

The Capability Approach to Economic Development: Its Applicability to Sub-Saharan Africa

Update: 27 November 2006

The Capability Approach to Economic Development: Its Applicability to Sub-Saharan Africa

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Submitted in partial fulfillment of the requirement for the

Masters in Arts
In
Economics

At the
University of Johannesburg

November 2006

TITLE PAGE

Title:

The capability approach to economic development: Its applicability to Sub-Saharan Africa

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Student Number:

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Degree:

Masters in Economics

Department:

Economics

Language:

English

University:

The University of Johannesburg

ABSTRACT

The capability approach's primary point of departure from mainstream economics may be stated simply: it perceives incomes and commodities value predominantly as instruments or means to other ends. In contrast to mainstream economics, the approach places individual freedom at the centre of its attention. Therefore, income is merely one of numerous variables that influence deprivation.

The dissertation aligns itself with the capability approach to development in its conclusion that developments' primary target ought to go beyond a study of the level of per capita incomes as it has more significant moral implication of diminished lives, agonised existences and a large percentage of premature preventable deaths. Therefore, the dissertation advocates a fundamental shift in the measures that economists utilise in their measurement of poverty. Accordingly, the dissertation suggests that the manner in which economists intellectualise the relationship between poverty and the lives that people lead requires alteration.

The dissertation provides evidence, using regression analysis, that the democratic frameworks that are in place in Sub-Saharan Africa are failing to provide the negative freedoms that serve as the environment in which individual's pursue their own conception of well-being. However, the dissertation acknowledges the constitutive and instrumental importance of democracy in the process of development. Therefore, the dissertation argues that it is the shape of democracy that has led to these results in Sub-Saharan Africa. As a repercussion, democracy remains an important ingredient in the development process. Instead of embracing the view that political freedom and, in particular, democracies failure to assist in human development is evidence of a flaw in the capability approach. The dissertation perceives the failure as an opportunity to re-evaluate the nature of democracies in Sub-Saharan Africa. Therefore, there is scope for policy makers to conceptualise and implement policies that will be able to harness the inherent strengths of democracy.

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GLOSSARY OF ABBREVIATIONS, SYMBOLS, OR TERMS

ADB	African Development Bank
AIDS	Acquired immunodeficiency syndrome
ANC	African National Congress
CIVILRIGHTS	Civil Rights ranking change from 1980 to 2003
EDUPRIENR	Total Primary School Enrolment Rate
FERTILITY	Fertility Rate
GDP	Gross Domestic Product
GDS	Gross Domestic Savings
GNI	Gross National Income
HDI	Human Development Index
HEACARGOV	Real Government Health Care Expenditure per Capita
HIV	Human immunodeficiency virus
ILO	International Labour Organisation
IMF	International Monetary Fund
PHYSICIANS	Physicians per 100 000 of the population
POLRIGHTS	Level of Democracy and the functioning of its apparatus
SA	South Africa
SEA	South East Asia
US	United States of America
UN	United Nations
UNHDR	United Nations Human Development Report
WB	World Bank
WW2	World War Two

1. INTRODUCTION

1.1. Basic concepts

The capability approach commences its interpretation of advantage or disadvantage with those items that free agents intrinsically value. In short, its primary departure from mainstream economics may be stated simply: incomes and commodities are valued predominantly as instruments or means to other ends. In contrast to mainstream economics, the approach places individual freedom at the centre of its attention. Therefore, income is merely one of numerous variables that influence deprivation.

In contemporary society it is inadequate to argue for the maximisation of income and wealth over all other variables. Furthermore, economic growth is not an end of development in itself. Development is the enhancement of the lives that people are able to realise and the freedoms that they enjoy. Expanding the freedoms of individuals within society is a more valuable and meaningful objective for policy makers as its success implies that people are able to live richer and fuller lives. The capability approach creates a fresh perspective for development economists as it suggests that deprivation goes beyond a lowness of income. The approach incorporates a broader spectrum of information into its evaluation by offering a broader conception of individual well-being. To this end, it creates an alternative empirical focus to other evaluative approaches found within the development literature.

An evaluative approach may be characterised by the information basis that it uses as its foundation for making ethical judgments; the informational basis of a judgment identifies the information on which the judgment is directly dependent. Therefore, a critique of an information basis can challenge the information that the evaluative approach includes or the information that it excludes in making ethical judgments.

