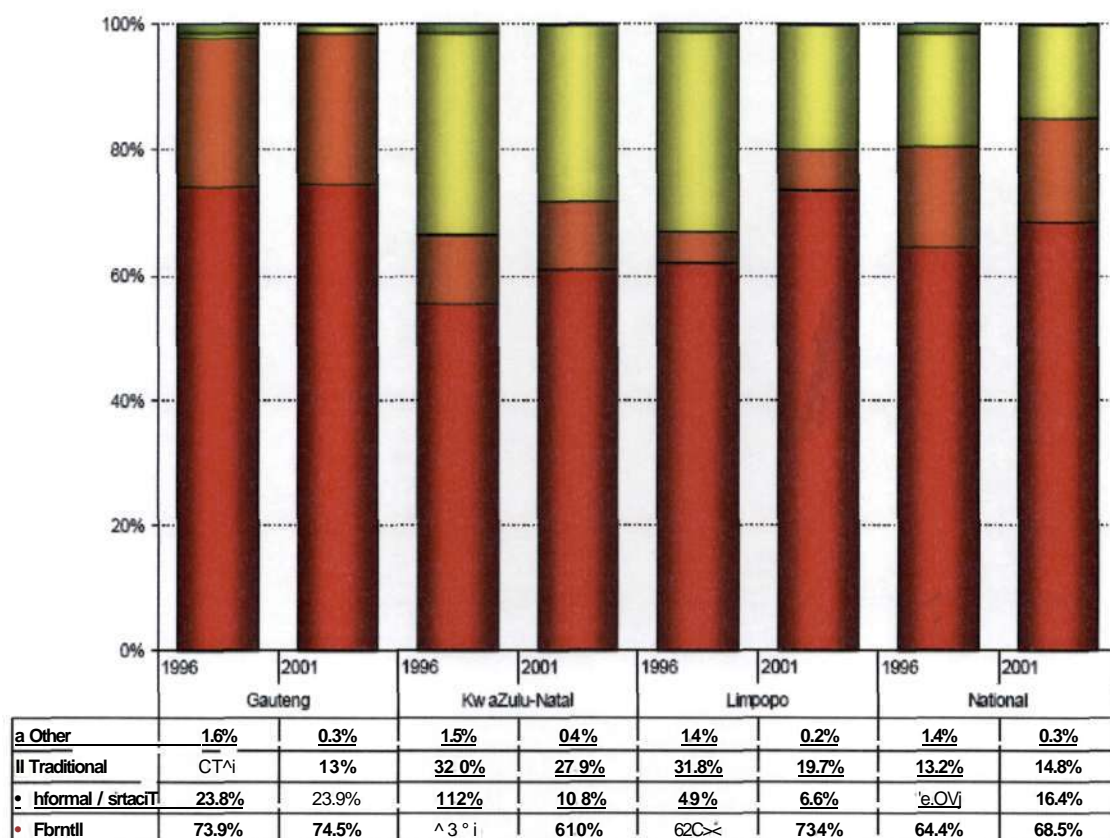
of income form a particular source (World Bank, 1995:14; Woolard, 2002:5&13). Figure 3.4 also highlights the importance of wage income. Poor households are characterised by a lack of wage income, either as a result of unemployment or of low-paid jobs. Cost of unemployment is not only limited to an individual's loss of income and ill feelings of personal worth, it extends to the wider society. South Africa's failure to socialise the youth is evident in the high rates of crime, alcohol abuse and family violence and this further creates a vicious cycle of family breakdown (Woolard, 2002:5).

3.3.4 Housing

Apart from income, housing is a significant determinant of well-being. A household's dwelling and the land on which it stands is a major asset for many people, both rich and poor. A home offers physical (and psychological) protection, it can be a potential source of income (e.g. via the rental of rooms), it can serve as security for loans and as a place of work (Budlender, 1999:201; Bhorat et al, 2004:5).

Figure 3.5, taken from a report by Bhorat et al (2004:2&5), shows the changes that have occurred in the types of dwellings occupied by households at a national level and for three selected provinces; Gauteng, Limpopo and KwaZulu-Natal. The report selects these provinces to explain and highlight the regional discrepancies in wellbeing that exist in South Africa, even on a provincial level. Gauteng was chosen as a proxy for the richest provinces (Gauteng and the Western Cape), Limpopo as representative of the poorest provinces (Limpopo, the Free State the Eastern Cape) and KwaZulu-Natal as the more average performer.

Figure 3. 5 Dwelling Types by Province, 1996 and 2001



Source: (Census, 1996; Census 2001) cited in Bhorat et al, 2004:5

From Figure 3.5, it can be seen that at the national level 68.5% of households lived in formal dwellings in 2001, up from 64% in 1996. The share of informal housing remained almost constant (around 16%), while the incidence of traditional dwellings declined from 18.2% in 1996 to 14.8% in 2001. It is also seen that the dominant type of dwelling in Gauteng is formal housing as over 70% of households resided in such dwellings, both in 1996 and 2001. At 24%, the proportion of informal housing in Gauteng significantly exceeds that of other provinces, where as traditional housing negligible. The quality of dwellings is also indicative of those households that are most vulnerable to shocks such as adverse weather conditions (Bhorat et al, 2004:5).

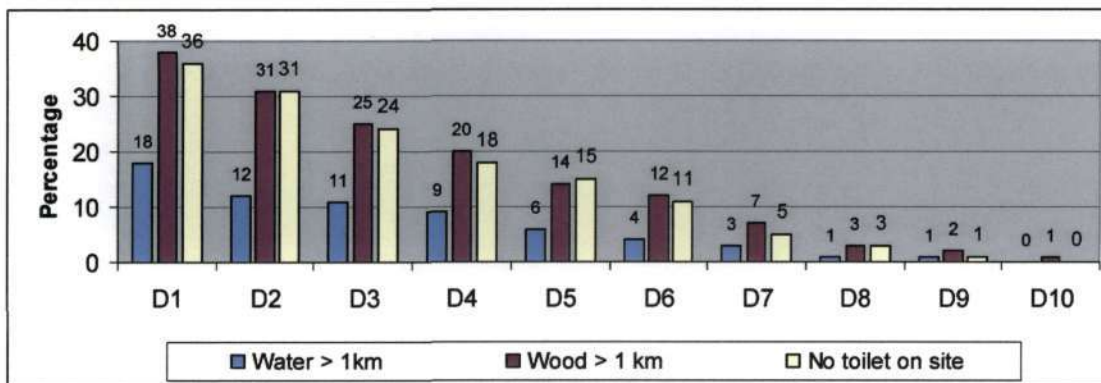
The report by Bhorat et al (2004:5) indicates, within the context of a three province overview of dwelling types, that firstly, formal dwellings are the dominant form of housing nationally and across the three provinces. Secondly, it points out that there has been an increase in the absolute numbers of informal dwellings. Finally, within the above context, a measure of household dwelling vulnerability shows that informal dwellings are disproportionately in disrepair and overcrowded, both nationally and across the three provinces (Bhorat et al, 2004:6).

3.3.5 Access to Basic Services

Budlender (1999:205) affirms that "one conception of wealth or poverty involves the level of access to the means of satisfying basic needs" and access to basic services such as clean drinking water, refuse removal, sanitation, energy for cooking and lighting as well as the use of assets such as refrigerators, telephones and radios contribute to the overall physical and psychological well-being of household members (Budlender, 1999:205; Bhorat et al, 2004:5). Although there have been enormous efforts to provide adequate basic services in South Africa since 1994, many poor households lack access to basic services.

The following Figure 3.6, taken from Budlender (1999:206), summarises the situation with respect to water, energy and sanitation. Budlender's article is based on data from the October Household survey and the Income and Expenditure survey of 1995. Households are sorted according to income per capita and are divided into ten equal groups. The bottom decile (D1) contains households with the lowest per capita income and the top decile contains the richest households.

Figure 3. 6 Access to Facilities by Income Decile, 1995



Source: Budlender, 1999:206

The graph in Figure 3.6 measures the proportion of households that lack adequate access to a particular facility by distinguishing between those who are far from their main water source, those who are far from their main source of energy and those who do not have a toilet on their dwelling site. A comparison of the situation between the bottom and the topmost deciles confirms severe disparities as at 1995:

- 18% of households in bottom decile relied on water sources that were situated more than a kilometre from their dwelling; in comparison 1% or fewer of households faced the same situation in the top three deciles
- 38% of households in the bottom decile collected wood for energy from more than a kilometre away from their dwellings while in the top three deciles, 3% or fewer of households were faced with the same situation
- 36% of households in the bottom decile did not have a toilet site, compared with 1% or fewer in the top two deciles (Budlender, 1999:205).

According to Bhorat et al (2004:8), access to clean drinking water and sanitation services provides a fundamental basis for promoting good health of the population. Nationally, gains have been made in water provision since access to piped water (in the dwelling, yard or public tap) increased from 79.8% in 1996 to 84.5% in 2001. In highly urbanized areas, such as Gauteng, the main source of water for a very large percentage of households is piped water. Although, access to piped water has increased throughout the

country, residents in certain areas/provinces still rely on other sources of water supply, such as boreholes, rain water, rivers, streams, dams etc, which may not be safe and reliable sources. Over a quarter of the households in KwaZulu-Natal do not have access to piped water and also many poor people in various parts of the country live far from their main water source and thus spend time to reach their water source. These challenges facing the poor indicate that access to clean water near one's home could make a substantial difference to standards of living and the ability to pursue paid economic activity (Bhorat et al, 2004:7).

Improvements have also been made in sanitation, as nationally, there was a 9% increase in flush/chemical toilets between 1996 and 2001. Whereas a province, such as Gauteng had an 87.2% incidence of flush/chemical toilets in 2001, in a province like Limpopo, only 18% of all households had a functioning toilet. Also, a high proportion of households in provinces like KwaZulu-Natal and Limpopo use pit latrines and this could indicate that although there have been improvements in sanitation at the national level, many households, especially those in rural areas, may still be lacking adequate toilet facilities (Bhorat et al, 2004:8).

South Africa embarked on an intensive electrification program post-1994 and this brought about an improvement in accessing electricity for lighting purposes. Nationally, 58% of all households had access to electricity for lighting in 1996, and within five years this figure had increased to 70%. Unfortunately, households had to face the constraint of being charged user fees for this form of energy (Bhorat et al, 2004:8). The electrification program in the post apartheid period saw declines in the use of paraffin and candles as an energy source for lighting. Due to various reasons energy choices for cooking are different to those for lighting and from 1996 to 2001, the increase in electricity used for cooking nationally rose by 4% (as opposed to the 12% increase for lighting). Wood and paraffin are alternative energy sources for cooking on which the more deprived are heavily reliant. Wood tends to be more readily available in rural areas while paraffin is more readily available in urban areas. Prices of paraffin tend to move with international oil prices thus households that are reliant on paraffin will be highly affected by

fluctuations in its prices; this is indicative, once more, that poor households are more vulnerable to such price shocks (Bhorat et al, 2004:9).

3.3.6 Summary of the Characteristics of the Poor in South Africa

This section has discussed the poor in depth. It started by presenting various poverty lines used in South Africa and then highlighted the distribution of the most vulnerable in terms of location. The poor were also analysed with respect to racial groups and inequalities between and within these groups. It has been shown that a household's structure as well as one's age and gender has implications on poverty in the country. The importance of accessing services that lead to human development and thus a reduction of poverty has also been highlighted. Table 3.8 below summarises some of the most important characteristics of the most vulnerable in South Africa, post 1994 and this helps to provide a succinct yet descriptive view of the conditions faced by the poor in the country.

Table 3.8 A Profile of the Most Vulnerable

(Characteristics of poorest 20 % of households or 29% of the population)

1. Expenditure	
Monthly adult equivalent expenditure (R)	118.9
% of expenditure on food	59.0
% of expenditure on maize	16.9
2. Employment and income sources	
Unemployment rate (%)	53.4
% of working age adults working	22.9
% of households relying on pensions and remittances as primary sources of income	47.1
3. Race, location, household structure	
% living in rural areas	80.7
% living in Eastern Cape and Northern Province	52.0
% living in KwaZulu-Natal, Free State, North West and Mpumalanga	41.4
% living in Northern Cape, Western Cape and Gauteng	6.6
% African	97.1
% Coloured	2.9
Average household size (number of people)	6.5
% of female-headed households	48.4
4. Housing and access to services	
% living in shacks or traditional dwellings	22.6
% without access to electricity	84.9
% without piped water to household	81.5
% without modern sanitation	88.7
5. Education and health	
% of household heads with no education	46.2
% of household heads with less than primary	31.9
% of children below 5 who are chronically malnourished	37.5
6. Levels of satisfaction and priorities	
% of households dissatisfied or very dissatisfied	74.1
% who name jobs as priority	57.8
% who name piped water as priority	44.2
% who name food aid as priority	34.3
% who name housing as priority	32.1

Source: World Bank, 1995:27

The World Bank's Key indicators of poverty (1995:27), states that "it is this group who needs measures to help them move out of destitution; and it is this group who are most vulnerable to changes in incomes, prices and opportunities."

3.4 Conclusion

Past policies of segregation and discrimination have left a legacy of inequality and poverty in South Africa. The apartheid system was heavily biased towards providing health, education and housing services to the white minority, to the detriment of the black population who were denied the opportunity to accumulate human and physical capital. Policies were aimed at protecting the white population and the system also distributed resources unequally, thus marginalising and impoverishing a large sector of the population (Woolard, 2002:7).

Over a quarter of South Africa's population is currently living in conditions of poverty and deprivation. Poverty tends to be concentrated in rural areas and is higher in certain provinces. Income poverty and other forms of deprivation are higher among the Black and Coloured communities as opposed to the Indian and White population groups in South Africa. Gender and age add dimensions to the poverty situation in South Africa. The high unemployment rates indicate a serious lack of ability to create job opportunities for many South African and this only serves to perpetuate the vulnerabilities faced by many in the country. The lack of income deepens the deprivations faced by the poor as income can increase one's ability to access a variety of services that could contribute towards a person's well-being.

According to Woolard (2002:7), past policies forced a large proportion of the South Africans to tend toward menial and poorly paid sectors of the labour market. Currently, many South African households have no access to wage income, and household wage income is seen as a major determinant of inequality and poverty. The main challenge of the democratic government is to attempt to undo the harm of decades of racially based policies, specifically those that impacted on poverty and the labour market directly or indirectly. This is the focus of the next chapter, which discusses government anti-poverty measures. The main objective is to look at how government uses redistribution, in terms of budget allocations towards social services, to target poverty alleviation.

CHAPTER FOUR

POVERTY ALLEVIATION APPROACHES

4.1 Introduction

Generally, poverty can be combated through an increase in economic growth, which can have the effect of creating jobs, providing funds for human and infrastructure development and thus increasing the general standards of living in an economy. However, poverty cannot be effectively targeted through general economic activities alone. Policies, strategies, frameworks and resources will have to be adopted and focussed specifically on poverty and its related multifaceted manifestations. This chapter will discuss the existing general theories on eradicating poverty and specifically examine initiatives taken to combat poverty in the South African economy.

The chapter is outlined as follows: the next section 4.2, deals with the alleviation of poverty via redistribution. The section 4.3 discusses the South African government's macroeconomic policy response in dealing with poverty and focuses on the government's expenditure on the social sector. Selected government programmes and initiatives focussing on different dimensions of poverty will also be highlighted. The last section 4.4 covers anti-poverty interventions by other groups, including some of the international organisations and civil society.

4.2 Theory on the Alleviation of Poverty: Anti Poverty Interventions

Even though the terms poverty eradication, alleviation and reduction may be used interchangeably, Pieterse and van Donk, (2002:24), indicate that it is important to highlight the differences between these concepts as these may have different implications on how poverty is addressed:

- Poverty Alleviation - refers to public and private actions that address destitution in terms of lack of food, access to safe portable water, safety from abuse and shelter. By definition, these interventions aim to amend and improve a situation, and tend to be carried out with a 'welfarist' mentality, although not necessarily. Nevertheless, these measures are necessary to prevent starvation, ill health and exposure to the elements.
- Poverty reduction - refers to deliberate actions that reduce the depth of poverty faced by individuals and households. Deliberate actions could include income and physical asset transfers and/or the supply of education, employment and trading opportunities. Such measures can lead to a reduction in the absolute number of people that are (income and asset) poor, but do not necessarily alter the structural conditions (at various scales) that reproduce poverty and inequality.
- Poverty eradication - this refers to institutional reforms that increase the political power of the poor to the extent that—through their social movements and 'encroachment practices'—they determine or shape the agenda for how the full range and scope of poverty reduction measures are to be structured and sequenced in order to address the structural causes of poverty, whilst at the same time addressing chronic poverty. As a result, poverty eradication actions (including remedial ones) are organised to ensure the political empowerment of poor citizens and their organisations relative to political and economic elites (Pieterse and van Donk, 2002:24).

Poverty eradication would be the most progressive approach in terms of development as it takes both the short- and long-term concerns into account. However this does not mean that poverty alleviation and reduction measures are not valid measures as they address the immediate and medium term needs of the poor, which is important for people experiencing direct poverty (Pieterse and van Donk, 2002:24). This study, however, tends to use these terms interchangeably unless where explicitly stated.

4.2.1 Redistribution, Growth and Poverty

As mentioned previously, economic growth has potentials to reduce poverty in an economy. However, the degree of inequality or redistribution is what will determine who benefits from the fruits of economic growth. If structures are such that income, wealth, power and assets are concentrated in the hands of the few, then the benefits of economic growth will only accrue to those few who have assets. Thus it is important to balance structures such that more people in a country benefit from the growth of the economy. This section looks at the link between growth, redistribution and poverty.

4.2.1.1 Economic Growth and Poverty

According to Ingham (1995:35), economic growth generally refers to a rise in national product or per capita income. This means that as economies grow there will be a general increase in the goods and services available and this rise in national productivity will increase the average level of income and thus the standard of living in an economy. This natural process of economic growth can thus contribute to the alleviation of poverty in the long run once the benefits of growth has managed to trickle down to the larger population.

Simon Kuznets, in his analysis of the historical growth patterns of developed economies, suggested that in the early stages of economic growth, the distribution of income in an economy tends to worsen and then improve at later stages. This observation is characterised by the "inverted U" Kuznets curve shown in Figure 4.1 below.

Figure 4.1 The "Inverted U" Kuznets Curve



Source: Adapted from Todaro, 2000:176

In Figure 4.1, the Gini coefficient, which measures changes in the distribution of income, is measured on the Y axis and the Gross national income per capita is measured on the X axis. Kuznets curve shows the relationship between a country's income per capita and its equality of distribution, such that as per capita incomes increase, the distribution of income (as measured here by the Gini coefficient) initially worsens and then later improves (Todaro, 2000:176&751).

This observation suggests that if structures are not balanced, then economic growth can have the effect of exacerbating poverty by increasing the income distribution gap between the poor and rich. It is acknowledged that growth can eliminate poverty and substantially improve the quality of life in the long run because it creates the potential for rising employment levels, real wages and state benefits. However, there is no guarantee that these gains will trickle down to the poor within a reasonable time and therefore economic growth on its own is not sufficient to alleviate poverty. Developing economies will need to incorporate redistribution in their poverty reduction strategies and for a country like South Africa, where high inequalities already exist, there is a heightened need for redistribution.

4.2.1.2 Redistribution and Poverty

The existence of high inequalities, in an economy like South Africa, necessitates the implementation of redistribution strategies to allow the benefits of economic growth reach a wider proportion of the population. Thus it is important that policies chosen are such that they facilitate asset and income redistribution and economic growth. Redistributive strategies are divided into three categories: the redistribution of physical assets, of market-related earnings and of state revenue and spending (Moll, 1991:2).

4.2.1.2.1 Redistribution of physical assets

This usually involves the shifting of non-human wealth, such as land, factories and machines directly from the rich to the poor, for example, large estates can be divided among small producers or large farms can be transferred to their workers. This type of redistribution changes the right to appropriate income-streams from assets even though it may involve payments of various kinds (e.g. land being partly expropriated and partly purchased, or being paid for by non-transferable government bonds with low or negative real returns).

Land reforms

This usually involves the redistribution of land from large to small farmers. In Moll (1991:2), some issues about land reforms have been identified. Firstly, land reforms will be more effective if new farmers have prior agricultural experience and skills. Secondly, a range of expensive complementary state inputs may be required to enable land reform work e.g. marketing channels, access to finance, research and agricultural extension support. Thirdly, a small scale dynamic agricultural sector could be created when land reforms destroy pre-capitalist or feudal social structures which impede economic development. Lastly, it is common to find that land reforms usually benefit established or middle-level farmers instead of the very poor and usually the most landless people are excluded from the benefits. In spite of the redistributive capacity of land reforms, some surveys and research have found that land reforms are rarely ever completed.

Redistributing non-land assets

The redistribution of non-agricultural resources, such as mines, large manufacturing firms and the financial sector, tends to be more problematic. The approach used is for the state to nationalise firms in order to achieve various kinds of market goals. Firstly, it can correct various kinds of market failure and weaken the monopoly power of small groups of wealthy producers. Secondly, it allows the state to play a more active developmental and planning role in the economy. Lastly, it allows the state to claim the "surplus" of large firms, i.e. profits which are often repatriated by multinational companies, and use it in a redistributive manner. Unfortunately, nationalisation may tend to benefit the middle class who are politically powerful and connected, rather than the poor people (Moll, 1991:7).

According to Hunter *et al* (2003:40), the redistribution of assets is an important component of poverty reduction in South Africa. The key elements of redistributive policies in the country are land reform, the delivery of housing, the reform of water, infrastructural development and meeting energy requirements.

4.2.1.2.2 Redistribution of Market Related Earnings

The second major form of redistribution involves the state intervening in market processes with the intention of increasing the relative amounts or prices of assets sold by the poor, or reducing the cost of items bought by the poor. Tactics used include supporting worker demands for higher wages or urging multinational companies to develop stronger links with local labour-intensive firms. The main objective is to use market relations to modify the current and future levels of earnings that poor people get from the ownership of various kinds of assets, both human and non-human (skills, education, etc).

There are three sets of policies used and the first is access to markets and barriers to entry. Changes are made in market relations with the intention to improve overall efficiency and this can weaken constraints to employment and growth and thus serve as

an instrument of redistribution (Selowsky, 1981:75; cited in Moll, 1991:9). The second policy area is labour market and usually measures are designed to shift the balance of power towards labour as opposed to capital. Tools used are regulations concerning minimum wages and working conditions, restrictions on firing workers, higher social security payments by employers and policies of allowing trade unions to organise more freely. Such interferences with the labour market present a host of problems; they tend to reduce the profits, investment, exports and the efficiency of the labour market and thus undermine long-run economic growth. Since these policies are usually aimed at increasing the bargaining power and real wage of workers, they tend to reduce profits and investment by capitalist firm but it is important that a balance between wages and productivity is maintained if workers are to benefit from rising productivity. Also, rising labour costs can harm international competitiveness and exports, which can have the effect of slowing down the long term growth of productivity and wages. In addition, firms can decide to switch to capital-intensive technologies when there are higher labour costs and greater labour regulation. The third area of market intervention concerns the relation between the state and large local firms or multinational corporations (MNCs). The state bargains with or guides such firms in various ways to achieve developmental or distributional objectives. However, a major disadvantage of such controls is the administrative capacity of the state.

Apart from the above, there are a range of other market-related initiatives that could be used, e.g. the use of taxes and subsidies to change structures of relative prices to the benefit of the poor, price controls and the provision of food stamps. Generally, if market-oriented reforms are to be efficient, then the rent component of income of those who will suffer from the reforms has to be high and the administrative costs have to be low. In addition, policies to raise the returns of assets held by the poor are most effective if carried out in conjunction with efforts to raise the demand for assets held by poor people. Since in most developing countries the main asset owned by the poor is unskilled labour, development strategies that increase the absolute and relative demand for unskilled labour are likely to benefit poor people the most. It is important to note that policies have

long and short term effects and these will have to be examined before the choice of market-oriented reforms are made (Moll, 1991:14).

4.2.1.2.3 Government Spending and Taxation

State revenues and expenditure constitute the third category of redistribution and this involves a change in the balance between revenues and expenditure of the two such that the poor are taxed proportionately less than the rich and if possible also receive a higher share of government spending. Government spending on the poor generally falls into two sub-categories: consumption spending and capital/investment spending. Consumption spending raises the consumption and welfare of the poor but does not necessarily address their productivity in the future, whereas investment spending, for example on education and training, increases the future productivity and earning-power of the poor. State spending in this regard can have high returns because the poor face many market weaknesses in trying to invest in themselves, especially in the capital markets.

Government consumption spending on the poor

In developing countries, the subsidisation of consumption is usually complementary to other state activities, such as health and education programmes. Alternatively, such subsidies may take the form of temporary emergency anti-poverty strategies e.g. efforts that have been made to relieve the most harmful effects of structural adjustment programmes in a number of developing countries in the 1970s and 1980s. Unfortunately, the problem with consumption subsidies is that unless they are strictly controlled they could end up consuming an increasing share of the state budget and thus harm long-run investment and growth (Moll, 1991:15).

Government capital spending on the poor

State investment in the poor aims to raise the value of assets held by the poor and thus improve their market position and also yield high social returns. Evidence from the developing world has shown that increasing state expenditure in areas like education, health, nutrition, housing, subsidised credit for poor people, rural infrastructure and spending on children can benefit long-run growth and the welfare of the poor at a

relatively low cost (Ffrench-Davis, 1976; cited in Moll, 1991:16). Generally, the required government spending on the poor, in terms of health, education, housing and school feeding programmes is a relatively small percentage of GDP. Such efforts are likely to raise the productive potential of the poor and encourage growth as well as raise the income share of the poor over time. This implies that proper vigorous reformist efforts can change the long-run asset distribution at fairly low costs (Moll, 1991:17).

In some developing countries, human capital investment strategies have been a focal point of economic development programmes due to the fact that the long-run returns from human capital seems higher than other forms of investment. It should also be noted that the extent to which state expenditures are investment may also depend on the state economic development strategy. A strategy stressing higher education when jobs for educated workers are scarce might be wasteful or harmful, creating economic expectations that cannot be met. Thus, it is important that a human capital redistribution strategy fits in with a country's growth strategy (Moll, 1991:17).

Constraints and Implications

Government expenditure on the poor entails redistribution through the budget. However, fiscal redistributive efforts have certain constraints for the economy. Firstly, the government budget cannot be too unbalanced as it would lead to printing money and inflation, or escalating government interest repayments, all of which are not sustainable. Williamson (1990:10; cited in Moll, 1991:17) stresses that the "permanent" government budget deficit should be kept firmly under control, otherwise the eventual macroeconomic consequences such as inflation, debt and structural adjustment, could lead to substantial costs. Also, increasing taxes can undermine economic activity, profits and investment. Secondly, many states lack the administrative capacity to redistribute through the budget, as often the administrative costs and inefficiencies are high. Lastly, past experience has shown that fiscal redistribution has not been highly progressive. The urban middle classes/the rich have benefited from many allegedly anti-poverty subsidies and thus ensuring that the poor benefit from government spending may be ultimately a political problem.

These fiscal constraints give rise to two implications for policy makers in developing countries. Firstly, the priority could be to shift the composition of government spending towards the poor instead of raising spending levels as a share of GDP, e.g. the provision of compulsory primary education instead of free university for those who qualify and may already be privileged to begin with; preventive rural health care, target-oriented nutrition programmes and subsidies for basic low-income housing (Selowsky, 1981:84-89; cited in Moll, 1991:18). Secondly, government spending can be targeted specifically at the poor as there is evidence that well-targeted social expenditures can raise the standards of living and productivity of the poor (Blejer and Chu, 1990; cited in Moll, 1991:19). Concentrating on easily defined target groups of the poor, such as poor regions, children and pregnant women, those who will respond to food-for-work schemes, can be a much cheaper and effective way of alleviating poverty than generalised subsidies which have high leakages to non-poor people (Moll, 1991:19).

4.2.1.3 Overall Strategy: Redistribution, Growth or Both?

Redistribution and growth are both important in the alleviation of poverty and three sets of growth strategies can be distinguished for developing countries. The first is termed "grow now, redistribute later", the second is "redistribute now, grow later" and the third, which falls between the two is a "redistribute and grow" approach.

The first option, "grow now, redistribute later" consists of economic practices that are argued to have trickle-down effects that may take ages to materialise, these strategies may not be efficient and can be viewed to be highly unjust. The second and third options present more opportunities or hope for the poor. It is argued that there is a relation between the degree of equality at the start of a growth-period and the trend of equality during growth. Most countries that have grown rapidly and equitably began their growth-phases with a relatively even distribution of assets (both physical and human), for example Taiwan, Costa Rica, and the Republic of Korea. On the other hand, many of those that grew fast but began with high levels of inequality experienced rising inequality

over long periods, for instance Brazil and the Philippines. In some cases the owners of assets benefit the most from growth and it is difficult to modify income flows substantially using instruments like government spending, taxes and labour market policies. It is thus concluded that equitable growth requires a "redistribute first, grow later strategy" (Moll, 1991:34).

The following sections of the chapter will discuss the South African government's macroeconomic framework and how it contributes to the reduction of poverty and inequality. There will also be a discussion on some recent initiatives that have been implemented by the South African government, some international organisations and other micro initiatives by civil society (such as NGOs).

4.3 Macroeconomic Policy Response

Since 1994, poverty reduction and the development of a more just and equitable society has been one of the priorities of the new democratic government of South Africa.

At the time of the first democratic election, South Africa was faced with major socio-economic problems and in 1994 the new South African government was confronted with major challenges of addressing poverty and inequality and advancing economic development. According to May, (2000,viii) the new government had inherited "an apartheid state machinery which had been set up, on the one hand, to provide quality services for a privileged minority of the population, and on the other hand, to ensure deliberate, systematic underdevelopment of the majority of South Africans. This resulted, *inter alia*, in a huge backlog in basic service provision."

This section of the chapter examines the South African government's macroeconomic framework with respect to its potential to contribute to the reduction of poverty and inequality. To review the literature on this aspect of the study, the Poverty and Inequality Report (PIR) will be cited. The Reconstruction and Development Programme (RDP) and Growth, Employment and Redistribution Strategy (GEAR) will be reviewed and public

expenditure in post 1994 will also be analysed. It is important to note that the government's budget allocation on social services is the main thrust of this section as the econometric analysis in the next chapter will be based on this. Specific programmes, initiatives and schemes that have been implemented by the government to address poverty will also be highlighted.

According to May (1998:53), in 1996, it had become clear that new macroeconomic initiatives by the government would be important if sustainable economic growth of more than 3% was to be achieved. A growth rate of 3% or less, indicates that critical economic objectives in areas such as poverty alleviation, income distribution and employment creation would not be achieved. Also low growth rates constrain the level of public expenditure that could be afforded, thereby limiting government's ability to provide essential social services.

4.3.1 The Reconstruction and Development Programme (RDP)

The democratic government of 1994 inherited a country with widespread economic hurdles, decreasing economic growth, increasing unemployment, balance of payment deficits and high levels of poverty and inequality. The challenge to the new government was to re-orient the state expenditure towards overcoming the legacies of apartheid yet a major obstacle to setting up a national anti-poverty programme was the lack of information on the poor - who they are, where they live, why they are poor, and what would be the best way to overcome the twin problem of poverty and inequality.

The anti-poverty strategy of the first democratic government is partly embodied in the RDP, which sees poverty as a multi-dimensional issue. The RDP is based on four pillars namely

- Building the economy,
- Meeting basic needs,
- Developing human resources, and
- Democratising the state (May, 2000:viii; Budget Review, 1998:E3).

One of the principal instruments for the realisation of the policy objectives of the RDP has been Government's macroeconomic strategy, known as the *Growth, Employment and Redistribution Strategy* (GEAR,). This integrated macroeconomic strategy was adopted to deliver job creation, improved export performance, more savings and investment in human and capital resources. It supports a redistribution of income and opportunities in favour of the poor. The fiscal framework outlined as part of the RDP and GEAR establishes the parameters for budget expenditure and the amounts available to allocate between the spheres (Budget Review, 1998:E3).

4.3.2 Growth, Employment and Redistribution Strategy (GEAR)

The RDP is complemented by GEAR, which is founded on the understanding that economic growth and employment creation are essential for the reduction of inequality and poverty.

The government released the GEAR in June 1996. The GEAR did not differ significantly from prior government policy assertions; it reiterated government's commitment to the existing policy framework and its continued application over the medium term. The GEAR also identified many of the structural weaknesses in the economy that inhibit the growth and employment creation, and focused attention on market-based policy measures to address them. The GEAR indicated government's intention to alter the relative price of tradables and non-tradables to help increase the outward orientation of the economy, boost investment and increase the demand for labour.

The strategy recognised that accelerated job creation is essential to achieving a sustained reduction in inequality and that substantial job creation would require structural transformation to achieve higher and more labour-absorbing growth within the economy. GEAR then focuses its strategy for higher growth rates on several related elements, including:

- A reprioritisation of the budget towards social spending
- An acceleration of the fiscal reform process
- The gradual relaxation of exchange controls
- The consolidation of trade and industrial reforms
- Expansionary public sector restructuring
- Structures flexibility with collective bargaining
- A social agreement to facilitate wage and price moderation

As with the Poverty and Inequality Report (May, 1998:53), the last six elements are considered below with respect to their impact on poverty and inequality. A public expenditure review is discussed in the subsection 4.3.3. in the case of the reprioritisation of the budget. The aims of GEAR were to stimulate economic growth and job creation, reduce inflation and the budget deficit, accelerate domestic savings and increase the flow of foreign direct investment and it was argued that the economic benefits of GEAR would be felt during 1996 - 2001 (UNDP, 2003:57).

4.3.2.1 Fiscal Policy

The government adopted a tight fiscal policy stance compatible with lower inflation and interest rates in an effort to improve the performance of the economy. Key elements of this policy were a reduction in government deficit, a revision of the tax structure to increase its efficiency, reprioritisation of the budget and a restructuring of state assets. GEAR gives fiscal discipline a prominent role as it is regarded as an essential element of sound economic policy management, especially considering the effect of global conditions on national economies. The approach taken in GEAR has an effect on poverty and inequality patterns in South Africa and these issues are discussed below.

Inflation

In addressing poverty, a low and stable level of inflation can help protect the poor against an erosion of their standard of living yet the extent and duration of the economic contraction required to achieve this outcome must be carefully considered as this has the

potential to generate costs that can offset some of the anticipated gains from low inflation. The deficit targets set in GEAR aimed at maintaining inflation at single digit levels thus requiring fairly restrictive monetary and fiscal policies. According to economic theory, low levels of inflation are linked with high levels of unemployment (as depicted by the Philips curve) and therefore there is an implication of a potential trade-off between the GEAR objectives of low inflation and higher levels of employment and output.

The extent to which lower inflation benefits poor people depends on other factors such as the commodity composition of consumption of different households. Poor households will benefit from low inflation relatively more if a decrease in the inflation rate is due mainly to lower price increases for basic goods consumed such as food. Thus it is possible that even if overall inflation reduces, low-income households can be adversely affected depending on the resulting pattern of commodity price changes (May, 1998:54: Mokate, 2000:59).

Savings and Investment

For economic growth to occur, it is essential to generate savings in the economy which supports investment; GEAR estimated this at approximately 25%. Government saving makes an important contribution to the overall domestic savings level. Foreign capital infusion can also help growth however this is limited to a maximum sustained level of around 2 - 3% of GDP over the long run, thus the level of national savings is more important in determining the resources available. In the South African context it is important to determine the extent of government savings required to deal with the multiple challenges of growth, poverty and inequality (May, 1998:54: Mokate, 2000:61).

When government spending exceeds its revenue, government has to borrow to fund its expenditure, the budget goes into deficit and dis-saving occurs. Deficit spending tends to lead to a "crowding out effect" whereby private investment is reduced. A reduction in the deficit over time, leads to lower debt levels and this in conjunction with lower interest rates, allows government to save on interest expenditures. These take up about 20% of

the budget and usually interest expenses incurred by the government have the effect of crowding out other government expenditures, including social expenditures (May, 1998:56).

The fiscal policy promoted by GEAR, requires reductions in the budget, an issue which may constrain the government in meeting the objectives of reducing poverty and inequality. Given the extent of poverty and inequality that exists, government has to undertake some measure of redistribution and reprioritise expenditure towards poor households, for instance in education and health. The current fiscal policy stance requires either squeezing more out of the higher income earners or giving less to the low income earners (May, 1998:56; Mokate, 2000:61).

4.3.2.2 Monetary and Exchange Rate Policy

The main aim of monetary policy in South Africa is to gradually reduce exchange rate controls, maintain low inflation rates and ensure that the real exchange rate is at a competitive level. A competitive real exchange rate is likely to make South African exports more attractive. These objectives have the potential to contribute to the reduction of poverty and inequality, especially if firms that are able to take advantage of the export markets produce more labour-intensive products. These objectives can also bring about overall growth in the economy through a healthy balance of payments.

The maintenance of low inflation rates can be achieved through the implementation of high interest rates. However, this has a negative impact on the other above objectives. This policy can also adversely affect poverty. Firstly, persistent high real interest rates negatively affect growth, employment expansion, the development of the SMME sectors and the encouragement of home ownership. Secondly, this tactic has to be co-ordinated with the objectives of exchange rate policy because high interest rates can bring about a strengthening of the value of the currency and this could ultimately result in a weakening of export competitiveness. Lastly, the approach of reducing consumption via high interest rates may lead to the neglect of other ways of mobilising domestic resources. Thus, to

facilitate both economic growth and the reduction of poverty, government has to regularly evaluate issues of policy timing and flexibility regarding the macroeconomic stance (May, 1998:57; Mokate, 2000:62).

4.3.2.3 Consolidation of Industrial Reforms

Under the GEAR, the proposed trade and industrial reform strategy was designed to aid the South African industry become internationally competitive, encourage the development of small and medium firms, strengthen competition policy and develop an industrial cluster program.

For the poor to benefit from an international competitiveness strategy, it is important that the use of labour-intensive technologies is encouraged and necessary precautions are taken to deal with the adverse impacts of globalisation on poor people. Trade liberalisation primarily involves industrial restructuring and resource allocation, including labour. Changes introduced by firms facing increased competition from world markets include reorganising production processes through measures such as additional shifts or consolidation of production lines, investment in newer and higher productivity machinery as well as acquisition of new technology. Trade liberalisation also has the potential to impact negatively on the poor, especially when it leads to shedding of unskilled labour or adoption of practices that lower the social wage received by poorer households. As South African firms respond to changes in the external environment, it is highly probable that jobs are likely to be shed or conditions of employment are likely to deteriorate in those industries where the poor are predominantly employed. It is thus important to monitor the impact to ensure that the poor do not bear an excessive share of the adjustment burden.

The main elements of South Africa's competitive strategy are trade liberalisation, tax incentives (e.g. accelerated depreciation tax allowance and tax holidays), initiatives to attract foreign direct investment and continuing relaxation of exchange controls. Some of these policies tend to have a negative effect on poverty e.g. tax incentives used have

encouraged capital intensive industries as opposed to labour intensive ones and this adversely affects South Africa's development policy in terms of addressing poverty. On the other hand South Africa stands to gain from having a more open economy, which in turn can have a beneficial impact on poverty and inequality (May, 1998:58; Mokate, 2000:63).

4.3.2.4 Public Sector Restructuring

According to the Poverty and Inequality Report (May, 1998:58), an increase in the efficiency of public spending through the restructuring or right-sizing of the public sector service may impact on poverty. The programme for this includes transforming public corporations, privatisation, the sale of non-strategic assets and the creation of public-private partnerships in transport, telecommunications and other service provision at local and national levels. Public service restructuring is to reduce government spending, which is to occur by ensuring that:

- Government moves out of providing services that can be more efficiently provided by the private sector;
- Public-private partnerships are used to increase access to capital, new technologies and increased efficiency;
- Funds raised from privatisation are used to reduce the budget deficit.

The report argues that if the restructuring of state assets is done correctly, it can lead to an expansion of services at lower prices and also the process can provide opportunities for addressing poverty and inequality, through the distribution of assets to poor households.