The two most prominent informational bases found within the economic literature for evaluating states of affairs and well-being are utility and rights based approaches. The informational basis for utilitarian methods of evaluation identifies utility as the *only* basis for the evaluation of different states of affairs, actions, choices or rules. Judgments that harness a utilitarian approach depend exclusively on mental achievements; most notably, pleasure over pain. However, the exclusive concentration on mental states place utilitarianists under duress as momentous matters like individual freedoms, rights and other aspects that influence people's quality of life are not included directly in evaluations. These important notions – included in the capability approach - are only significant in the utilitarian view if they are able to have an indirect effect on utility through an indirect influence on mental satisfaction and happiness. Furthermore, utilitarianism is frequently accused of being insensitive to the distribution of these utilities as it concentrates on the

accumulation of aggregate levels. In contrast, libertarianism have no direct interest in the mental realm of happiness or pleasure; the informational basis libertarianism boasts consists exclusively on individual liberty and rights. In the spirit of Kantian ethics, rights are considered rules by which each member of society ought to respect. Therefore, justice and well-being may be considered as a function of these unbreakable rules.

These different informational bases prompt mutually exclusive conceptions and interpretations of individual well-being. Subsequently, each evaluative approach offers a different moral-based adjudication of actions and choices. In each case, the informational basis is narrow and limits the robustness of the application of its conclusion for policymakers. In short, when faced with certain states of affairs, ethical evaluations hinge in a profound manner on the information that is granted ethical significance and from which ethical judgments are based. The motions of individuals in society will affect these variables, among many others. When considering the ethical evaluation of action it is important to identify the impact on those variables that the evaluator considers significant, which are most frequently, defined by their own ethical conception of well-being.

The capability approach manages to embrace both utility and right considerations into its conception of well-being by interpreting well-being as individual freedom. Therefore, as opposed to mental states like happiness or unbreakable rules, the capability approach measures development as a function of individual freedom. It manages to achieve this by incorporating libertarian and utilitarian principles into its informational basis by bridging the general gap between deontological and consequential reasoning. The essential element of deontological reasoning is the recognition of the priority of the right over the good, as embraced by the libertarian perspective. In contrast, the primary tenet of consequentialism, often referred to as goal-based theories, is that it acknowledges the good over the right by identifying desirable social goals and insisting that agents in society ought to deliberately seek them out.

The dissertation finds that the crucial distinction between an act and its consequence is far more difficult to achieve in reality than in theory. In addition, both forms of public judgments rely on some level of aggregation and the difference is the extent of the aggregation. As a result, both forms of reasoning may be considered less distinct than originally conceived and may be integrated into the broader informational basis as demanded by the capability approach to development.

The starting point for the capability approach is the notion of needs, which enables development economists to link rights, utility, welfare and freedom. Appealing to the concept of needs enables development to be viewed as a complex production process with commodity consumption as an input, freedom as the background environment, and welfare and individual functionings as an output vector. The linkage between these

important variables is more palatable and comprehensive when the broader conception of well-being is utilised.

According to the capability approach, the starting points of the development process are inputs such as clean water, sanitation facilities and medicine required for survival. Social indicators, for example the percentage of the total population with access to water, are different measures that capture the input side of this production process. Development economists frequently use indices that attempt to capture the negative-rights of the population within a social union. Therefore, economists are familiar with indices that measure the freedom of speech enjoyed by members of society, the protection from physical abuse, and so on. According to the capability approach, these measures provide the background environment within which people engage in a production process. The production process is one of converting commodities and services into the realisation of well-being. On the output side the development production process are various social indicators that measure the achievement of a society in realising well-being. These measures include: adult literacy rates, infant mortality rates and life expectancy. The initiative being formulated is that these variables have more relevance to policymakers than aggregate utility measures, as they are measures of the extent to which certain real interests of persons are being served, protected and promoted. Therefore, the capability approach argues that economies ought to be evaluated on such bases by looking at the abilities and freedom of society's individuals to realize the lives that they value inherently.

In order to measure well-being, the capability approach introduces the concept of individual functionings that reflect the various actions a person may value either doing or not doing. The functionings themselves vary from the elementary, such as the desire to be adequately nourished, to more complex activities or states, such as the desire to be able to integrate into society and attain self-respect. A person's capability refers to the alternative combinations of functioning that are feasible for a person to achieve. Using individual capabilities, the capability approach places freedom at the center of development. For a person to realise his or her certain functionings and capabilities, they need to be free to pursue their own functionings and realise their own capabilities. The capability approach to development treats each person's capability set as the primary end of development; these capabilities ought to be pursued by each person in a manner that treats each capability as an end and none as mere tools of the ends of others. Therefore, the capability approach is indeed universally applicable in the sense that the capabilities are important to each individual, in each country and each is treated as an end objective for development.