4.3.2.5 Structured Labour Market Flexibility

GEAR recognises that due to globalisation and international division of labour, emphasis should be placed on the role of relative wages in determining competitiveness and the location of production. International competition is such that it pushes down the wages earned by unskilled workers and pushes up wages earned by skilled workers. Further,

labour market flexibility is becoming widely accepted as a method of increasing employment and ensuring wage distribution. The GEAR does not define labour market flexibility. Recent surveys have indicated that South African firms have been moving towards the use of casual labour, contract labour and sub-contracting against a background of stringent labour laws. This indicates an increasing level of employment flexibility (Standing, 1997:7; cited in Mokate, 2000:64), as the unemployed can be drawn into the workforce through such flexible opportunities. However, this approach could end up producing lower quality jobs and increased worker insecurity.

The challenge for South Africa is to ensure flexibility with security as global competition is likely to require flexibility to adjust to competitive forces. This then implies some regulation of the affected labour markets and structuring a benefit system to which the various employers can contribute. It also implies the need for government intervention to ensure that overall social wages earned by workers places them above the poverty line (May, 1998:59; Mokate, 2000:64).

4.3.2.6 Social Agreement

According to the Poverty and Inequality Report (May, 1998:59), GEAR advocates for a social agreement to facilitate wage moderation, accelerated investment and employment and enhanced public service delivery. A social agreement is a tool that can be used to deal with the negative impact of labour market flexibility and international competitiveness on vulnerable groups. GEAR assumes that a strategy that focuses on growth and job creation would be the most successful for reducing poverty and promoting equity. To ensure maximum effectiveness, it is important that the social compact incorporates the interests of all groups. Consideration should therefore, be given to small-scale businessmen, the corporate interests, the unemployed and unskilled, as well as skilled and organised labour (May, 1998:60; Mokate, 2000:65).

A Critique of GEAR

GEAR was presented as an economic policy framework for the period between 1996 and 2000, however its tight fiscal policy stance has been established to last beyond the original five-year duration (UNDP, 2003:63&104). It was predicted that there would be a gradual but significant increase in the growth rate of the economy, the number of formal manufacturing jobs, the net inflow of foreign investment, exports and real private and public investments (UNDP, 2003:57). The framework has been heavily criticised for failing to deliver the expected outcomes. According to GEAR, South Africa was expected to achieve an annual growth rate of 6% over the 1996-2000 period, unemployment was expected to be reduced and it was also projected that from 2000, about 400 000 new jobs would be created annually. Since the implementation of GEAR, the economy has grown at an average of 2.98% between 1996 and 2004 and employment has declined by 509 000 in non-agricultural sectors. The loss of jobs may have impacted on poverty levels. Other outcomes include maintaining inflation below the 10% barrier as targeted and achieving a 4.3% average annual real growth rate for the export of goods and services instead of the targeted 8.4% during the period (SARB, 2005:S-154; Mahadea, 2003:23; UNDP, 2003:189).

The GEAR policy framework has been criticised for being restrictive and focussing on selected intermediate targets. Attempts to reduce the budget deficit from about 5% to less than 3% within a five-year period resulted in severe restrictions on expenditure, which has impacted mostly on government's capital investment and also in social and economic infrastructure development. The framework is said to have given marginal priority to the quality of growth in terms of employment creation and poverty reduction. The framework may also have trapped the economy in a low growth path (UNDP, 2003:57&190).

4.3.3 Reprioritisation of the Budget

This section focuses on the post apartheid government's attempt to reprioritise its expenditure and examines how this expenditure has impacted on poor individuals and households. For the purpose of this study only certain aspects of the public expenditure review will be dealt with.

4.3.3.1 Sectoral Composition of the Expenditure,

According to the PIR (May, 1998:60), "in the case of South Africa, the functions that comprise the social sector are education, health, social security and welfare, housing, and recreation and culture." The level and nature of expenditure allocations to sectors of government concerned with human development are an important indicator of whether or not government expenditure is likely to lead to a reduction in poverty and inequality. According to Mokate (2000:65), in South Africa there is a strong correlation between poverty and the lack of access to basic services. This implies that to tackle poverty, it is important to ensure that adequate resources are allocated to sectors of the government that provide basic services. One might argue that this would entail excessive government intervention. However, the social services sector often requires government intervention due to the existence of market failures.

There has been an increase in the share of total expenditure going to social services from about 43% in 1985 to about 57% in 1995/1996. Budget allocations for 1997-1998 indicated that social services account for 60% of non-interest spending and 46.9% of total consolidated national and provincial expenditures. The education component of this allocation was the highest, followed by health, social security and housing (May, 1998:61).

Tables 4.1 and 4.2 show the trend with respect to social services since the 1994/1995 budget year for the consolidated national and provincial budgets.

Table 4.1 Functional Classification as % of Total Expenditure

Function	1994/95	1995/96	1996/97	1997/98
Government services and unallocated expenditure	7.6	6.9	7.6	7.0
Protection services	18.1	16.0	15.9	15.7
Social services	45.0	47.1	45.6	46.9
Economic services	11.7	11.1	11.0	10.0
Interest	17.5	18.8	19.6	20.4

Source: May, 1998:61; Mokate, 2000:66

Table 4.2 Functional Classification as % of GDP

Function	1994/95	1995/96	1996/97	1997/98
Government services and unallocated expenditure	2.4	2.2	2.4	2.1
Protection services	5.7	5.0	5.0	4.8
Social services	14.1	14.8	14.5	14.2
Economic services	3.7	3.5	3.5	3.0
Interest	5.5	5.9	6.2	6.2
Total estimated expenditure	31.4	31.7	31.7	30.6

Source: May, 1998:61; Mokate, 2000:66

Table 4.1 shows that as the share of total expenditure on social services increased from 45% in the 1994/95 fiscal year to 46.9% in 1997/98, the share for economic services decreased from 11.7% in 1994/95 to 10% in 1997/98. Within the economic services group, water and related schemes increased from 0.7% in 1994/95 to 1.0% in 1997/98 (not shown here). Within protection services, defence decreased by 34%, as its allocation dropped from 8.7% of total expenditure in 1994/95 to 5.7% of total expenditures in 1997/98 (not shown here). This trend indicates that in the post apartheid era, there has been a shift in expenditure towards social service as this sector's share of total expenditure increased between 1994 and 1998. The shifts are generally considered to be an indication of a poverty sensitive budget (May, 1998:61). An examination of more recent data in the Budget Review of 2004 and 2005, indicates that government expenditure on social services continues to be the largest functional category as the average expenditure on social services between 2000/01 and 2003/04 was about 58.1% of total non-interest spending.

It is useful to compare expenditure allocations between South Africa and other countries. However, it is important to note that such comparisons have limitations. Nevertheless, it gives an indication of where a particular country falls. Table 4.3 shows South Africa is spending considerably more on social services as a share of total expenditure than the other countries/regions.

Table 4.3 Means of Government Expenditure in Developing Countries by Region (1985-1990)

Sector	East Asia	South Asia	Sub-Saharan Africa	Latin America	MENA*	South Africa (1997/98) budget figures
Social services	33.51	26.5	26.18	31.34	28.59	46.9
Education	20.45	8.95	13.9	14.85	10.73	21.3
Health	7.03	4.2	5.47	7.21	4.35	10.7
Social security and welfare	3.09	5.66	2.29	5.48	8.23	9.8
Housing	2.19	5.36	2.44	3.11	3.28	2.2
Economic services	25.17	30.56	22.19	18.56	20.47	10

Source: (Pardhan, 1996; SA Budget Review, 1997:B64) cited in Mokate, 2000:67

*MENA - Middle East and North Africa

The table shows that the amounts for education and housing are comparable to those of East Asia. In the case of education the region closest to South Africa is East Asia. Total government expenditure in most countries shown in the table is lower than that of South Africa and thus social spending in South Africa as a share of GDP is considerably higher. South Africa spent relatively less, in 1997/98, on economic services compared to what was spent by other regions in the period between 1985 and 1990.

South Africa's public expenditure on health amounted to 3,2% of GDP in 1990 (UNDP, 1997;cited in May, 1998:64). As is shown by Table 4.4, this was above the average of 2,3% for countries falling within the medium human development index (HDI) category.

Table 4.4 Comparison of Government Expenditure and Composition

	South Africa (1997/98 budget)	Industrialised Countries						NICs
		Big Governments		Medium-sized governments		Small governments		
		1960	1990	1960	1990	1960	1990	
Total expenditures (% of GDP) of which	30.6	31.0	55.1	29.3	44.9	23.0	34.6	18.2
Health	3.3	2.6	6.6	3.0	5.9	2.3	5.2	3.3
Education	6.5	4.5	6.4	2.9	5.6	3.4	5.0	3.4
Social Security	3.	13.5	19.5	9.6	13.9	6.2	7.9	1.0

Source: [Schuhknecht and Tanzi (1996); Budget Review 1997] cited in May, 1998:64

During 1993-94 South Africa spent 7,1% of its GDP on education as compared to an average of 2,9% for countries with a medium HDL. The value for the 1997/98 budget year was 6,5% of GDP. This figure compares favourably to all OECD countries, and the Newly Industrialising Countries (NICs). Similarly, only 'Big' OECD governments outspent South Africa on health as a percentage of GDP. However, education expenditures were lower than what was spent by other countries with similar HDIs, such as Botswana (8,5%), Namibia (8,7%), Zimbabwe (8,3%) and Congo (8,3%). This analysis suggests that the pattern of South Africa's social spending compares favourably to most other 'similar' countries.

To gain more insight into the Government's social spending, one needs to focus on the quality of services provided, how equitably they are distributed, and their impact on quality of life and economic growth. However, it is important to note that, even if government is allocating spending in proportions which are comparable to 'internationally accepted norms', the overall favourable impact may be reduced if overall spending is decreasing at the same time. Inefficiencies within the system can also serve to undermine the impact of government spending (May, 1998:64).

4.3.3.2 Intra-sectoral Composition and Incidence of Social Service Expenditures

"Social services lay the foundation for future growth through human capital development while providing direct support to the most vulnerable groups in society" (Budget Review, 2005:120). Government spending, if efficiently and effectively directed towards the poor, can contribute to human development as it has the potential to increase the welfare and future productivity of the poor. This section focuses on intra-sectoral allocations of expenditures in the social sector components of public spending with a specific focus on education, health, welfare and housing. According to May (1998:69), education, health and welfare "are the sectors that impact significantly on poverty and inequality and they also make up a high proportion of the budget relative to other components." (The next chapter picks up on this as a regression analysis is used to determine how government expenditure on social services contributes to the alleviation of poverty in the country.) The following section thus discusses government expenditure on the social services component and the impact made on the poor in the post apartheid era.

Education

The 1997/98 allocations of expenditure indicate that education received the largest proportion of the budget (21%) followed by debt interest at (20%). It also received the largest proportion of funding allocated for social sectors. With respect to the intra-sectoral allocation of education, Table 4.5 below shows that pre-primary, primary and secondary education received the largest share of the allocation between 1994/95 and 1997/98. This compares favourably with amounts spent by countries such as Indonesia (89%>), Malaysia (74%>) and Korea (84%>) on basic education in their early years of development (Chandra, 1997; cited in PIR, 1998:69). The focus of these countries was on quality basic education in order to provide a sound foundation to increase the pool of individuals eligible for higher education. In South Africa however, a weakness in the allocation of resources within the education sector, is that pre-primary education and Adult Basic Education and Training (ABET) sectors do not receive the required amount of funds reflected by the level of need. Greater focus on these areas is critical for strengthening the impact of primary and secondary education. This is particularly

important given the levels of poverty among Africans, and the fact that African women, especially rural women, have the lowest levels of education (May, 1998:69).

Table 4.5 shows that the proportion of expenditure allocated to pre-tertiary education has been declining progressively since 1994/1995. This trend is contrary to intra-sectoral allocations normally advocated; to spend less on tertiary education and more on the primary and secondary levels. The idea behind this is that tertiary level education recipients should bear a higher proportion of their costs, because of the direct returns they will receive from having higher levels of education.

Table 4.5 Allocations of Education Expenditures

Level	1994/95	1995/96	1996/97	1997/98
Education	30 849.8	34 594.0	39 165.6	40 270.5
Pre-primary, primary and secondary	26 519.7 (86%)	28 959.4 (84%)	32 332.6 (83%)	33 074.3 (82%)
Tertiary	4 330.1 (14%)	5 634.7 (16%)	6 833.0 (17%)	7 196.3 (18%)

Source: (Budget Review 1997:B63) cited in May, 1998:70

In 1995/96 spending on primary education was 43,1%, secondary 30,7%, university 14,6% and technikons 10,7%. The extent to which these allocations represent 'adequate' funding to address poverty and inequality can only be measured through a benefit-incidence analysis.

A benefit incidence analysis of public expenditure in education undertaken by Castro-Leal (1996; cited in May, 1998:70) using 1993 figures indicates that "in 1993, poor households received 40% of all public education spending for 60% of the South African school-age population, while the share going to the richest households was 28% for only 8% of the school-age population. Ultra-poor households received 21% of public education resources for 34% of the school-age population". The research further found that as the education level rises from primary to tertiary, so too does the distribution of resources widen across income groups and different races. Further, 1996 *per capita* student expenditure on primary education was lowest in the provinces with the highest incidence of poverty, KwaZulu-Natal, Eastern Cape and the Northern Province. With

respect to secondary education, the Free State, Mpumalanga and Northern Province have the lowest respectively (May, 1998:70).

Since 1995 there has been a considerable shift of resources between schools, mostly linked to the shift of teachers to historically disadvantaged schools to equalise teacher pupil ratios. Overall school costs are now similarly distributed to the school going population, and equity in spending per child has almost been reached. The remaining differences are the result of better-qualified teachers in suburban schools, or arise from the mix between primary and secondary pupils, reflecting the higher enrolment of the poor in primary rather than secondary school. Higher dropout ratios, and the younger age structure of the black population are contributory factors, and as these change, the redistributive impact will improve (Van der Berg *et al*; cited in Budget Review, 2005:122).

The proportion of students accessing higher education who are black has rose from 51% in 1995 to 61% in 2000, reflecting a moderate improvement in targeting from 1995 to 2000. Future emphasis will be on improving the equity of outcomes through improving the efficiency of social services to the poor (Van der Berg *et al*; cited in Budget Review, 2005:122).

Health

Health is another component of social expenditure. From the early 90s to about the mid-90s, health received the next largest allocation of total expenditure after education. Table 4.6 shows expenditure on health between 1995 and 2002.

Table 4.6 Expenditure on health (1996-2002)

	Constant 1995 Prices (Rm)			Per Capita Constant 1995 Prices (R)		
	1996	2002	Average annual growth rate (1997-2002)	1996	2002	Average annual growth rate (1997-2002)
Compensation of employees	10 171	10913	0.3%	258	241	-1.7%
Expenditure on goods and services	4 280	5 990	7.5%	108	132	5.3%
Total	14 451	16 903	2.3%	366	373	0.3%
% of government total current expenditure	8.9%	9.8%				
% of GDP	2.6%	2.6%				

Source: Adapted from UNDP, 2003:31

Table 4.6 shows that the health budget was about 2.6% of the GDP or about 9.8% of government's total current expenditure (in constant 1995 prices) in 2002. Between 1995 and 2002, there was a slight increase in the real health expenditure as it increased from about 14.5 billion in 1995 to 16.9 billion in 2002. During this period, the real per capita health expenditure also increased at an average annual rate of 0.3% (UNDP, 2003:31).

The major focus of the reprioritisation of expenditure in the health sector has been to increase spending on the expansion of access to primary health care particularly in underserved areas. The results of an analysis undertaken by Castro-Leal in 1993 portrayed that at that time, South Africans appeared to be utilising high cost, high level care for primary health purposes. There was also a significant leakage of high level clinical care in public hospitals going to the richest quintiles. The high usage of private care by poor households was related partly to lack of easy access or unavailability of clinics and the lower quality of care clinics provided in the areas in which they live. (May, 1998:71).

The introduction of free clinics between 1995 and 2000 led to a greater use of public clinics by the poor. Further, there has been some reduction in the use of public healthcare services by the middle class who have shifted to private clinic services. There has also been a variation in the efficiency levels and standards of services offered in clinics (Van der Berg *et al*; cited in Budget Review, 2005:122).

Welfare

Social security and welfare expenditures form an essential part of government's programme to address poverty. Expenditures on this sector have increased substantially over the years in order to achieve parity in social grants and this is shown in Table 4.7 below.

Table 4.7 Government Expenditure Per Capita on Social Security and Welfare (1994-2002)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Social security and welfare	82	104	84	106	112	117	1213	132	138

Source: UNDP, 2003:104

Table 4.7 shows the changes in per capita real welfare expenditure from 1994 to 2002. Apart from 1996 when there was a reduction, generally, there has been an upward trend in welfare expenditure per capita over the period.

As at 1997, 88% of the overall budget of social security and welfare sector was going toward social security, 8% to welfare assistance and services and 4% to capital expenditure (DoW, 1997:33; cited in May, 1998:72). Most of the social security (60%) went to the elderly, 24% to the disabled and 14% toward maintenance grants. Pensions have been shown to make up a significant proportion of the income of poor households (Swami and Ketley, 1997; cited in May, 1998:72) and on average, 64% of those eligible for pensions receive them. As at 1997, the percentage of Black South Africans receiving pensions was 80% for women and 77% for the men. Whites relied less on state provided old-age pensions as only 7% of the eligible men and 14% of the women took them up.

Blacks receive 90% of the benefits of welfare pensions. In addition, pensions make up 23%-26% of the income of poor households and 29% of the income for the ultra poor as compared to about 3%-5% for the non-poor (May, 1998:72; Woolard, 2002:13).

The provision of old-age pensions is one of the programmes that can accurately target the eligible population. Approximately one-third of all children were living with a pensioner in 1993, thus the benefit also reaches poor children. Unlike old-age pensions, the incidence of expenditure of the child maintenance grant is skewed against black women. Despite the high rate of poverty among blacks, only 0,5% of black children were covered in 1993, as compared to 13% of coloured children and 2% of white children (Swami and Ketley, 1997: 38; cited in May, 1998:72). To address this problem, government introduced a child maintenance system called the Child Support Grant (CSG). The grant, which will be discussed in more detail in a subsequent section, begun in early 1998 but its growth puts pressure on welfare budgets (May, 1998:72).

The literature indicates that even though social grants expenditure are generally perceived to be well-targeted, the overall grant expenditure is not as well targeted as it was in 1995. This could be due to the introduction of the child support grants (CSG), which initially led to a broadening of the client base. Many recipients of the CSG live in households with some other income, whereas pensioners often live with no other income source. In addition, the rollout of the CSG was initially uneven, focusing on urban areas, thereby excluding many of the poorest in rural areas from coverage. This has improved greatly since then (Van der Berg *et al*; cited in Budget Review, 2005:122).

Housing

The results for 2000 showed a significant shift away from subsidies for first time homeowners and building of housing by the state, towards spending on housing subsidies for those without formal housing. In 2000/01, 163 114 housing subsidies were given to beneficiaries with household incomes of less than R18 000 per year, 6 746 to households with income between R18 000 and R30 000, 3 999 to those with incomes ranging from R30 000 to R42 000, and 5 to people in higher income brackets. This represents highly

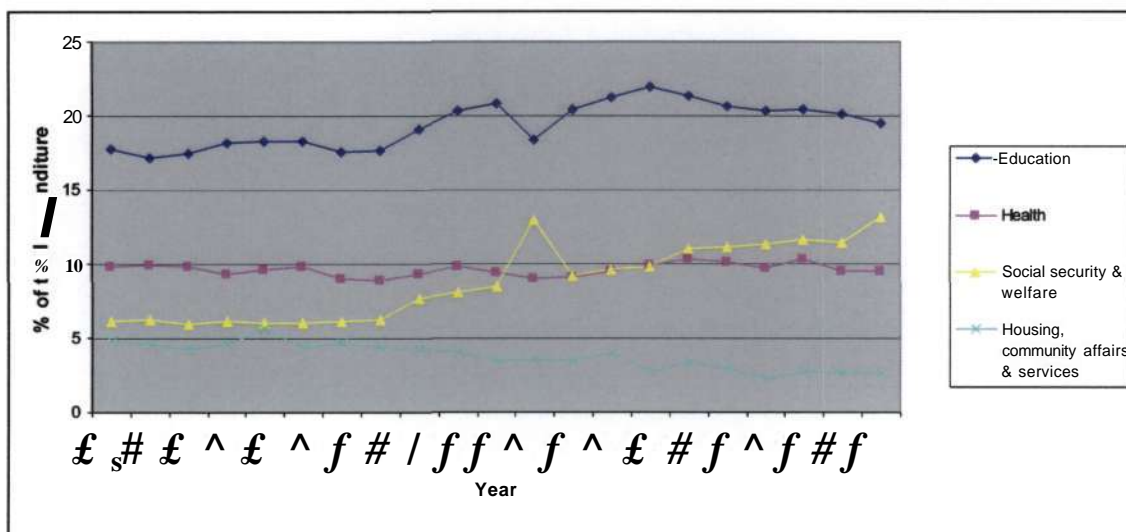
effective targeting of the poor in the housing sector (Van der Berg *et al*; cited in Budget Review, 2005:122).

In 2004, the National Treasury commissioned a study to determine the shifts in spending from rich to poor that have taken place in education, health, welfare and housing. The study revealed that the country had achieved considerable progress in the degree of targeting. This is attributed to a combination of broad access to social services, particularly education for the poor and a social grants system, which is unique in its size and reach among developing countries. In addition, there has been increasing emphasis on primary health care, housing programmes and infrastructure, including water provision, all targeted at the poor. Real social spending between 1995 and 2000 increased by R15,1 billion - an increase of 14% per capita in social spending and a 25% per capita increase for the poorest 40% of households over the five year period (Van der Berg *et al*; cited in Budget Review, 2005:122; Hunter *et al*, 2003:24).

4.3.3.3 General Trends in Government Expenditure on Social Services, 1983 - 2003

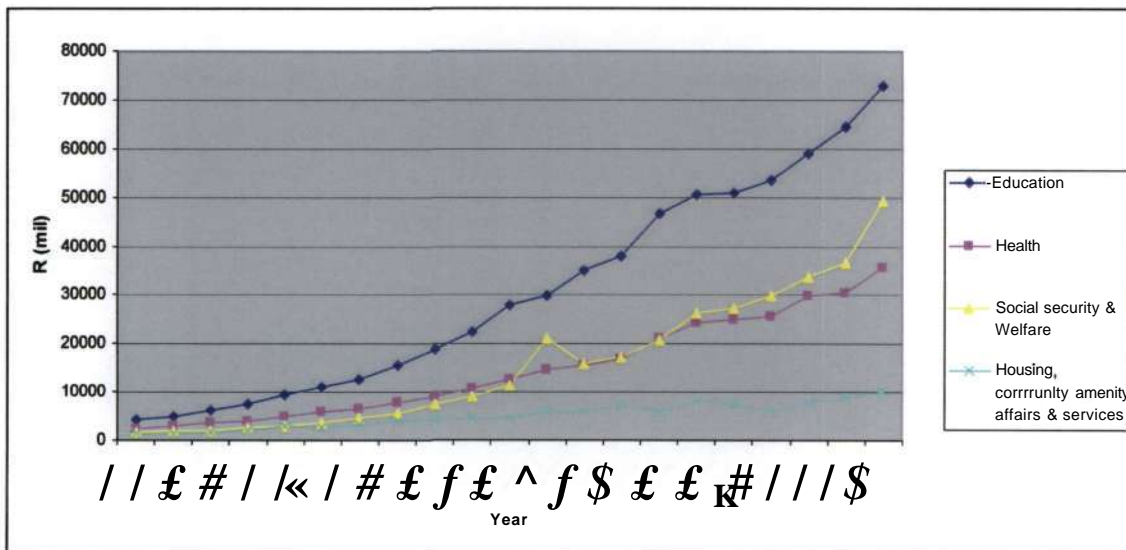
To provide a clearer picture of the movements in the expenditure on social services, time series data on government expenditure on social services has been used to illustrate the trends in the period between 1983 and 2003.

Figure 4.2 Total Consolidated Government Expenditure on Social Services: each component as a percentage of total expenditure



Source: own calculations from South African Reserve Bank: 2005

Figure 4.3 Total Consolidated Annual Government Expenditure on Social Services in R million



Source: own calculations from South African Reserve Bank:2005

Figures 4.2 and 4.3 provide information on how government expenditure is allocated between the different components of social services. Whereas Figure 4.3 shows the trend in Rand amounts, Figure 4.2 shows the trends in expenditure on each component as a

percentage of total expenditure. It can be seen that even though the monetary amount spent on social services has increased rapidly between 1983 and 2003, the rise in government spending on each component as a percentage of total government expenditure has been less dramatic and gradual in most sectors. This information is represented numerically in the following Table 4.8.

Table 4.8 Comparison of government expenditure on social services

YEAR	Total expenditure - Consolidated general government: Education (Rmil)	Total expenditure - Consolidated general government: Education (as % of total)	Total expenditure - Consolidated general government: Health (Rmil)	Total expenditure - Consolidated general government: Health (as % of total)	Total expenditure - Consolidated general government: Social security & welfare (Rmil)	Total expenditure - Consolidated general government: Social security & welfare (as % of total)	Total expenditure - Consolidated general government: Housing & community amenity affairs & services (Rmil)	Total expenditure - Consolidated general government: Housing & community amenity affairs & services (as % of total)
1983	4348	17.72	2394	9.76	1511	6.16	1182	4.82
1984	4977	17.1	2878	9.89	1805	6.2	1327	4.56
1985	6157	17.43	3470	9.83	2074	5.87	1526	4.32
1986	7601	18.12	3916	9.33	2558	6.1	1936	4.62
1987	9327	18.27	4924	9.64	3065	6	2874	5.63
1988	10886	18.25	5849	9.81	3600	6.04	2600	4.36
1989	12625	17.57	6448	8.97	4437	6.17	3338	4.65
1990	15408	17.7	7754	8.91	5460	6.27	3834	4.4
1991	18886	19.13	9192	9.31	7586	7.68	4168	4.22
1992	22505	20.29	10849	9.78	8926	8.05	4521	4.08
1993	27737	20.83	12487	9.38	11222	8.43	4663	3.5
1994	29756	18.35	14475	8.93	21028	12.97	5727	3.53
1995	34878	20.4	15504	9.07	15781	9.23	5873	3.44
1996	38037	21.22	16973	9.47	17201	9.6	7109	3.97
1997	46658	21.96	21117	9.94	20748	9.76	5845	2.75
1998	50417	21.34	24410	10.33	26093	11.05	7968	3.37
1999	50819	20.61	24856	10.08	27350	11.09	7338	2.98
2000	53451	20.28	25662	9.74	29959	11.37	5957	2.26
2001	58891	20.42	29813	10.34	33654	11.67	7905	2.74
2002	64585	20.15	30549	9.53	36757	11.47	8639	2.7
2003	73028	19.54	35527	9.5	49198	13.16	10102	2.7

Source: SARB:2005

The data in Table 4.8 has been represented graphically in Figures 4.2 and 4.3 and thus contain the same information. Figures 4.2, 4.3 and Table 4.8 suggest that there has generally been an increasing trend in government expenditure on most social services except in the case of housing.

Figure 4.2 indicates that the proportion of government expenditure allocated to education has consistently been the highest out of all social spending, and from 1983 to 2002 there has been a general upward trend; the proportion went from 17.72% of total government expenditure in 1983 to 19.54% in 2003. It is shown that there was a sharp decline in 1994. But from 1995 this general upward trend resumed even though there has been decreases in recent years, from 20.42% in 2001 to 19.54% in 2003.

Averaging at about 9.6% from 1983 to 2003, Figure 4.2 shows that the percentage of government expenditure allocated to health has generally shown a consistent trend. Though it was the second highest component in terms of social spending from 1983 till about 1993, since 1994 it has been taken over by social security and welfare.

Table 4.8 shows that the share of government expenditure on social security and welfare as a percentage of total government expenditure went from 6.16% in 1983 to 13.16% in 2003. Prior to 1994, government expenditure on social security and welfare was the third highest but in 1994 there was a sharp increase in the government's spending on this component and since then there has been a gradual increasing trend. This component is currently the second highest in terms of government spending on social services.

The data shows that the proportion of government expenditure allocated to housing, community amenity affairs and services has gradually decreased from 1983 to 2003; even though nominal Rand amount spent on housing increased from R 1.182 billion in 1983 to R 10.1 billion in 2003, this component's share as a percentage of total government spending decreased from 4.82% to 2.7% during this period.

It can be concluded that government spending on education is the highest, followed by spending on social security and welfare (since the mid 1990s), and then expenditure on health. The social services component that takes up the least of government expenditure is housing and community amenity affairs. The data supports the proposition that the government is dedicated to reducing poverty in the country through a poverty sensitive budget and its spending plans. The relatively high expenditure on education indicates the recognition and partial support of the theory that investment in human capital via education has the potential to reduce poverty and increase people's standards of living in the long run. The expenditure on social security and welfare indicates the need to address and alleviate poverty and its related issues in the short run through the provision of various types of grants for the poor and unemployed.

4.3.3.4 Medium Term Expenditure Framework

The government of South Africa currently uses a budgetary process that consists of three-year spending plans and it is known as the Medium Term Expenditure Framework (MTEF). This framework sets out medium term expenditure projections based on fiscal policy goals: the inclusion of a discussion on the MTEF aims to spell out the intended spending plans of the government with respect to social services in the near future.

Since 2003/2004, the government has adopted an expansionary fiscal stance. In recent years the budget has allowed for an extension of key public services, particularly in the social sector and in areas of infrastructure. The budget prioritises services that target the poor and vulnerable groups, while advancing programmes that provide greater impetus for economic growth and broad-based development (Budget Review, 2004:120).

The sustained expansion of the economy and sound fiscal management allow for significant increases in expenditure in the 2005 Medium Term Expenditure Framework. Budget priorities are determined by Government's broad objectives of increasing economic growth, advancing social development and reducing inequality. Allocations are targeted at increasing social and economic infrastructure investment, providing direct

income support, improving remuneration in key public services, accelerating land restitution and improving basic service delivery to the poor (Budget Review, 2005:117).

To illustrate the expected pattern of government spending on social services Table 4.9 provides the MTEF estimates on social services.

Table 4.9 MTEF: Estimates of Expenditure on Social Services (%)

	2004/05	2005/06	2006/07	2007/08
Education	22.4	21.6	21.6	21.5
Health	12.5	12.6	12.6	12.5
Social security & welfare	18.6	19.1	19.4	19.5
Housing & community development	5.8	5.6	6	6.1
Total social services	59.3	58.9	59.6	59.6

Source: Budget Review, 2005:191

According to the 2005 Budget Review (2005:142), consolidated national and provincial expenditure indicates the following trends:

- Social services remain the largest category of spending; as shown by table 4.9 this component will average at about 59.4% of total non-interest spending between 2004/05 and 2007/08
- Within social services, education continues to be the largest component, as seen in Table 4.9, and at 18,8% continues to receive the largest share of the budget.
- A strong average annual growth in welfare of 25,5% between 2001/02 and 2004/05 reflects the growth in the number of beneficiaries, increases in the value of grants and higher spending of the Road Accident Fund. At 16,7%, spending on social security continues to be the second largest component of the Budget.

4.3.3.5 Concluding Remarks on Public Expenditure and Poverty Alleviation

Generally, increases in public expenditure, especially in social services, have the potential to decrease poverty if effective measures are efficiently targeted. A study by Borat (2000:765), which was conducted to determine the potential cost to the state of alleviating poverty through an extensive income transfer scheme, found that the financial

commitment necessary for eradicating poverty at the household level - using 1995 data - is approximately R12,9 billion per annum. The state's total expenditure in 1995 was about R154,9 billion, and therefore the cost of eradicating household poverty in the society would constitute 8.29% of this expenditure. The study argues that the poor would benefit more from additive grants as opposed to multiplicative grants. At the individual level, gender, location and race all have implications on spending requirements in relation to poverty.

Generally to alleviate poverty greater government spending is required for women, people in rural areas as well as within the African and Coloured groups of the population. The study also discusses poverty and public expenditure at the individual level, and it shows that the state would need to spend approximately R15 billion per annum to keep all individuals (in the labour force) out of poverty. This figure constitutes 9,7% of total government spending in 1995 and shows that public expenditure commitment required to reduce poverty at the individual level is higher than at the household level. This indicates that economies of scale reduce the cost of keeping households out of poverty, a feature that is lost when poverty is analysed only on the basis of individuals (Bhorat, 2000:796).

A key issue for the reduction of poverty and inequality is targeting of government expenditures to the poor. In the past, the richest and middle quintiles benefited the most from public expenditure, but recent policies are quickly changing this situation. In order to address inequality, sectoral policies must continue to target the poor, as well as address racial, gender and spatial imbalances in access to basic services.

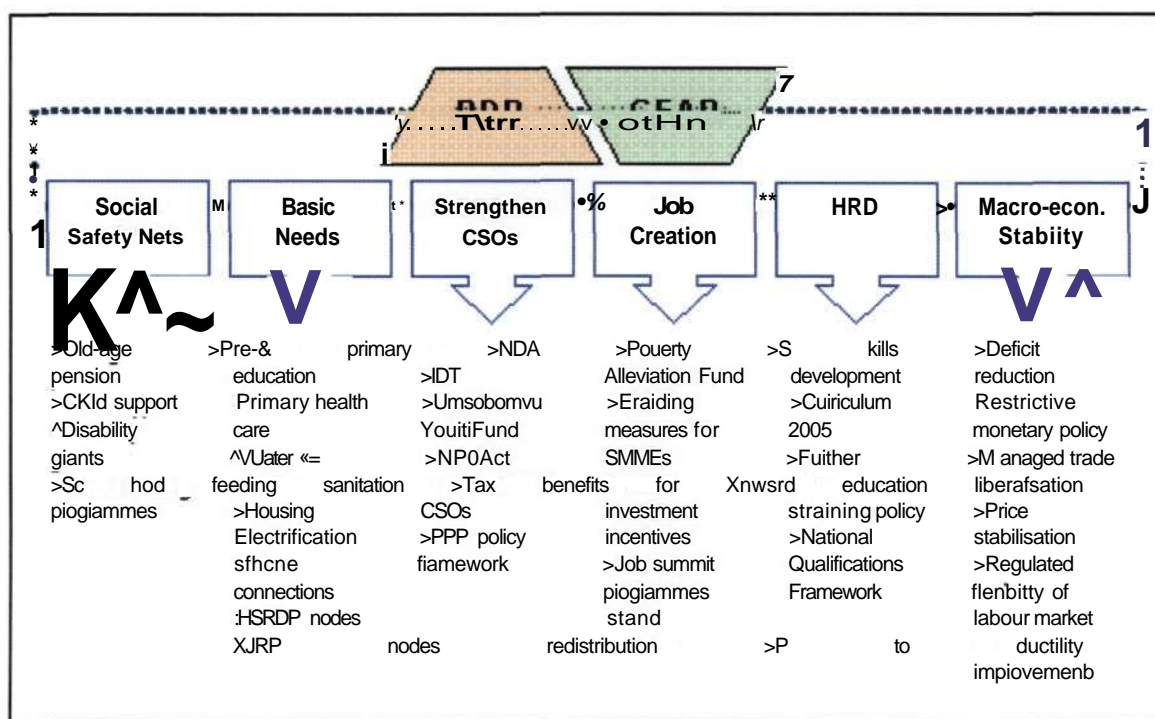
The government has taken constructive steps to address the poverty and inequities created by past policies. May (1998:73) stresses the need for "a mechanism to monitor the impact of policies very closely to ensure that poverty and inequality reduction are an integral part of the focus of the policies and their implementation. Furthermore, the country must develop the institutional capacity to take corrective action quickly should policies fall short of expectations. Considering which areas should be of major priority, and how the changes should be phased is thus of critical importance in terms of the impact of

macroeconomic policy on the reduction of poverty and inequality." In light of this the next section takes a look at some specific programs that are targeted at poverty and some of its related dimensions.

4.3.4 An Overview of Poverty-Related Programmes

This section will highlight a few selected initiatives that have been implemented with the aim of tackling poverty. The section does not aim to be a comprehensive guide but rather provide an idea of poverty-related programmes at the government level. The following diagram, Figure 4.4, gives a broad overview of South Africa's policies and programmes that are related to poverty and also partly feature under the RDP/GEAR framework.

Figure 4.4 South African Government's Anti-Poverty Policies and Programmes



Source: Pieterse and van Donk, 2002:11

From Figure 4.4, it can be seen that the government has implemented programmes that target different aspects of poverty. Programmes and frameworks need to exist at all levels

of the economy to effectively deal with the dimensions of poverty, i.e. both macro and micro levels. A few of these selected programmes and initiatives are discussed below.

4.3.4.1 Poverty relief allocations

Special poverty relief allocations were first made in 1997/98 for special employment programmes. In 1998/99 these allocations were broadened to include a focus on temporary poverty relief, and extended in 1999/00 to include commitments of the Government at the Presidential Job Summit. The poverty alleviation fund was a short term fund located in the Treasury and resources in the fund were channelled to various line departments for special poverty alleviation programs in the departments as shown in Table 4.10. It was established to provide a fast route for special poverty alleviation and reduction programs (Pieterse and van Donk , 2002:7; Budget Review, 2004:135).

Table 4.10 Poverty Alleviation Fund Allocations by Department 1997/98 to 2003/04 (R million)

Department	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Agriculture		25	20	25	35	35	50
Arts & Culture				30	55	48	64
Education					73	74	114
Environmental affairs & tourism			70	99	175	240	300
Health	15	28	23	7	10	12	15
Housing			75	-	75	75	-
Labour			50	3.4	10	-	-
Provincial & local government			45	78	79	102	120
Public Works	85	374	377	249	274	274	274
Social Development	50	203	40	120	50	100	71
Sport & Recreation					40	90	129.5
Transport			100	-	94	100	100
Water Affairs & Forestry	150	270	200	351	380	350	330
TOTAL	300	800	1000	972.4	1350	1500	1567.5

Source: (De Bruyn 2001: 3) cited in Pieterse and van Donk, 2002:8

From Table 4.10, it can be seen that over the years, the size of the fund and the number of departments utilising the fund both increased. Programmes funded through this source complement other key poverty alleviation interventions, such as social security grants and the delivery of basic services to communities like education, health, welfare, housing, water and sanitation, electricity, waste removal and municipal roads. Since the special poverty relief allocation was a short-term intervention, it ceases this year, 2005. However an independent review was undertaken to help determine which programmes would continue to receive funding from 2004/05 onward, thus enabling certain programs become integrated into mainstream departmental budget (Pieterse and van Donk , 2002:7; Budget Review, 2004:135).

The intended beneficiaries of this programme are rural women, young people and the disabled. Projects under the special poverty relief allocation have greatly contributed to:

- The creation of new infrastructure (stream-crossings, rural access roads, taxi ranks, markets stalls, boreholes, ventilated improved pit latrine toilets, canals, sports fields, craft factories, fencing, community centres).
- Infrastructure rehabilitation (upgrading of roads, bridges, school buildings, clinics).
- Increased services to communities (waste removal, crèches, removal of alien vegetation, soil conservation, wetland rehabilitation)
- Income generating activities and support for the development of SMME's in communities (tourism related activities like food services points and crafts; infrastructure related activities like welding, brick making, carpentry and service related activities like bakeries, poultry farms, sewing groups).

All projects created short term and permanent jobs and provided training ranging from vocational training to business skills, life skills, literacy and numeracy. The following Table 4.11 shows programmes that have been integrated into various government departments and the projected funding allocated to each.

Table 4.11 Projected Allocations by Department (R million)

Department	Programmes	2004/05	2005/06	2006/07
Agriculture	Land care	60	64	68
Arts & Culture	Investing in culture	75	83	91
Environmental Affairs & Tourism	Coastal management, tourism infrastructure & product development	356	381	404
Science & Technology	Agriculture processing projects	45	47	53
Sport & Recreation	Building for sport & recreation	137	7	9
Water Affairs & Forestry	Working for water	400	424	449
Total		1073	1006	1074

Source: Budget Review, 2004:135

These six national poverty relief programmes are now part of the Expanded Public Works Programme (Budget Review, 2004:135).

4.3.4.2 The Expanded Public Works Programme (EPWP)

The EPWP is one of an array of government strategies aimed at addressing unemployment in the short to medium term. The programme attempts to bridge the gap between the formal economy and the large numbers of unskilled and unemployed people who have not yet enjoyed the benefits of economic development. The EPWP involves creating temporary work opportunities for the unemployed, using public sector expenditure that builds on existing government infrastructure and social programmes that are known to be successful, by either deepening their labour absorption capacity or by extending it. The EPWP cuts across all spheres of government, including public entities.