1.2. Background

Traditionally development economics and economists have consistently focused on income metric variables to articulate development levels. According to the capability

approach, these measures serve as a means to the end of development. As a repercussion, policy makers have implemented policies that have been based on the means of development. Development economics is required to shift its emphasis away from a primary focus on the means, most notably one of the means – income – towards a more powerful conceptual framework that is able to embrace a wide variety of information required for making judgments concerning political, economic and social arrangement. The development debate and policy is required to focus on the expansion of individual freedom to facilitate an expansion on individual capabilities in a manner that is measurable and insightful to policy makers.

During the last four decades a general movement to abolish one-dimensional conceptions that focus on economic growth and replace them with multidimensional notions that incorporate non-economic aspects has ensued. To this end, the capability approach represents the crystallisation of this momentum and has revealed itself as a conception of development that may reveal insights into the process for policy makers. The capability approach to development is an attempt by various economists to emphasise the importance of focusing on the end of development; in particular, the expansion of individual freedom. As a result, it has attracted a large volume of interest. However, its application as a tool of analysis has been minimal.

There are a few countries, like Sri Lanka and India, who have targeted human development before economic considerations (Sen, 1999:105). The results have been positive as their populations are enjoying increasing life expectancies, a reduction in mortality rates and sound productivity growth (United Nations, 2005c). However, in the face of poor human development indicators, Sub-Saharan African countries and policymakers are doing relatively less to rectify the negative trend in their achievements in human development. In contrast to Sri Lanka and India, Sub-Saharan African countries continue to focus on economic growth – a means to well-being – as opposed to the end – freedom (Easterly & Levine, 1997:1203-1208). The poor performance of the region remains steadfast, while policy frameworks remain focused on economic growth. The evidence suggests that the improvements that are managed are not reaching the people who require it most. Therefore, the dissertation argues for a paradigm shift towards the capability approach to development in an attempt to reverse the regions process of marginalisation.

1.3. Problem statement and objectives

Development from the capability approach is a dynamic process of enlarging people's choices. The Individual choices around which the development theory is centered are as follows: the opportunity to lead long and healthy lives, the opportunity to acquire knowledge and the opportunity to have access to resources needed for a decent standard of living. Moreover, in recent years, the following choices have been included:

political freedoms, human rights, human development of women, environmental sustainability and citizen participation and the opportunity to effect political decisions in society (Martinussen: 2002:38).

The goal of the capability approach is two-fold: firstly, to provide the philosophical underpinning for the basic constitutional principles that should be implemented by all governments, regardless of the country's level of development, which establishes a bare minimum standard in respect for human dignity. Secondly, it moves away from a preoccupation with utility and rights by specifying an alternative space to in which quality of life comparisons may occur and yield insightful results. More specifically, it identifies how the people in society are actually doing by focusing on individual capabilities (Nussbaum, 2000:124 – 125).

The capability approach to development has steadily been incorporated into the development literature: for example, the first United Nations Human Development Report in 1990 defined development as a process of expanding individual choice (United Nations, 1990:46). However, its analytical application to underdeveloped regions by policy makers has been minimal. The objective of the dissertation is to discuss human development and its determinants in the context of Sub-Saharan Africa. The study focuses on the region in its entirety in order to establish the distribution of well-being among each variable under consideration. This enables the dissertation to reflect on the relative performance of the region and each country. The primary objective is to determine if the revised interpretation of development provides a different empirical focus to the development agenda of policy makers. The intention is to illustrate the insights offered by the capability approach to underdevelopment.

In order to achieve the primary objective, the dissertation has secondary aims that provide the paper with the theoretical framework to undertake an empirical investigation of development in Sub-Saharan Africa. The aims enable the dissertation to reach its objective in a logical progression.

The first aim of the dissertation attempts to detail the theoretical heritage of development economics in a manner that compares the neoclassical theory with the capability approach. The second aim of the dissertation is to introduce the foundations of well-being and attempt to illustrate the importance of an informational basis for reaching evaluations of well-being. It uses libertarianism and utilitarianism to illustrate a more general cleavage between consequential and deontological forms of reasoning. It attempts to offer a synthesis between the two notions by overcoming the obstacles commonly presented against each method of reasoning. The intention is to introduce a broader conception of well-being that embraces both important conceptions of well-being. The third aim of the dissertation is to introduce the capability approach to development. It offers a more dynamic interpretation of development, delineates the ends and means of development

and discusses the constitutive and instrumental role freedom plays in development. The fourth aim of the dissertation is to provide an overview of development in Sub-Saharan Africa.