Given that most of the unemployed are unskilled, the emphasis is on relatively unskilled work opportunities. These are to be combined with training or education or skills development, with the aim of increasing the ability of people to earn an income once they leave the programme. The programme aims to provide employment opportunities and training to at least one million targeted unemployed people in its first five years. Work opportunities are to be created by firstly, increasing the labour intensity of government-

funded infrastructure projects under the leadership of the Department of Public Works. Secondly, by creating work opportunities in public environmental programmes (e.g. Working for Water) under the leadership of the Department of Environmental Affairs and Tourism. Thirdly, by creating work opportunities in public social programmes (e.g. community-based care in health and social welfare and early childhood development) under the leadership of the Department of Social Development. And finally, by developing small businesses and cooperatives, including utilising general government expenditure on goods and services to provide the work experience component of small enterprise learnership or incubation programmes under the leadership of the Department of Trade and Industry (Budget Review, 2004:123).

Funds for EPWP programmes are allocated to national departments, provinces and municipalities through the normal budgeting process. The allocations for the period between 2004/05 and 2008/09 are given below according to each sector:

- Infrastructure - R 15 billion
- Environmental and cultural - R 4 billion
- Social - at least R 600 million
- Economic - still to be determined

Together with the Sector Education and Training Authorities (SETAs), the Department of Labour coordinates the training and skills development aspects of the programme (Budget Review, 2004:123).

4.3.4.3 The Basic Income Grant (BIG)

The BIG is briefly discussed here because even though it has not been formally implemented yet by the government, it has raised a lot of debate from different groups within the country.

In 2000, the Taylor committee was appointed by the government to investigate ways for the state to reform the social security system to provide comprehensive coverage for all.

Amongst the recommendations made, the BIG of about R 100 was proposed as an effective way of alleviating income poverty, which tends to exacerbate other dimensions of poverty. It is expected to close the poverty gap by almost 74%. In addition, the BIG is expected to stimulate local consumption-driven economic growth and job creation, and to lay a foundation for sustainable livelihoods. The general conclusions made are as follows:

- The Basic Income Grant is an affordable option for South Africa.
- There are feasible financing options for a Basic Income Grant.
- The optimal financing package will involve a mix of tax sources.
- The Basic Income Grant would significantly reduce poverty, promote human development and sustainable livelihoods
- The Basic Income Grant would be developmental.

In spite of the above arguments the government has not yet articulated its stance on this issue (Big Financing Reference Group, 2004:26). Critics of the BIG point out that this grant could be prohibitively costly for the fiscus, difficult to implement and might generate a culture of entitlement and dependency among the citizens. There are already numerous cases of fraud and corruption with the implementation of child support grants and pensions. With a universal BIG, the situation could become worse.

4.3.4.4 The Child Support Grant (CSG)

The Child Support Grant (CSG), which begun in early 1998, is a cash grant from the government to support the income of households by enabling them to care adequately for children and to help provide for their basic needs. The aim was to reach 3 million of the poorest children over a five-year period. This amounts to 48% of children under the age of 7 years, living in households earning less than R10,000 per year or R833 per month. Starting 2003, the CGS was to be rolled out to very poor children of up to 14 years over a three year period.

The CSG replaced the State Maintenance Grant (SMG), which was a larger amount but did not benefit the majority of children in need. The intention was to phase in the CSG through incremental age increases; the first age group to be targeted was the 0 to 6 year-olds, as the group most vulnerable to poverty, illness and underdevelopment. It was hoped that children would be assisted by the nutritional feeding schemes once they attended school.

The international and local evidence prove that increasing family incomes through cash transfers or subsidies reduces poverty levels in households, and enhances the children's development, educational achievement and health status. The current CSG is spent in 75% of cases directly on the child, or it is pooled and the entire household benefits, including the child. Cash transfers are found to be effective for immediate relief of needs for poor children. The system hopes to reach a large number of children and the benefits include free health care and early childhood development programmes however, for a comprehensive attack on poverty, other services and interventions would be essential depending on availability of resources (May, 1998:72; http://www.aces.org.za/doc_extending_grant.htm, April, 2005).

Overall, there tends to be a perception that inadequate resources are allocated to poverty alleviation but on assessing the programmes and policies that exist, it is apparent that resources have definitely been set aside for poverty reduction. In spite of this there still exists high levels of poverty indicating that the government is faced with problems of poor service delivery and a lack of adequate knowledge and effective management to ensure that programmes and allocated resources are used to bring about desirable developmental outcomes. Hunter *et al* (2003:50), note that there is no effective monitoring and evaluation of poverty alleviation programmes in South Africa. The following section will highlight a few other initiatives spearheaded by international organizations and the need for civil society organizations will also be mentioned.

4.4 Poverty Alleviation Attempts by Other Organisations

This section discusses the potential role of other groups in the alleviation of poverty in South Africa. These include international organisations, civil society organisations and NGOs.

4.4.1 The World Bank and Poverty

The World Bank (WB) is an international organisation concerned with the alleviation of poverty in developing countries. The Bank's approach to poverty has changed over the years and the renewed emphasis was marked in the World Bank's World Development Report in 1990, which was devoted to poverty alleviation. The strategy of poverty reduction expressed in the report centred on labour-intensive growth and a broad provision of social services. This strategy became the foundation of World Bank policies and it advocated 5 features on which poverty alleviation measures should be based:

1. Economic growth - generally as economies experience growth, poverty rates will decrease; however, the pattern of growth is important. The World Bank argues that broad-based agricultural development and labour intensive industries will be more likely to provide significant reductions in poverty.
2. Investment in people - The World Bank places emphasis on education, health nutrition and family planning; emphasis has also been placed on educating women.
3. Economic adjustment - The World Bank has conceded that adjustment measures implemented in the 1980s adversely affected the poor. Economic reform and macro adjustment are still central to World Bank lending. However to alleviate poverty, it needs to be accompanied by safety nets for vulnerable groups and this is done through an increased share of public spending on basic social sectors and by improved efficiency and delivery of social services to the poor.

4. Participation and the environment - For poverty alleviation to succeed, the poor will have to participate more in the design and implementation of projects and this can be done partly via greater NGO and CBO (civil society) involvement. It is also necessary for the poor to have political power, which can be achieved through democratisation and good governance. The environment is an important issue, as environmental degradation tends to fall on the poor, e.g. dirty water, poor sanitation, contamination and depletion of fertile land.
5. World Bank lending - this is to be increasingly targeted at poverty reduction. This includes reorientation of public spending towards social sectors, increased lending for human resource development, emphasis on investment in feeder roads and basic infrastructure in rural areas.

Criticisms of the WB have focussed on the effect of structural adjustment policies on the poor and the question of whether the WB really knows who the poor are and the coping strategies adopted by the poor. The WB has also been criticised for identifying too closely with macro-level policies and that it needs to spend more time identifying, locating and listening to the poor (Ingham, 1995:241; World Bank, 1990:51).

Over the last decade, the World Bank has built on its views of poverty not only to encompass low income and consumption levels but also incorporate low achievements in human development as well as powerlessness and vulnerability, as highlighted in the World Bank's World Development Report (2001:34). The report builds on earlier strategies in the light of cumulative evidence and experience of the past decade, as well the changing global conditions. It proposes a strategy for attacking poverty in three ways; promoting opportunity, facilitating empowerment, and enhancing security.

- *Promoting opportunity*: this refers to expanding economic opportunity for poor people by stimulating overall growth and by building the assets of the poor (such as land and education) and increasing the returns on these assets, through a combination of market and non-market actions.

- *Facilitating empowerment*: this refers to making state institutions more accountable and responsive to poor people, strengthening the participation of the poor in political processes and local decision-making, and removing the social barriers that result from distinctions of gender, ethnicity, race, religion, and social status.

- *Enhancing security*: this refers to reducing poor people's vulnerability to ill health, economic shocks, crop failure, policy induced dislocations, natural disasters, and violence, as well as helping them cope with adverse shocks when they occur. A big part of this is ensuring that effective safety nets are in place to mitigate the impact of personal and national calamities (World Bank, 2001:5&v).

Each of these components is individually important but also they are fundamentally complementary. Countries are to develop their own Poverty Reduction Strategies (PRS), by drawing on this framework. However, it is also important that the PRS takes into account local social and cultural factors. Action on these strategies will be required not only at the local and national levels but also on the global level. This is to ensure that the opportunities from global integration and technological advance benefit poor people and correspondingly, there will also be a need to manage the risks of insecurity and exclusion that may result from global change. South Africa currently does not have its own Poverty Reduction Strategy Paper (PRSP) however, the country has introduced many of the reforms expected of a PRSP. This provides South Africa with the opportunity to engage with the World Bank and the International Monetary Fund regarding the funding of poverty reduction programmes in the country (World Bank, 2001:vii; Hunter *et al*, 2003:4).

4.4.2 The United Nations and Poverty

The United Nations Development Programme's focus in South Africa is to help the government and civil society build and share solutions to the challenges of local governance; poverty reduction; energy and environment; and HIV/AIDS. Before 1994, UNDP supported the anti-apartheid struggle and in the post 1994 era, it developed a

Country Cooperation Framework (CCF) for the period between 1997 and 2001. This framework was aimed at reducing poverty and inequality in South Africa through two major programmes: creating sustainable livelihoods and promoting sound governance.

The current CCF, which runs between 2002 and 2006, aims to help the South African government translate some of its policies and strategies into practice so that there is greater social and economic transformation, particularly in the poorest rural areas. The programmes in the current CCF are centred around: policy analysis for human development, supporting poverty reduction through local governance; a holistic response to HIV/AIDS and poverty; and strengthening the link between environmental conservation and development (www.undp.org.za; April, 2005).

The Millennium Development Goals (MDGs) is a special initiative adopted by the UNDP since September 2000. The MDGs set targets for reducing poverty, hunger, disease, illiteracy, child and maternal mortality, environmental degradation, and discrimination against women. The MDGs, which are summarised below, are to be achieved by United Nations (UN) member states by 2015:

1. Eradicate extreme poverty and hunger - halve the proportion of people whose income is less than one dollar a day by 2015
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development

The UNDP helps countries integrate the Millennium Development Goals into their national development frameworks. Countries are tailoring the MDGs to their national circumstances, building them into national development strategies and policies, and incorporating them in budgets and ministries' priorities. The goals are also integrated into

assistance frameworks and programmes (www.undp.org.za; April, 2005; African Development Bank, 2003:1).

4.4.3 Civil Society

Civil society organisations tend to be very effective at reaching the poor as their programmes are usually targeted at and situated in poor communities. People in communities tend to have local knowledge and experience to support and direct policy, planning and delivery processes. Communities, being that target users of infrastructure services, are thus critical to the planning and decision-making processes for social infrastructure delivery. The UNDP's South Africa Human Development Report (2003:114) highlights that it is important that community involvement is not seen as an impediment, but rather as an essential component to achieving intended outcomes and impact. Civil society organisations have the capacity to expand democracy and mobilise poor people at the grassroots level and in addition they could be utilised to enhance service delivery in communities (UNDP, 2003:114).

4.5. Conclusion

This chapter has extensively assessed the alleviation of poverty and it has been highlighted that the normal growth path of an economy may not always present enough opportunities for the alleviation of poverty in the short run. The existence of high inequalities, as in the case of South Africa, necessitates that the government implement redistributive measures that are designed to cater for the needs of the poor.

The democratic government of 1994 inherited a country that was faced with several socio-economic problems. The RDP and GEAR have since been the cornerstone of the South African government's macro economic policies. The macroeconomic context of a country is important for the reduction of poverty as it influences that extent to which government can use policies to facilitate growth and bring about human development.

The South African government has made attempts to use its budget to achieve macroeconomic and redistributive goals as well as alleviate poverty in the country. Apart from the government, other organisations also present opportunities in reaching the poor.

Trends in government spending have shown increasing allocations to the social services sector. Generally, the government has moved from a tight fiscal stance to a cautiously expansionary fiscal position in recent years. Also, an assessment of government programmes indicates that in spite of the rising poverty levels in South Africa, a substantial amount of resources have been directed towards the poor since 1994. This suggests that there is a break in the link between expenditure and policies at the macro level and their ability to adequately bring about the desired reductions in the levels of poverty that continue to exist. To effectively reduce poverty and inequality, the government will have to increase its efforts in ensuring that its policies and programmes are effectively targeted at the poor, as general measures may have the effect of leaking benefits to the non-poor groups within the economy, thus rendering efforts ineffective.

CHAPTER FIVE ECONOMETRIC ANALYSIS

5.1 Introduction and Recap of Macroeconomic Underpinning

The earlier chapters look at the theory and nature of poverty and the South African government's approach to tackling poverty. This chapter looks at the extent to which government can use fiscal redistributive measures to alleviate poverty. Econometric analyses are used to determine the relationship between government expenditure on social services and the level of poverty in the country; the effects of unemployment and economic growth on poverty alleviation are also considered. The ultimate aim of the analyses is to determine the relationships between poverty and these selected variables and make policy recommendations regarding the issue of poverty. This section of the chapter reviews the macroeconomic framework on which the econometric model is based. The next section discusses the data and research methodology used and the results obtained are presented. The findings are discussed in the subsequent section and finally the limitations of the study and possible areas of research are highlighted for future studies.

As discussed in earlier chapters, poverty is caused by many factors and thus its alleviation and reduction would also require wide-ranging measures. An instrument at the disposal of the government is fiscal policy that operates through taxation and government expenditure. Unlike taxation, government spending is an injection that impacts positively through the multiplier to raise income and output. The government raises its revenue largely through taxation and borrowing and then spends the income through its annual budgets on various departments. It is argued that the government's ability to address poverty largely comes from its budget allocation or expenditure on social services that benefit the poor. It thus follows that as government expenditure on social services increases, the level of poverty in a country would also decrease in the long run.

The primary objective of this chapter is therefore to explore the effect of government fiscal expenditure on social services on poverty in South Africa using regression analyses. Literature states that economic growth in a country is also necessary for the reduction of poverty as it increases average income but the trickle down effects may only occur in the long run. Employment in an economy allows people to earn incomes and thus increase their standards of living and accordingly the lack of employment has been cited as a major contributing factor to poverty in South Africa. In light of this, the secondary objective of the study is to determine the effect of economic growth and unemployment on poverty levels in the country as measured by the World Bank \$1-a-day poverty line.

The econometric analyses in this section make use of the World Bank poverty line due to the absence of an official poverty line to identify the absolutely poor in South Africa. Also, the study focuses on the income measure of poverty because according to Budlender (1999:199), access to income in South Africa can be an important determinant of access to a range of services and goods that could increase well-being. Thus, even though poverty is not only characterized by a lack of income, for the purposes of this study, this poverty measure is used because at least it provides an indication of the poverty situation in South Africa.

The study uses regression analyses to estimate three models on poverty alleviation but during the process of estimation, the problem of multicollinearity is encountered in the data set. Consequently, a fourth model is developed whereby the technique of principal component analysis (PCA) is used to correct for multicollinearity and also allow for policy recommendations to be made. The process of PCA is also discussed in subsequent sections.

5.2 Research Methodology

As mentioned previously, the aim of the study is to determine the relationship between poverty and selected macroeconomic variables and this section of the chapter develops a model that examines the association using regression analyses.

According to Gujarati (2003:18), "a regression analysis is concerned with the study of the dependence of one variable, the dependent variable, on one or more other variables, the explanatory variables, with a view to estimating and/or predicting the (population) mean or average value of the former in terms of the known or fixed (in repeated sampling) values of the latter." In a regression analysis, the variation in the dependent variable is explained by the variations in the explanatory variables. The model in this study takes headcount poverty as the dependent variable and it is regressed on various explanatory variables, which initially include government expenditure on education, government expenditure on health, government expenditure on social security & welfare and government expenditure on housing. At later stages GDP per capita and the unemployment rate are also incorporated into the model as explanatory variables to assess their impact on the level of poverty in South Africa between 1983 and 2001.

5.2.1 Objectives of the Study

Primary: To assess the influence of government redistributive expenditure on poverty in South Africa (over the period 1983 - 2001).

Secondary: Determine the contribution of economic growth to poverty alleviation as well as the association between unemployment and poverty.

5.2.2 Data

The secondary data used in the regression analyses were mainly obtained from the websites of the South African Reserve Bank (SARB), Statistics South Africa (STATSSA), the World Bank, and the Food and Agriculture Organisation (FAO).

Data on headcount poverty ratio (the percentage of the population living below a \$1-a-day) was obtained from the World Bank website for the periods 1981, 1984, 1987, 1990, 1993, 1996, 1999 and 2001. Annual South African data on GDP per capita in constant rand figures and consolidated total government expenditure on the selected social services (education, health, social security and welfare and housing) were obtained from the SARB website for the period between 1983 and 2001.

The data on the unemployment rates were obtained from the Development Bank of Southern Africa and from an article by Loots (1998:320) for the period between 1980 and 1993, and for the period between 1994 and 2001, data were obtained from STATSSA. Data on annual Consumer Price Index (CPI, with 2000 as the base year) were obtained from the STATSSA website and lastly the annual data on population were obtained from the FAO website.

Transformation of data

The empirical analysis requires the use of yearly time series data on headcount poverty and thus the periodic data obtained from the World Bank website was interpolated to increase the number of observations for the regression analyses. The method of interpolation is described in the appendix, A1 (p 150). The headcount poverty ratio was also multiplied by the population to obtain absolute headcount poverty figures. The data on government social spending was deflated using CPI figures (with 2000 as the base year) and then divided by population to obtain real expenditures per capita. Data on unemployment was multiplied by the population to obtain an indication of the absolute number of unemployed people.

The final variables used in the econometric analyses are all based on annual data and expressed as follows:

H = headcount poverty, calculated as the number of people living below the extreme poverty line of US\$ 1-a-day as identified by the World Bank

REDNPC = real consolidated total government expenditure on education (R Million)

RHTHPC = real consolidated total government expenditure on health (R Million)

RWEL_PC = real consolidated total government expenditure on social security and welfare (R Million)

RHSGPC = real consolidated total government expenditure on housing and community amenity affairs (R Million)

GDP_PC = real gross domestic product per capita at constant 2000 prices (R)

U = number of unemployed people

5.2.3 Economic Model

The model to be used in the regression analysis depicts how poverty levels change when certain macroeconomic variables are taken into consideration. It is important to note that this study does not assume a static model, hence the addition of the GDP and unemployment variables. The study recognises that just as poverty is multidimensional, policies and measures implemented to tackle poverty will also have to be wide-ranging and dynamic to effectively deal with its various dimensions. For the purposes of this thesis the postulated model initially considers government expenditure on social services; however other variables are added at a later stage.

Poverty level = f (government expenditure on education, government expenditure on health, government expenditure on social security & welfare and government expenditure on housing).

Poverty = f (Edn, Hth, Wei, Hsg)

All these variables are expected to be negatively related to poverty levels in the long run, thus an increase in the expenditure value of any of these parameters is expected to result in a reduction of poverty, as measured by the headcount poverty. Following the example of Koop (2000:211), the relationship between headcount poverty, the dependent variable, and the explanatory variables is expressed as follows:

$H = - Edn - Hth - Wei - Hsg$

Where

H = Headcount poverty based on the US\$ 1 -a-day poverty line

Edn = Total expenditure - consolidated general government: education

Hth = Total expenditure - consolidated general government: health

Wei = Total expenditure - consolidated general government: social security and welfare

Hsg = Total expenditure - consolidated general government: housing and community amenity affairs

As mentioned previously, economic growth in a country is important for the reduction of poverty as it increases average income. Unemployment on the other hand can greatly reduce people's access to earning incomes and thereby also lead to increased levels of poverty. In light of this, the model is then expanded to include GDP per capita (GDPpc) and unemployment. The poverty function is now presented as follows:

$$\text{Poverty} = f(U, \text{GDP pc}, \text{Edn}, \text{Hth}, \text{Wei}, \text{Hsg})$$

As GDP per capita rises it is expected to decrease headcount poverty and as unemployment in the economy increases it is expected to increase the number of poor people. Incorporating the two new variables in the basic model, the expanded model will be in the following form:

$$H = U - \text{GDPpc} - \text{Edn} - \text{Hth} - \text{Wei} - \text{Hsg}$$

Where

GDPpc = Gross domestic product per capita

U = Unemployment

All other variables still remain the same as in the earlier basic model.

5.2.4 Econometric Model

The multivariate relationships between poverty and the selected government redistributive expenditures, and extended to include unemployment and GDP can be expressed in an econometric model.

Basic Model

$$H = p_0 - p_1 Edn - p_2 Hth - p_3 Wei - p_4 Hsg + u_t$$

Expanded Model

$$H = p_0 + p_1 U - p_2 GDP - p_3 Edn - p_4 Hth - p_5 Wei - p_6 Hsg + w_t$$

The error term u_t in the regression is a surrogate for all variables that have been omitted from the model but collectively affect Y . There are various reasons why a multiple regression model would omit variables and these include, *inter alia*, unavailability of quantitative data, the joint influence of some variables may be so small that their effect on an estimated model would be negligible, available data may be poor proxies especially if there are errors in their measurement. In addition, according to the principle of parsimony, a regression model should be kept as simple as possible and if the behaviour of the dependent variable can be substantially explained with a few explanatory variables then it may not be necessary to introduce more variables. Ultimately, the error term u_{it} plays an extremely important role in regression analysis because it is a non-systematic component that captures the unknown factors (Gujarati, 2003:44-47).

The betas (β), which are the partial slope coefficients, will capture the effect of a unit change in each of the explanatory variables on the estimated average rate of headcount poverty in South Africa.

5.3 Results

With only 7 observations, the available data on headcount ratio obtained from the World Bank for the period under consideration highly limits the number of observations and thus the data is interpolated (as mentioned above) to increase the number of observations for analyses. After this, the extended time series data consists of 19 observations but according to Gujarati (2003:485), sample sizes of between 15 to 20 may be considered small. Owing to data limitations on poverty statistics in South Africa, the small sample size is a constraint that cannot be overcome in this study, and thus the results are to be interpreted cautiously.

It is important to note that the model used here does not capture all the possible measures that can alleviate poverty. Rather, the model in this chapter seeks to highlight that poverty alleviation requires dynamic measures; the allocation of government budget towards social services, while crucial, is not the only measure of addressing poverty. Literature suggests that GDP growth is an important factor but alone it is also not sufficient; lastly, apart from economic growth and a more equitable redistribution, direct measures can be implemented to deal with the various dimensions of poverty.

Model 1 - Poverty Alleviation: Government Expenditure on Social Services

The following table provides the regression results obtained when absolute headcount poverty is regressed on per capita real total government expenditure on the selected social services variables: education, health, social security and welfare, and housing, community amenity affairs and services.

Table 5.1 Estimates of an Equation for Poverty Levels in South Africa (1)Dependent variable: Absolute headcount poverty

Model 1	Unstandardized Coefficients	t	Sig.	Collinearity Statistics	
	B			Tolerance	VIF
(Constant)	.103	.035	.973		
REDN PC	9.141E-05	.046	.964	.164	6.083
RHTH PC	.006	1.214	.245	.201	4.964
RWEL PC	.001	.712	.488	.205	4.871
RHSG PC	-.004	-.718	.485	.401	2.491

 $R^2 = 0.653$ Adjusted $R^2 = 0.554$ $F = 6.591$ $p \text{ value} = 0.003$ $DW = 0.718$

From the above results, one can be misled in that the model seems to explain over 50% of the variation in poverty. On closer inspection, it can be seen that most of the estimated parameters have the wrong signs except the real housing expenditure variable. The t ratios of all the coefficients are statistically insignificant and according to the VIF (variance-inflating factor) statistics, multicollinearity is moderate. The VIF shows how the variance of an estimator is inflated by the presence of multicollinearity. As the extent of collinearity increases between explanatory variables, the VIF increases towards infinity; a VIF of 1 indicates there is no collinearity. A VIF between 1 and 10 indicates weak multicollinearity and high multicollinearity is shown by VIF of above 10. The tolerance (TOL) is the inverse of the VIF and thus the closer it is to .0, the greater the degree of collinearity among explanatory variables (Gujarati, 2003:351&362). The Durbin Watson (DW) statistic of 0.718 lies in the zone of indecision thus a decision cannot be made about the existence of positive or negative autocorrelation.

In spite of the statistical insignificance of the t ratios, the F test and the R^2 give positive results. The adjusted R^2 which measures the goodness of fit, i.e. how well the sample regression line fits the data, indicates that the explanatory variables in the model explains about 55% of the variation in poverty. The F test, which determines the overall significance of the observed regression, is also significant. The F test is a joint hypothesis that states that $\beta_1, \beta_2, \beta_3$ and β_4 are simultaneously equal to zero. Since the p value of

obtaining the calculated F value of 6.591 is very small (0.003), the null hypothesis, which states that together REDN_PC, RHTH_PC, RWEL_PC and RHSG_PC have no effect on poverty, H_0 , is rejected.

According to the above results government expenditure on social services has some effect on the alleviation of poverty, however these results are not robust. The poor availability of data could be a major contributing factor or important variables could have been omitted in the model. To address the limitations, an alternate model is examined in the next section and economic growth is included with the earlier variables.

Specifically, economic growth is measured in terms of real GDP and as a country registers positive economic growth, more output is produced annually and this should generate more incomes for households. The average level of income in a country is measured by GDP per capita; so as the population increases, real output should also increase so as to sustain the average income level in the economy. Accordingly, improvements in real GDP per capita should be able to reflect an improvement in living standards (as the average income of households would have increased) and thus have the effect of reducing poverty levels in the country. On this basis, real GDP per head is included in the second model as an explanatory variable in the alleviation of poverty and the results are presented in Table 5.2 below.

Model 2 - Poverty Alleviation: Economic Growth and Government Expenditure on Social Services

The following table provides the regression results obtained when headcount poverty is regressed on GDP per capita and real total government expenditure per capita on the selected social services variables: education, health, social security and welfare, and housing, community amenity affairs and services.

Table 5.2 Estimates of an Equation for Poverty Levels in South Africa (2)

Dependent variable: Absolute headcount poverty

Model 2	Unstandardized Coefficients	t	Sig.	Collinearity Statistics	
	B			Tolerance	VIF
(Constant)	13.122	2.001	.067		
GDPpc (R)	-.001	-2.167	.049	.212	4.720
REDN PC	-.004	-1.577	.139	.073	13.622
RUTH PC	.017	2.495	.027	.101	9.863
RWEL PC	.000	-.280	.784	.162	6.161
PvHSG PC	-.006	-1.139	.275	.391	2.554

 $R^2 = 0.745$ Adjusted $R^2 = 0.647$ DW = 0.969 F = 7.604 p value - 0.002

With the inclusion of the GDP per capita variable in the model, there is seemingly an improvement in the results, as reflected by the adjusted R^2 (0.647) and the F value (7.604). The t statistic shows that some of the estimated parameter coefficients for government spending social services have the wrong signs and others are insignificant. The estimated coefficient for real government expenditure per capita on education is shown here to have the correct sign but is insignificant at the 10% level. The estimated coefficient for real government expenditure per capita on health is statistically significant and seems to have a positive relationship with poverty levels in the country. The estimated coefficient for real government spending on social security & welfare seems to be statistically insignificant. Finally, the estimated coefficient of real government expenditure on housing per capita is statistically insignificant but carries the correct sign. The VIF indicates that the estimated education variable shows sign of high multicollinearity with one or more of the other variables. The Durbin Watson statistic (0.969) lies in the zone of indecision, thus a decision cannot be made about the existence of positive or negative autocorrelation.

When compared to model 1, this model shows that there has been an improvement in the F ratio, from 6.591 to 7.604 and adjusted R^2 , from 0.554 to 0.647, respectively, and this indicates that the variables chosen in model 2 explain an increasing amount of the variability in poverty. The model shows that for alleviating poverty, some redistribution

may help in a growing economy; an improvement in GDP per capita is found to be the most significant poverty-reducing factor over time ($t = -2.167$; $p = 0.049$).

In spite of the improved results, Table 5.2 shows that three of the explanatory variables are statistically insignificant. In an attempt to improve the model, an important contributor to poverty in South Africa, unemployment, is added as an explanatory variable. Employment opportunities increase one's ability to earn an income and this can lead to a reduction of poverty, as higher incomes in an economy allows people to increase their well being and standard of living. Thus to shed some more light on the levels of poverty in South Africa, the following model builds on the above two by incorporating unemployment to reflect how changes in this variable affects the number of people considered as being poor.

Model 3 - Poverty Alleviation: Unemployment, Economic Growth and Government Expenditure on Social Services

The following table provides the regression results obtained when headcount poverty is regressed on absolute unemployment, GDP per capita and real total government expenditure per capita on the selected social services: education, health, social security & welfare, and housing, community amenity affairs and services.

Table 5.3 Estimates of an Equation for Poverty Levels in South Africa (3)

Dependent variable: Absolute headcount poverty

Model 3	Unstandardized Coefficients	t	Sig.	Collinearity Statistics	
	B			Tolerance	VIF
(Constant)	14.784	2.854	.015		
REDN_PC	-.010	-3.495	.004	.042	24.003
RHTH_PC	.017	3.316	.006	.101	9.885
RWEL_PC	-.004	-2.395	.034	.080	12.477
RHSG_PC	-.001	-.144	.888	.331	3.025
GDPpc (R)	-.001	-2.475	.029	.210	4.760
U	.346	3.014	.011	.026	38.292

$R^2 = 0.855$ Adjusted $R^2 = 0.782$ DW = 1.753 F = 11.789 p value = 0.00

The above results in Table 5.3 show a great improvement in the tests of significance. As with the previous models, the F ratio and adjusted R^2 statistic indicate that the model is adequately specified as about 78% of the variability in poverty levels is explained by the selected variables in the model. The Durbin Watson statistic (1.753) lies in the zone of indecision; thus a decision cannot be made about the existence of positive or negative autocorrelation.

Almost all the t ratios indicate that the estimated regression coefficients for all the variables are statistically significant at the 5% level, except the housing variable. Also the sign of the coefficient for the health variable is positive and this means that apart from the housing variable, each of the partial regression coefficients partly explains the variability in the dependent variable. So in effect, if the results of this model were to be accepted, it would be concluded that poverty levels in South Africa are influenced by the joint effects of GDP per capita, the level of unemployment and real government expenditure per capita on education, health and social security & welfare.

According to the third model, a R1 million increase in real government expenditure on education per capita leads to a reduction in the number of poor people by about 10, 000.

This model also shows that a R1 million increase in real government health expenditure per capita is linked to an increase in the number of poor people by about 10, 000. The t statistic for this coefficient is significant yet it does not accord with the theory stated earlier. This could indicate that the causal relationship is opposite so that government health expenditure merely responds to the health needs of the poor.

The third model also shows that as real government expenditure per capita on social services and welfare increases by R1 million, there is a corresponding reduction in the number of poor people by about 4,000.

The housing variable in the third model is estimated to be highly insignificant in explaining the variability in headcount poverty. This would indicate that real expenditure on housing has not contributed significantly to reduce the levels of poverty in the country. This could indicate that probably government expenditure on housing during the period of this study may not have been well targeted to the poor in the society. Allocations to housing may have been used up in administration costs and for the payments of salaries in the relevant government departments instead of being used for the benefit of the poor.

The third model shows that an increase in the number of unemployed in the country by 1 million leads to an increase in the levels of poverty as the absolute number of poor people increases by about 346 000 people. This supports literature that states that unemployment is a huge contributor to poverty as the results of the above model show that poverty and unemployment are positively related.

Lastly, model three shows that a R 1000 increase in real GDP per capita leads to a decrease in the number of poor people by about 1000.

The results of the series of regression indicate that apart from government expenditure on social services, other factors in the economy have to be incorporated into the economy's anti-poverty strategy to adequately address poverty in the country.

A closer inspection of the results

In spite of the apparently impressive results obtained, the variables contained in the model 3 suffer from a high level of multicollinearity as indicated by the high VIF and low TOL values. The Pearson correlation matrix, which shows the level of linear association between two variables, confirms that some of the variables are highly correlated as the correlations are in excess of 0.5 (Table 5.4).

Table 5.4 Pearson Correlations

	HCNT_MIL	REDN_PC	RHTH_PC	RWEL_PC	RHSG_PC	ABS_UNEM	GDPpc (R)
HCNT_MIL	1.000	.740 (0.000)	.781 (0.000)	.752 (0.000)	-.682 (0.001)	.820 (0.000)	-.593 (0.004)
REDN_PC	.740 (0.000)	1.000	.873 (0.000)	.872 (0.000)	-.755 (0.000)	.961 (0.000)	-.743 (0.000)
RHTH_PC	.781 (0.000)	.873 (0.000)	1.000	.847 (0.000)	-.731 (0.000)	.870 (0.000)	-.442 (0.029)
RWEL_PC	.752 (0.000)	.872 (0.000)	.847 (0.000)	1.000	-.722 (0.000)	.942 (0.000)	-.679 (0.001)
RHSG_PC	-.682 (0.001)	-.755 (0.000)	-.731 (0.000)	-.722 (0.000)	1.000	-.795 (0.000)	.470 (0.021)
ABS_UNEM	.820 (0.000)	.961 (0.000)	.870 (0.000)	.942 (0.000)	-.795 (0.000)	1.000	-.736 (0.000)
GDPpc (R)	-.593 (0.004)	-.743 (0.000)	-.442 (0.029)	-.679 (0.001)	.470 (0.021)	-.736 (0.000)	1.000

The above table shows that there is a high degree of correlation between the variables. The figures shown in brackets indicate the level of significance of the correlations and from the table it is seen that the correlations are highly significant. The unemployment variable is highly correlated with the other variables; it is highly positively correlated with the education variable (0.961), followed by the welfare variable (0.942) and then the health variable (0.870). It is negatively related to the housing variable (-0.795) and the GDP per capita variable (-0.736).

The inclusion of the unemployment variable is important, yet the problem of multicollinearity introduced by this variable has many consequences. Firstly, multicollinearity makes a precise estimation difficult as OLS estimators tend to have large variances and covariances. As a result of this, the t ratio of one or more coefficients tends to be statistically insignificant, and although the t ratio of one or more coefficients is statistically insignificant, R^2 , which measures the overall goodness of fit, can be very high. Lastly, the OLS estimators and their standard errors can be sensitive to small changes in the data (Gujarati, 2003:350).

In light of the problems in estimation caused by serious multicollinearity, one would suggest that since the unemployment variable exhibits the highest degree of

multicollinearity as shown by the corresponding VIF of 38.292 (Table 5.3), it should be dropped as a remedial measure for the multicollinearity problem. Unfortunately, this could lead to specification bias/error that occurs from an incorrect specification of a model used in analysis. More importantly, economic theory indicates that unemployment in South Africa is a large contributing factor to poverty and thus the omission of this variable from the model would mean that not only is the model mis-specified but a very significant explanatory variable would have been excluded.

It has been argued that multicollinearity can be overlooked if a model is being used only to forecast a dependent variable instead of testing hypotheses about the parameters. However, Cameron (2005:275), explains that if the focus of a model is for the purpose of formulating government policy or business strategy, then more information is required from a model. As a result, in addressing the problem of multicollinearity, this study then uses the technique of Principal Component Analysis (PCA) as an alternative remedial measure and also to obtain more reliable coefficient estimates, which will be used to inform policy recommendations.

Addressing Multicollinearity using Principal Component Analysis (PCA)

Principal component analysis (PCA) involves a mathematical procedure that transforms a number of (possibly) correlated variables into a (smaller) number of uncorrected variables called *principal components*. The first principal component accounts for as much of the variability in the data as possible, and each succeeding component accounts for as much of the remaining variability as possible. The main aim of component analysis is to economise in the number of variates; in addition, the use of PCA has been to discover or to reduce the dimensionality of the data set and also to identify new meaningful underlying variables.

This technique is used in this study primarily to solve the multicollinearity problem and provide a more informative and reliable explanation of the relationships present in the

poverty situation. The details of the technique are explained in the appendix, A3 (p 158), and the results are presented in Table 5.5 below.

It should be noted that the estimated regression coefficients calculated by the process of Principal component analysis are in a standardized form and are thus independent of the original units of measurement. Consequently, the comparison of any two variables in Table 5.5 (in the standardized beta column) shows the relative importance of the independent variables involved.

Table 5.5 Estimates of an Equation for Poverty Levels in South Africa After Removing Multicollinearity (Model 4)

Dependent variable: Absolute headcount poverty

Explanatory variables	Beta, b_i	Standardised Beta (L_i)	Std error	t value
Constant	6.63694			
R edn pc	0.003218	0.627640	0.115960	5.412537
R hth pc	0.009053	0.597603	0.116364	5.135638
R wel pc	0.002885	0.616164	0.113980	5.405909
R hsg pc	-0.01222	-0.549530	0.118020	-4.656240
GDPpc	-0.00038	-0.420360	0.119453	-3.519010
U	0.107639	0.637710	0.117197	5.441351

$$R^2 = 0.663 \quad \text{Adjusted } R^2 = 0.595 \quad DW = 0.572 \quad F = 9.818 \quad p = 0.001$$

Compared to model 3, Table 5.5 shows that the t values for all the explanatory variables have improved substantially as they are all significant at the 5% level after removing multicollinearity. The explanatory power of the model seems to have been reduced but with an adjusted R^2 of 0.595, the model still accounts for about 60% of the variation in poverty levels.

The information presented in Table 5.5 indicates that unemployment is the most important explanatory variable as it has the greatest regression coefficient (0.1076) and t value (5.44). In addition, a comparison of all the standardised betas in Table 5.5 confirms that with the largest standardised beta of 0.6377, the unemployment variable is the most important explanatory variable in the model (the results will be interpreted and discussed

in section 5.4 and thus detailed explanation of each variable will be provided in that section).

It can also be seen that even though highly significant, some of the signs of the estimated coefficients have different signs from what is expected and this interesting observation could be a result of various factors. The signs of the coefficients for GDP per capita, unemployment and government expenditure on housing all accord with the expectations of the postulated model but the signs of the coefficients for real government expenditure per capita on education, health and social security & welfare differ from that in the postulated model. As these variables are all significant at the 5% level thus they will be maintained and discussed in section 5.4.

The interesting findings of this study could be a consequence of the constraints in the data set; it could be that the quality and reliability of available data prevents an accurate representation of the poverty situation. On the other hand, it could be that the results shown in Table 5.5 are obtained due to certain characteristics that might be specific to the South African society and thus the estimated model could be a portrayal of the actual relationship between poverty and the selected variables in the case of South Africa.

Also, variables could be displaying short term relationship e.g. education is expected to reduce poverty in the long run; so in the short run increases in its expenditure may not bring about reductions in poverty. Rather a model with a lagged education variable may pick up the postulated relationship between expenditure on education and poverty in a longer time series situation. It could also be that the causal relationship between some of the variables and poverty could be opposite of what is assumed in the postulated model. According to Gujarati (2003:696), a regression analysis deals with the dependence of one variable on other variables but it does not necessarily imply causation so the existence of a relationship between variables does not prove causality or the direction of influence. So in this case the direction of causality could be from poverty to government expenditure on certain social services, namely education, health and social security and welfare.

The interpretations and discussions in the following section 5.4 are largely based on the results from the fourth model, however, the initial three models may be referred to where necessary to emphasize a point. Once more, it is important to emphasize that the results are to be interpreted cautiously owing to data limitations.

5.4 Interpretation and Discussion

From the above analyses, it can be concluded that headcount poverty i.e. the number of poor people as measured by the US\$1-a-day poverty line, is affected by government expenditure on certain social services, as indicated not only by the estimated fourth model, but also the second and third models. In addition, the second, third and fourth models show that increases in national income per capita reduce poverty levels. The third and fourth models indicate that the level of unemployment in the economy also contribute to increases in poverty.

From model 1 to model 4, the series of regression analyses indicate that generally, government expenditure on certain social services contribute to the alleviation of poverty. The results of model 3 clearly indicates that government expenditure on education ($t = -3.495$; $p = 0.004$) and on welfare ($t = -2.395$; $p = 0.034$) as well as economic growth ($t = -2.475$; $p = 0.029$) and unemployment reduction ($t = 3.014$; $p = 0.011$) are significantly associated with poverty alleviation. The progression of results show that other factors in the economy have to be incorporated into the economy's anti-poverty strategy to adequately address poverty in the country as fiscal redistribution on its own would be insufficient in addressing poverty.

According to the fourth model, a R1 million increase in real government expenditure on education per capita is linked to higher poverty levels; about 3, 218 more people are considered to be poor as government spending on education increases. This does not seem to accord with theory, even though the t value (5.413) for the coefficient of education expenditure is highly significant. Firstly, this could be indicative of the fact that education is a long-term investment and thus assuming the necessary structures are

put in place, its contribution towards the alleviation of poverty will only occur in the long run. Increased government expenditure on education in a certain time period may then only lead to an alleviation of poverty after some time lag. Secondly, post 1994, the TBVC states were all included as part of the new South Africa; thus government expenditure on education would now cover a larger population as compared to education expenditures pre 1994. In effect, the relationship suggested by the analyses may be indicating that government expenditure on education has increased in response to the larger proportion of the population that now requires education. So results show that as the number of people considered to be poor in the new South Africa has increased, government expenditure on education also had to increase in response to this. Lastly, expenditure on education may not be yielding the desired results because it could be that a large proportion of government expenditure on this variable may be contributing towards consumptive expenditure, such as salaries, instead of going towards the poor. Ultimately, government spending on education should add to human capital. In the long run it can build capacity and empower individuals to market their skills and talents. Education also improves the quality of labour and enhances individuals' earning ability, which in turn enables people to lift themselves out of poverty.

The fourth model also shows that a R1 million increase in real government health expenditure per capita is linked to a rise in the number of poor people by about 9, 053. The t statistic (5.136) for this coefficient is significant yet it does not accord with the theory stated earlier. This could indicate that the causal relationship is opposite, in other words it could be that an increase in poverty leads to an increase in government expenditure allocated to public health; poor people may be prone to sicknesses and without adequate resources to cover their medical bills government expenditure on health services will have to increase as poverty levels increase. Since HIV/AIDS is also highly related to poverty in South Africa, the results obtained here could be a reflection of the government resources/expenditure being allocated to people living with HIV/AIDS; as more poor people become infected with HIV/AIDS, the government has to spend increasingly more on health services to respond to the needs of the poor for health care.

In effect, the relationship would be such that the more poor people there are the higher the allocation of government health expenditure.

It is shown in the fourth model that as real government expenditure per capita on social services and welfare increases by R1 million, there is a corresponding increase in the number of poor people by about 2,885. Though the t value (5.406) is significant for this variable, the sign does not accord with the expected theory and it could be because the direction of causality goes from poverty to expenditure on social security and welfare. The greater the number of poor people in a country, the higher the need for government social spending on welfare transfers to the poor. The results may also indicate that transfers to the poor are merely used to sustain the poor and not used to lift them out of poverty. Grants received by the poor may be used to obtain basic needs such as food but not used to lift the poor out of their situations. This would suggest that a simple transfer of money/income to the poor might be inadequate as a poverty alleviation measure. To reduce poverty in the long run, a redistribution of income to the poor would have to be complemented with a redistribution of assets as well as increased efforts to expand the opportunities, capabilities and skills of the poor to enable them derive greater benefits from their assets, particularly their labour services (employment).

The coefficient of the housing variable in the fourth model is estimated to have a significant impact on poverty reduction ($t = -4.656$) and also carries the expected sign as stated in the postulated model. The estimated coefficient indicates that an increase of R1 million in real per capita government expenditure on housing and community amenities leads to a reduction in the levels of poverty in the country, as the number of poor people decreases by about 12, 220. These results point out that when basic needs, such as housing, are satisfied, people can then concentrate on other needs and possibly seek employment opportunities or income generating activities, which allows the poor to lift themselves out of poverty.

The fourth model shows that unemployment is a significant factor influencing poverty ($t = 5.44$). The model shows that an increase in the number of unemployed in the country

by 1 million leads to an increase in the levels of poverty as the absolute number of poor people also increases by about 107 639 people. It is also shown in model 4 that the coefficient of the unemployment variable has the largest standardised beta (0.637710), meaning this variable is the most important in explaining the variability in the dependent variable (poverty levels in the South Africa). This confirms that unemployment is a huge contributor to poverty in the country and the two are positively related. Put in other words, the results of this study also indicate that if unemployment is reduced, poverty could in turn be alleviated as employment leads to an increased standard of living. It should be noted that the data used in this study is based on the expanded definition of unemployment, which describes the unemployed as those people within the economically active population who have no work but are willing and able to work. This definition also includes those who may have given up hope finding a job and thus may not have taken active steps to seek employment. Policies that tackle poverty should also have a strong inclination towards the reduction of unemployment in the country to enable people have access to secured incomes from the labour market and thus help lift people out of poverty.

Lastly, the growth of GDP also plays an important role in alleviating poverty ($t = -3.519$). Model four suggests that a R 1000 increase in real GDP per capita would lead to a decrease in the number of poor people by about 380. This supports the view that increases in the average income levels contribute to increasing the average standard of living and thus if poor people have access to incomes then they are able to buy a range of goods and services that could contribute to improving the quality of their lives. The addition of the GDPpc variable in model 2 improved the results of the regression analysis; the results in model 1 showed that government redistributive expenditure on social services did not contribute significantly to reducing poverty but the introduction of GDPpc in model 2 showed that government expenditure on certain social services resulted in a reduction in poverty. This is indicative of the fact that redistribution is not possible without economic growth.

In summary, the estimated model shows that government expenditure on certain social services has an effect on poverty levels but the results also suggest that not all expenditure allocated to social services reaches the poor. In spite of increasing government expenditure on social services, poverty levels in the country seem to be rising. The data also shows that government expenditure on some social services may be more significant than others, in terms of their impact on poverty and this indicates that government policies and expenditure would address poverty more effectively if there is better targeting. The analyses also show that government expenditure on its own is inadequate in addressing poverty and its various dimensions; for a more effective anti-poverty strategy, complementary policies that directly address the needs of poor will have to be implemented. Economic growth and a corresponding increase in the average level of national income is another important macroeconomic factor that reduces poverty levels in the country. The results of the data support the view that unemployment is a major contributor to poverty in the country. Thus anti poverty strategies will have to incorporate job creation opportunities from which the poor can directly benefit.

The results discussed above are based on statistical analyses conducted on the available time series data. The data and thus the study were both restricted by various limitations which are described below.

5.5 Limitations and Constraints

Data Limitations

The limitations of this study largely stem from the fact that there is a shortage of up-to-date comprehensive data and statistics on the poor in South Africa. Limitations on the data are highlighted below:

- The main limitation was the lack of availability of adequate time series data on headcount poverty statistics in South Africa. Moreover, there is no nationally accepted level of a poverty line in South Africa and thus depending on the focus of a particular study, various studies tend to define the minimum level of poverty differently.

- The available time series data on headcount poverty had to be obtained from an international source (the World Bank) as opposed to a national source and in addition the data was collected at three-year intervals (between 1981 and 2001) thereby greatly limiting the number of observations to be used in the regression analyses. This resulted in an interpolation of the data (see appendix A1, pi50) in an attempt to increase the number of observations to permit a time series regression analysis.
- The method of increasing the data size assumed a trend, which could have led to some anomalies in the estimated model. For instance, autocorrelation may have been introduced in the data set yet the study does not seek to explore and correct for this as its existence is regarded as a consequence of data limitations. In addition complex econometric analyses such as cointegration could not be applied to the data set owing to the fact that available time series data was limited to a few years and was thus interpolated to increase the sample size.
- There are many deficiencies regarding available statistics prior to 1994. Data collected and recorded during this period did not take into account all the current nine provinces in South Africa as statistics excluded certain geographical areas, such as the former TBVC territories because they were considered as independent states.
- Lastly, regarding statistics in South Africa, Barker (2003:205) states that individual series are not always comparable over time because there have been changes in statistical techniques.

Limitations of study and areas of possible future study

Data constraints impose certain limitations on the current study. The models in this study have been estimated in spite of the data constraints on poverty statistics in South Africa. It could then be argued that the models in the study may be mis-specified as other important variables could have been omitted but this has been done because firstly, this is a basic model and the selected variables were simply chosen to accord with economic reasoning and with the focus of this study. Secondly, the inclusion of many other variables would be outside of the scope of this study. As a recourse, researchers could

build on this basic model in later studies as more comprehensive long term data becomes available in the future. Some possible areas of research in the future are highlighted below:

- 1 The problem of inadequate data sets could be explored by future researchers. Comprehensive data on different dimensions could be collected to facilitate more encompassing and holistic studies on poverty. Longer time series data could be used to identify long-term trends.
- 2 The construction and use of (time series data based on) a national poverty line could give a better representation of poverty relationships as measured by factors and dimensions within the country. The current study uses The World Bank US\$1-a-day poverty line and this captures only the income dimension of poverty, which has been argued earlier as being inadequate. Other dimensions of poverty may also be integrated.
- 3 Education is a long-term investment and thus its ability to reduce poverty can only be experienced in the long run. The relationship between these factors could be explored when more reliable and adequate data become available over time, and in addition time lags could be used to capture the long-term effects of increased literacy levels on the alleviation of poverty over time.
- 4 This study uses aggregated data to determine poverty relationships but depending on the availability of data, non-aggregated data could be used to determine how government *capital* spending and other specific distribution of expenditure items on social services contributes to the alleviation of poverty.

5.6 Conclusion

This chapter addresses possible models for the alleviation of poverty. It analyses how changes in government expenditure affect changes in poverty. As poverty is a multi-faceted problem, its alleviation would require wide-ranging measures to effectively address the different dimensions of poverty.

The South African government addresses poverty largely via its expenditure on social services and when the results of models 3 and 4 are combined, it is suggested that government expenditure on education, welfare and housing seems to have an impact on reducing poverty. On the other hand, when model 4 is taken in isolation, it is suggested that apart from government expenditure on housing, increasing government expenditure on some social services (namely, education, health and welfare) is linked to rising levels of poverty in the country. These results indicate that the poor may not be experiencing the full potential of redistributive government measures in spite of attempts made by the government at the macro level to increase its spending on social services that should benefit the poor. This lack of adequate change at the grassroots level could be due to the fact that government policies and spending may not be reaching the extremely poor people in society. Bureaucratic procedures may also be taking up a substantial amount of government budget allocations to social services so that more is spent on administration costs and the payments of salaries in government departments instead of being directly used for the benefit of the poor.

Fiscal redistribution alone cannot be used to address poverty; government social spending has to occur in the context of a growing economy. The literature suggests that higher economic growth can translate to poverty reduction; the results of the study confirm this as economic growth, measured by GDP per capita, is identified by the estimated model as a measure for reducing poverty levels. Increases in economic growth can have the effect of raising average incomes (GDP per capita) and thus allow people to afford an increased standard of living, thus alleviating poverty. However growth on its own is inadequate in the short term for the eradication of poverty because the trickle down effects would take time to reach the poor. What is important for tackling poverty is not just high economic growth rates but rather output expansion accompanied by significant employment creation. Otherwise economic growth may be jobless growth, a phenomenon that is likely to aggravate the poverty problem.

Unemployment, another macroeconomic factor, is also identified by the model as the most important contributing factor to poverty levels in the country. Higher levels of

employment could mean more people would have increased access to earning incomes which could be used to increase well-being and thus reduce poverty. Ultimately the results of the study point to the fact that general increases in fiscal redistribution expenditure may be inadequate in addressing poverty in the country. Economic growth, that leads to increased incomes, and reduced levels of unemployment need to be given considerable priority in the government's anti-poverty strategy. In addressing the possible lack of appropriate targeting regarding government spending on social services towards the poor, it will be necessary to consider other supplementary policies in addressing poverty, given the structural features of the South African economy.

For the efficient and effective alleviation and reduction of poverty in both the long and short run, government policies and spending aimed at the poor will have to be complemented with economic growth and increased employment levels.

CHAPTER SIX

RECOMMENDATIONS AND CONCLUSION

This chapter provides a summary of the concept and nature of poverty and its alleviation as discussed in the previous chapters. Some policy recommendations relating to poverty alleviation are made based on the results of the econometric analyses. Finally, some concluding remarks are presented.

6.1 Synthesis

Poverty is a complex problem. There are many facets to being poor and this can mean different things to different people. Traditionally, poverty is defined as a lack of income due to ease of measurability. However, this definition has been expanded to include vulnerability, powerlessness as well as a lack of education, adequate health and other deprivations that lower human development and ultimately prevent people's lives from flourishing. Poverty can generally be viewed as the inability of individuals, households or entire communities to command sufficient resources to satisfy a socially acceptable minimum standard of living.

Factors that lead to individuals, households and societies becoming poor are varied and range from economic, historical, demographic, cultural to social and political structures. Poverty manifests itself in various ways and includes a lack of secure jobs, income and wealth, poor access to basic necessities such as housing and poor health. It sometimes becomes difficult to distinguish between the causes and effects of poverty as they tend to be interrelated.

Poverty in South Africa is linked to the high inequality levels that exist in the country. Although South Africa is considered as a well-endowed middle-income economy, about half of its population continues to live in poverty. Poverty in South Africa tends to have geographic, racial and gender dimensions and is also greatly linked to the high levels of unemployment in the country.

As poverty is a multi-causal and complex phenomenon, it cannot be addressed with one-dimensional policies. A necessary but insufficient measure is a strategy that focuses on the attainment of high economic growth rates with a labour absorption capacity. Poverty can be combated through an increase in economic growth, which can have the effect of creating jobs, generating tax revenue for the government and providing funds for human and infrastructure development, and thus increase the general standards of living in an economy. However, poverty cannot be effectively targeted through an economic growth approach alone. Other policies, strategies and resources will have to be adopted and focussed specifically on poverty.

In South Africa the government's main measure for addressing poverty is via its fiscal allocation to social services in the country. Since 1994, the government has placed great emphasis on alleviating poverty and has reiterated that policies implemented, such as the RDP and GEAR, have the alleviation of poverty as their priorities. The UNDP's South African Human Development Report (2003:98) states that important achievements have been made in the delivery of social services since 1994 in areas such as water supply, access to education, primary healthcare services and housing. In spite of this many households (about 37.7% of households in South Africa) still face deprivations in accessing some of the most basic services in the new millennium.

Available data on the South African economy was subjected to econometric analyses to determine the impact of government redistributive measures on poverty alleviation in the country. The influence of economic growth and unemployment levels were also assessed and these are found to be critical macroeconomic factors that have a bearing on poverty reduction. If one is to accept model 3, then government expenditures on education, welfare and housing can impact significantly on reducing poverty. The final results (in model 4) of the analyses were interesting, confirming that government fiscal expenditure on some social services (housing and community amenity affairs and services) can contribute to the alleviation of poverty but only in a growing economy with job opportunities. Nonetheless, it is found that ultimately not all of the government's budget

expenditure on social services are contributing to alleviating poverty as suggested by theory. This could indicate that more emphasis than necessary is placed on the ability of social services to alleviate poverty or perhaps government policies are not well targeted at the poor. Other more effective measures will have to be considered. Even so, the impact of government expenditure on social services cannot be overlooked as these expenditures have the potential to provide short term relief and sustenance to the poor as well as the ability to create an environment with opportunities which can enable people break the poverty cycle in the long run. To achieve the desired results of reducing poverty, government policies and expenditures will need to be more focussed. Suggested policy recommendations are made in the following section on the basis of the results of the study.

6.2 Recommendations: Fiscal redistribution, Growth, Unemployment

Fiscal Expenditure on social services

- 6.2.1 It is important for government to properly identify the poor in the country and gain a better understanding of their needs, and implement programmes that meet their specific needs, partly through fiscal redistribution and government expenditure on social services.
- 6.2.2 General government expenditure on social services and/or programmes indicate that there might be leakages in the current set up/structures as increased expenditures on some social services (for example expenditure on health and education, as suggested by the results of model 4) do not seem to be making much of a difference in the lives of the poor. A larger percentage of government expenditure could be going towards the bureaucratic process, such as the cost of administering and maintaining government departments. Also, government expenditure could be going towards the non-poor in society due to inefficient targeting. As a result, only a small proportion of budget allocations towards social services actually filter through to the poor so that at the end of the day, the impact on the poor is not that large, in spite of the large budget allocations. In light of

this, more should be spent on activities that specifically target and benefit the poor and less should be spent on extravagant salary packages, administrative and bureaucratic processes that contribute to a waste of resources.

6.2.3 The social security system could also be evaluated to ensure that the needs of the most vulnerable groups within the society are prioritised and that these groups are provided with the required assistance. According to an article by Martin in the Sunday Times (2005), a government-appointed committee of inquiry concluded that the current social security system is inadequate to meet the problem of poverty in South Africa. The failure of the current system perhaps raises concern about the feasibility of implementing the Basic Income Grant (BIG) of about R100 per person per month as proposed by the Taylor Committee. The BIG Financing Reference Group (2004:6), argues that although a BIG would not be a solution to all the shortcomings of the current social security system, it could play a crucial role as a core component of a comprehensive social protection system. It is argued that a BIG would be particularly effective in alleviating income poverty, which often exacerbates other dimensions of poverty. Nevertheless, it should be noted that financing the BIG has fiscal implications; it could overburden the fiscus and an expansionary fiscal policy could also lead to inflationary pressures in the economy.

6.2.4 Increased access to housing and basic services is important for the extremely poor people in society and the results of this study confirm that government spending on housing and community services contribute to a reduction in poverty. When basic necessities are satisfied, people can then concentrate on other needs. The UNDP's South African Human Development Report (2003:98) states that according to the Service Deprivation Index, 65% of households are deprived of access to at least one quality basic service. As these deprivations are faced mostly by poorer households, it is imperative that there is better and improved delivery of infrastructure and the most basic services to the needy. In addition, if the poor have better access to clean water and improved sanitation, there will be a reduction in the incidence of hygiene-related health cases.

- 6.2.5 An important factor related to poverty is the HIV/AIDS epidemic, but it is also important to mention that the epidemic is not only confined to health issues. It has implications that span across various sectors. The UNDP's South African Human Development Report (2003:90) suggests a comprehensive approach that includes firstly, preventative measures to stop the spread of HIV/AIDS; secondly, treatment and care measures would be required from all sectors even though for most poor South Africans, the state would have to be the main source of treatment and care; lastly, the impact of HIV/AIDS would have to be mitigated because the loss of skills at all levels and the increase in the number of HIV/AIDS orphans requires that a national plan is set up and implemented to counter the adverse effects of the epidemic.
- 6.2.6 Continued government expenditure on education is beneficial as it contributes to the development of human capital, especially in the long term. However, investment in education should be coupled with increased access to employment to alleviate poverty in the long run. In other words, investment in education will not bring about a reduction in poverty if the job market is not expanded to absorb graduates and school leavers. An environment that leads to increased job opportunities is necessary to enable people earn an income and thus achieve at least a minimum standard of living and improved standards of living.
- 6.2.7 Fiscal redistribution as an approach to alleviating poverty is necessary, however on its own is inadequate. There is a need for a holistic approach whereby there is an implementation of value adding measures that impact on the lives of the poor in the long run.
- 6.2.8 Communities can be empowered to become more involved in decision making and the delivery of services that have a direct bearing on the quality of lives of individuals in it. The involvement of communities is beneficial in helping to identify the particular needs of people as well as the development of creative ideas in meeting these needs in a manner that leads to maximum participation by

members of the community. There is an opportunity for Non-Government Organisation (NGO) and Community-Based Organisation (CBO) activity in this regard.

- 6.2.9 As suggested by the results of this study, for alleviating poverty, fiscal redistribution has to occur in the ambit of economic growth because the government cannot significantly redistribute to the poor unless the economy is growing.

Growth

- 6.2.10 Redistribution in a non growing economy will have to be financed and this would increase the debt burden of the country and may generate inflationary tendencies. The results of this study identify the need for redistribution in a growing economy. Sustained real economic growth is thus important to fuel revenues obtained from taxation. This can then be used to facilitate redistribution that materially improves living conditions without eroding the purchasing power (inflation) of poor households.
- 6.2.11 Economic growth is important but there has to be economic growth with a "human face". Economic growth has to have a developmental approach whereby the social factors of an economy are taken into consideration. When the specific needs of a society are taken into account, an economy has the potential to grow and develop more holistically. As has been discussed previously, growth increases the income level but this will not necessarily benefit the poor unless they are empowered - economically, socially, politically and with adequate skills and knowledge to access opportunities and pursue options that can contribute to improving the quality of their lives.
- 6.2.12 Economic growth has to be coupled with higher levels of employment, else the poor cannot enjoy the benefits of increased standard of living that comes with increased average income levels as an economy grows. If people do not have

access to job opportunities they cannot participate in the economy and improve their well being in spite of a growing economy.

Unemployment

- 6.2.13 The econometric analyses of this study clearly shows that unemployment is the greatest contributing factor to poverty. Thus poverty can be reduced by addressing South Africa's unemployment problem, which is currently estimated at about 40%. The creation of an environment where there are increased job opportunities for all skills is necessary to tackle unemployment and the ensuing poverty in long run. Due to apartheid, a large percentage of the labour force is regarded as being inadequately skilled; thus current programs like the Expanded Public Works Program (EPWP) which uses unskilled labour may be sufficiently targeted for current the situation but it should be noted that this program only offers short-term, temporary employment in a country faced with chronic unemployment, a view supported by the Development Bank of Southern Africa (2005:94). As more people become educated, the labour force will become more skilled and thus there will have to be job opportunities that take the skills level of the economy into account. If the economy does not develop in this way, then in the future the country might be faced with a situation whereby there will be a high percentage of skilled and educated people who are unable to be absorbed into the labour market due to the lack of availability of suitable job opportunities.
- 6.2.14 Due to budget constraints, restructuring and problems of inefficiency, the public sector alone cannot create enough jobs to solve the unemployment and resulting poverty problem. The culture of entrepreneurship has to be encouraged and supported to allow for self employment and enterprise development. People will have to be empowered with skills to enable them create jobs for themselves as well as others.
- 6.2.15 A conducive environment will also have to be created to allow businesses to employ workers. This includes the macro, social and political environment as well

as laws and legislation that favour employment creation and labour market flexibility.

6.2.16 The greatest asset of the poor in South Africa is their labour. This labour needs to be educated and should be able to "sell" its services. However, formal education is a human capital investment that can bear fruit in the long term. In the short to medium term there would also be a need for alternative skills training that would not require long training periods. As suggested by Sachs (cited in Time, 2005:34), vocational training in the areas such carpentry, farming, basic infrastructure maintenance and catering services could improve the quality of labour and contribute to poverty alleviation. This could enable the poor offer an improved level of skills as well as offer them the opportunity to engage in entrepreneurship or ventures whereby they use these skills to create employment opportunities for themselves and also people around them. This also allows the poor to participate in the informal sector if they are not absorbed in the formal sector of the economy.

6.3 Conclusion

Poverty is caused by a combination of social, economic, spatial, environmental and political factors. Although South Africa is considered as an upper middle income country, there exists a high level of poverty and inequality, which has caused many critics to question the efforts of the government in alleviating poverty.

According to Hulme and Shepherd (2003:404), in a country where a significant proportion of the poor are chronically poor "policies to redistribute assets, direct investment toward basic physical infrastructure, reduce social exclusion (from employment, markets and public institutions) and provide long-term social security will be necessary if poverty is to be significantly reduced."

The South African government's redistributive efforts (in real terms) in addressing poverty have been partly successful. However, the results indicate that fiscal redistribution on its own is inadequate to alleviate poverty in the long run. Accordingly, poverty reduction does not lend itself to simple proposals of fiscal expenditures on social services. The study shows that fiscal redistribution has to be coupled with the realisation of certain macroeconomic goals, namely high economic growth and increased job opportunities as unemployment is a significantly major contributing factor to poverty in the country. Fiscal redistribution will also have to be focused on the basic needs and resources of the poor if it is to make the necessary impact on their lives, but without generating a culture of entitlement and destroying the incentives to seek and create employment.

Just as poverty has many dimensions, in South Africa its alleviation would require multidimensional measures which ensure that funds find their way into social programmes that are well targeted to tackle different aspects of poverty. Efforts would have to be such that they contribute to the long term development of the poor and enable them to lift themselves out of poverty in the long run. The cure for poverty goes beyond simple income measures and fiscal redistribution. Anti-poverty strategies in the long run would therefore require holistic approaches for maximum effectiveness.

The government may not be able to solve the poverty situation alone, although it may contribute to poverty through corruption, bad governance and excessive taxation or regulation that may rob the country of its entrepreneurial dynamism. In addition, Hunter *et al* (2003:50), draw attention to the fact that there is a lack of efficient service delivery, adequate technical knowledge and experience and a greater need for effective coordination between different government levels regarding the implementation of poverty alleviation programmes. In light of this, establishing partnerships between the state, private entrepreneurs and civil society may also help in addressing poverty in South Africa.

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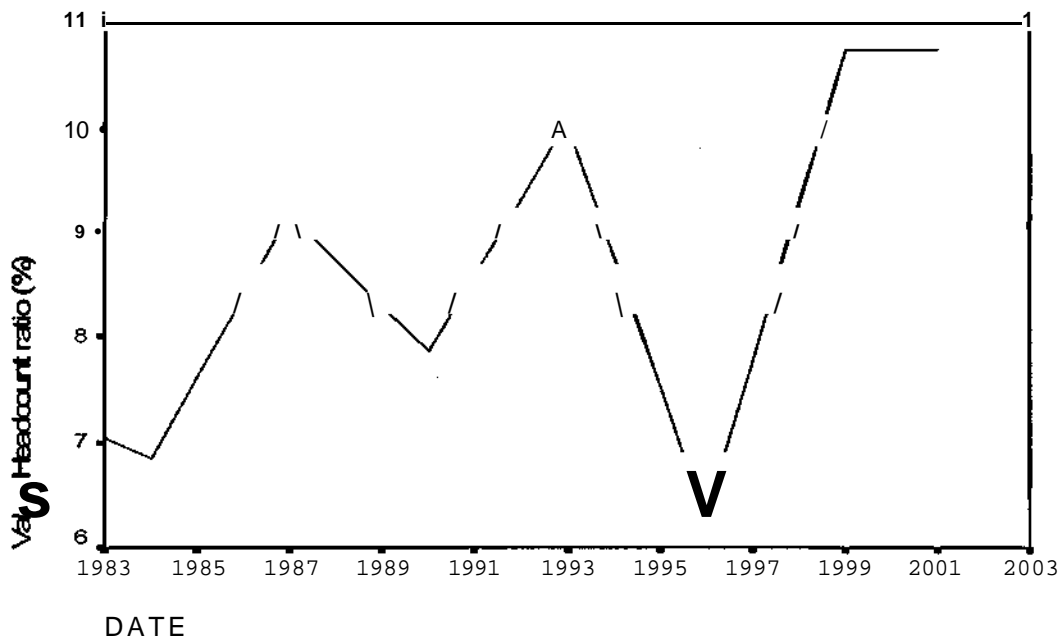
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APPENDIX A1 INTERPOLATION OF DATA

Increasing number of observations for time series headcount data

Data on headcount poverty was interpolated to obtain yearly time series data on that variable and thus increase the number of observations available. The following provides a step by step procedure on the interpolation process.

1. Too few observations.
2. Data was plotted to illustrate the trend.



3. The data showed three distinct troughs.
4. The first remedy was to fit a parabola to each trough but forecasted values were outside trough boundaries.
5. The second remedy assumed that each unknown point is an equal proportion of the change from known points.
6. The extrapolation method used is as follows:

If headcount rate is given in times t_i and U , then

Headcount rate for missing periods = $t_i - t_{i+1} = A$

To obtain headcount ratio for each year (between t_i and U) for which data is unknown

Headcount rate for $t_2 = A/3 * t_1$

Headcount rate for $t_3 = A/3 * t_2$

Headcount rate for $t_4 = A/3 * t_3$

APPENDIX A2 REGRESSION RESULTS

Regression results for model 1 - Poverty Alleviation: Government Expenditure on Social Services

Descriptive Statistics

	Mean	Std. Deviation	N
HCNT_MIL	3.3279645	.78225920	19
REDN_PC	1071.0847066	152.59452781	19
RHTH_PC	530.8810328	51.63577790	19
RWEL_PC	472.8204563	167.05450820	19
RHSG_PC	212.8192280	35.17252989	19

Correlations

		HCNT_MIL	REDN_PC	RHTH_PC	RWEL_PC	RHSG_PC
Pearson Correlation	HCNT_MIL	1.000	.740	.781	.752	-.682
	REDN_PC	.740	1.000	.873	.872	-.755
	RHTH_PC	.781	.873	1.000	.847	-.731
	RWEL_PC	.752	.872	.847	1.000	-.722
	RHSG_PC	-.682	-.755	-.731	-.722	1.000
Sig. (1-tailed)	HCNT_MIL	.	.000	.000	.000	.001
	REDN_PC	.000	.	.000	.000	.000
	RHTH_PC	.000	.000	.	.000	.000
	RWEL_PC	.000	.000	.000	.	.000
	RHSG_PC	.001	.000	.000	.000	.
N	HCNT_MIL	19	19	19	19	19
	REDN_PC	19	19	19	19	19
	RHTH_PC	19	19	19	19	19
	RWEL_PC	19	19	19	19	19
	RHSG_PC	19	19	19	19	19

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.194	4	1.799	6.591	.003(a)
	Residual	3.820	14	.273		
	Total	11.015	18			

a Predictors: (Constant), RHSG_PC, RWEL_PC, RHTH_PC, REDN_PC

b Dependent Variable: HCNT_MIL

Model Summary (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.808(a)	.653	.554	.52238003	.653	6.591	4	14	.003	.718

a Predictors: (Constant), RHSG_PC, RWEL_PC, RHTH_PC, REDN_PC

b Dependent Variable: HCNT_MIL

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.103	2.955		.035	.973		
	REDN_PC	9.141E-05	.002	.018	.046	.964	.164	6.083
	RHTH_PC	.006	.005	.426	1.214	.245	.201	4.964
	RWEL_PC	.001	.002	.247	.712	.488	.205	4.871
	RHSG_PC	-.004	.006	-.178	-.718	.485	.401	2.491

a Dependent Variable: HCNT_MIL

Regression results for model 2 - Poverty Alleviation: Economic Growth and Government Expenditure on Social Services

Descriptive Statistics

	Mean	Std. Deviation	N
HCNT_MIL	3.3279645	.78225920	19
REDN_PC	1071.0847066	152.59452781	19
RHTH_PC	530.8810328	51.63577790	19
RWEL_PC	472.8204563	167.05450820	19
RHSG_PC	212.8192280	35.17252989	19
GDPpc (R)	21292.9894737	862.96732828	19

Correlations

		HCNT_MIL	REDN_PC	RHTH_PC	RWEL_PC	RHSG_PC	GDPpc (R)
Pearson Correlation	HCNT_MIL	1.000	.740	.781	.752	-.682	-.593
	REDN_PC	.740	1.000	.873	.872	-.755	-.743
	RHTH_PC	.781	.873	1.000	.847	-.731	-.442
	RWEL_PC	.752	.872	.847	1.000	-.722	-.679
	RHSG_PC	-.682	-.755	-.731	-.722	1.000	.470
	GDPpc (R)	-.593	-.743	-.442	-.679	.470	1.000
Sig. (1-tailed)	HCNT_MIL	.	.000	.000	.000	.001	.004
	REDN_PC	.000	.	.000	.000	.000	.000
	RHTH_PC	.000	.000	.	.000	.000	.029
	RWEL_PC	.000	.000	.000	.	.000	.001
	RHSG_PC	.001	.000	.000	.000	.	.021
	GDPpc (R)	.004	.000	.029	.001	.021	.
N	HCNT_MIL	19	19	19	19	19	19
	REDN_PC	19	19	19	19	19	19
	RHTH_PC	19	19	19	19	19	19
	RWEL_PC	19	19	19	19	19	19
	RHSG_PC	19	19	19	19	19	19
	GDPpc (R)	19	19	19	19	19	19

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	8.208	5	1.642	7.604	.002(a)
	Residual	2.807	13	.216		
	Total	11.015	18			

a Predictors: (Constant), GDPpc (R), RHTH_PC, RHSG_PC, RWEL_PC, REDN_PC

b Dependent Variable: HCNT_MIL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
2	.863(a)	.745	.647	.46464992	.745	7.604	5	13	.002	.969

a Predictors: (Constant), GDPpc (R), RHTH_PC, RHSG_PC, RWEL_PC, REDN_PC

b Dependent Variable: HCNTJVIL

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
2	(Constant)	13.122	6.559		2.001	.067		
	REDN_PC	-.004	.003	-.815	-1.577	.139	.073	13.622
	RHTH_PC	.017	.007	1.097	2.495	.027	.101	9.863
	RWEL_PC	.000	.002	-.097	-.280	.784	.162	6.161
	RHSG_PC	-.006	.005	-.255	-1.139	.275	.391	2.554
	GDPpc (R)	-.001	.000	-.659	-2.167	.049	.212	4.720

a Dependent Variable: HCNTJV1IL

Regression results for model 3 - Poverty Alleviation: Unemployment, Economic Growth and Government Expenditure on Social Services

Descriptive Statistics

	Mean	Std. Deviation	N
HCNT_MIL	3.3279645	.78225920	19
REDN_PC	1071.0847066	152.59452781	19
RHTH_PC	530.8810328	51.63577790	19
RWEL_PC	472.8204563	167.05450820	19
RHSG_PC	212.8192280	35.17252989	19
GDPpc (R)	21292.9894737	862.96732828	19
ABSJJNEM	9.5645	4.63452	19

Correlations

		HCNT_MIL	REDN_PC	RHTH_PC	RWEL_PC	RHSG_PC	GDPpc (R)	ABS_UNEM
Pearson Correlation	HCNT_MIL	1.000	.740	.781	.752	-.682	-.593	.820
	REDN_PC	.740	1.000	.873	.872	-.755	-.743	.961
	RHTH_PC	.781	.873	1.000	.847	-.731	-.442	.870
	RWEL_PC	.752	.872	.847	1.000	-.722	-.679	.942
	RHSG_PC	-.682	-.755	-.731	-.722	1.000	.470	-.795
	GDPpc (R)	-.593	-.743	-.442	-.679	.470	1.000	-.736
	ABSJJNEM	.820	.961	.870	.942	-.795	-.736	1.000
Sig. (1-tailed)	HCNT_MIL	.	.000	.000	.000	.001	.004	.000
	REDN_PC	.000	.	.000	.000	.000	.000	.000
	RHTH_PC	.000	.000	.	.000	.000	.029	.000
	RWEL_PC	.000	.000	.000	.	.000	.001	.000
	RHSG_PC	.001	.000	.000	.000	.	.021	.000
	GDPpc (R)	.004	.000	.029	.001	.021	.	.000
	ABSJJNEM	.000	.000	.000	.000	.000	.000	.
N	HCNT_MIL	19	19	19	19	19	19	19
	REDN_PC	19	19	19	19	19	19	19
	RHTH_PC	19	19	19	19	19	19	19
	RWEL_PC	19	19	19	19	19	19	19
	RHSG_PC	19	19	19	19	19	19	19
	GDPpc (R)	19	19	19	19	19	19	19
	ABSJJNEM	19	19	19	19	19	19	19

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	9.417	6	1.570	11.789	.000(a)
	Residual	1.598	12	.133		
	Total	11.015	18			

a Predictors: (Constant), ABSJJNEM, GDPpc (R), RHSG_PC, RHTH_PC, RWEL_PC, REDN_PC

b Dependent Variable: HCNT_MIL

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
3	.925(a)	.855	.782	.36487907	.855	11.789	6	12	.000	1.753

a Predictors: (Constant), ABSJJNEM, GDPpc (R), RHSG_PC, RHTH_PC, RWEL_PC, REDN_PC

b Dependent Variable: HCNT_MIL

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
3	(Constant)	14.784	5.180		2.854	.015		
	REDN_PC	-.010	.003	-1.883	-3.495	.004	.042	24.003
	RHTH_PC	.017	.005	1.146	3.316	.006	.101	9.885
	RWEL_PC	-.004	.002	-.930	-2.395	.034	.080	12.477
	RHSG_PC	-.001	.004	-.028	-.144	.888	.331	3.025
	GDPpc (R)	-.001	.000	-.594	-2.475	.029	.210	4.760
	ABJJNEM	.346	.115	2.050	3.014	.011	.026	38.292

a Dependent Variable: HCNTJVIL

APPENDIX A3

PRINCIPAL COMPONENT ANALYSIS

Model 4: Principal Component Analysis (PCA)

The method of principal components analysis is used here to overcome the problem of multicollinearity so that more reliable and informative variables can be obtained. Principal components (PCs) are linear combinations of the original variables as shown below:

$$PC = a_{11} X_1 + a_{12} X_2 + \dots + a_{1k} X_k$$

Where

PC_j = ith principal component

a_{ij} = component loadings

X_j = original variables

The transformed X variables are calculated in this manner to make them uncorrelated and also in such a way that they account for as much of the variation as possible in descending order. The process is explained below.

1) Calculation of PCs

Component loadings calculated indicate that the first component accounts for 80 % of the variation in the original variables as shown in the following table. The cumulative value of the first three PCs contribute to about 96% of the variation and thus these three components were retained.

Component loadings of the three principal components retained

	PCI	PC2	PC3
GDP _{pc}	-0.688	0.715	0.079
U	0.984	0.014	0.04
R edn pc	0.971	-0.049	0.068
R hth pc	0.903	0.304	0.222
R wel pc	0.948	0.021	0.141
R hsg pc	-0.846	-0.273	0.456
Eigen Value	4.817	0.681	0.29
% Variance	80.284	11.354	4.827
Cum %	80.284	91.638	96.465

2) *Re-estimation of the model using PCs*

Using the principal components as explanatory variables, the model (3) is re-estimated using absolute headcount as the independent variable (as in the previous models). The results are given below:

Regression coefficients for the principal components

Explanatory Variable	Unstandardised Coefficients (a)	Std error	variance
Constant	0		
PCI	0.647	0.119	0.014161
PC2	0.033	0.121	0.014641
PC3	0.015	0.114	0.012996

These PCs will not be interpreted as the aim is to correct for multicollinearity.

3) *Obtaining standardised and uncorrelated variables from PCs*

The component loadings are then used to transform the regression coefficients for the PCs into standardised estimates for the original variables. The computation uses the following formula described by Nieuwoudt (1972:277) to obtain new standardised regression coefficients:

$$C_i = \frac{\sum_{j=1}^P l_{ij} X_j}{\sqrt{\sum_{j=1}^P l_{ij}^2}}, i=1, 2 \dots P$$

e.g. the GDPpc variable would be calculated as follows:

$$= -0.688 (0.647) + 0.715 (0.033) + 0.079 (0.015) \\ = -0.42036$$

The following table shows the standardised regression coefficients for all the original explanatory variables.

Expressing model using standardised regression coefficients

Explanatory variables	Beta, C _i	Variance	Std error	t value
GDPpc	-0.42036	0.014269	0.119453	-3.51901
AbsU	0.63771	0.013735	0.117197	5.441351
R edn pc	0.62764	0.013447	0.11596	5.412537
R hth pc	0.597603	0.013541	0.116364	5.135638
R wel pc	0.616164	0.012991	0.11398	5.405909
Rhsg	-0.54953	0.013929	0.11802	-4.65624

The t-values are computed as $C_{i,j} / \text{Square root of Var}(C_{i,j})$

Where

$$\text{Var}(C_{i,j}) = \sum_{i=1}^k [(\text{PC loading})^2 * \text{Var}(oD)]$$

with k = number of principal components retained

Standardised variables obtained are independent of the original units of measurement and thus show the relative importance of each explanatory variable involved. However, for predictive purposes, the standardised coefficients (β_i) are converted to original scale by multiplying the regression coefficients with S_y/S_x ; (the standard deviation of the dependent variable divided by the standard deviation of the independent variable) and the constant term is calculated as the difference between the mean values of the observed and predicted values of the headcount variable (Nieuwoudt, 1972:280). The following table presents the regression coefficients computed from the original variables and measured in their original units.

Standardised and unstandardised regression coefficients estimated for absolute headcount poverty

Explanatory variables	bi (Sy/Sx*Std C 0	Standardised Beta (C 0	Variance	Std error	t value
Constant	6.63694				
R edn pc	0.003218	0.62764	0.013447	0.11596	5.412537
R hth pc	0.009053	0.597603	0.013541	0.116364	5.135638
R wel pc	0.002885	0.616164	0.012991	0.11398	5.405909
Rhsg	-0.01222	-0.54953	0.013929	0.11802	-4.65624
GDPpc	-0.00038	-0.42036	0.014269	0.119453	-3.51901
U	0.107639	0.63771	0.013735	0.117197	5.441351