Each of these aims contributes to the primary objective of the dissertation. The objective of the dissertation is to present a feasible, practical and precise database of the pertinent variables that shape the HDI in Sub-Saharan Africa. Additionally, the dissertation utilises the data set to create a model that can unpack the determinants of HDI in a Sub-Saharan Africa context.

1.4. Method of research

The research method of this study has been predominantly literature based as it attempts to clarify the conceptual framework of development and the roles of society's agents. Therefore, resources like academic journals, books and electronic sources through the internet have been the primary source of information.

To support the clarification of the conceptual framework the dissertation provides an empirical examination of the distribution of well-being across different variables in the context of Sub-Saharan Africa using regression analysis. The purpose of the regression is to support the conceptual framework developed by the literature review. Therefore regression analysis has been used and electronic databases have been the primary source of information.

1.5. Demarcation of study

The structure of this dissertation attempts to guide the reader through these aims in the most fluid and logical manner. Chapter two traces the evolution of development economics in order to introduce the process of informational broadening, to delineate the ends and means of development and articulate how the capability approach diverges from the neoclassical theories and other mainstream development theories.

In order to justify this necessary divergence from more traditional approaches, one is compelled to examine the respective shortfalls of each theory and offer the capability approach as a remedy. Therefore, chapter three undertakes an investigation of the general question concerning the importance of the informational basis used in evaluation judgments. The chapter attempts to identify the informational basis of the utilitarianism and libertarian theories to reveal the various inadequacies of these more standard approaches of well-being found within the literature; each of which has a special emphasis on narrow and exclusive information. Following, the chapter compares and contrasts the two viewpoints and concludes that the general distinction between the two

approaches may be a misrepresentation of reality. Therefore, the chapter offers a synthesis is possible for practical application.

Chapter four attempts to use the practical fusion created between consequential and deontological reasoning by using its broader conception of well-being to detail the capability approach to development. The capability approach investigates people's entitlements, which are interests that routinely manifest in various claims on goods. These claims on goods are facilitated by the freedoms enjoyed by the people in society. The dissertation argues that the appropriate space for measuring well-being is neither that of utilities as claimed by utilitarians, nor is it primary goods as argued for by libertarians. Rather, well-being should be measured by the freedoms that people themselves deem valuable. Hence, the chapter draws from the pioneers of the capability approach and introduces the key ingredients, its theoretical heritage and its universal practical applicability. Subsequently, it highlights the strengths of the pluralistic conception of well-being and articulates how it is able to overcome the obstacles faced by its more narrowly-focused predecessors. The idea is to illustrate how the capability approach offers fresh insights into these variables and engenders a fuller conceptualization of deprivations and poverty.

This dissertation reflects on the contribution of the capability approach and embraces the paradigm shift in favour of its broader informational basis. To this end, in light of the shift in emphasis, the empirical study undertaken in chapter five recognises the insights that the paradigm may offer policymakers. However, prior to the empirical study, it is important that the dissertation provides a sound summary of the current state of affairs in Sub-Saharan Africa. The chapter provides a brief review of the formation and integration of the capability approach into mainstream development economics over time by tracing the historical progress of development theory. The evidence suggests that a gradual expansion in the informational basis has occurred while a superior conception of the relationship between poverty and human development has been formulated, refined and defended with an improved empirical tools and methods (Martinussen, 2002:296). Subsequently, the chapter discusses the initial social, political and economic arrangements that Sub-Saharan African countries inherited at independence in the 1960's. Africa's development process post independence runs parallel to the expansion of development theory. Therefore, the historical context provides a useful empirical example of the need for development literature to expand its narrower conception of the process. Furthermore, it provides a sound platform of which an introduction into contemporary Sub-Saharan Africa may transpire. Following, the chapter draws together this discussion and applying the capability perspective to Sub-Saharan Africa.

Specifically, a regression model for the determinants of the Human Development Index (HDI) in Sub-Saharan Africa is undertaken to illustrate the insights that a broader conceptual framework offers development economists and policy makers. The chapter

investigates the role of democracy in development in light of the negative relationship revealed by the empirical study between improvements in the HDI and democracy index of the empirical investigation in the previous section. It attempts to substantiate the role of democracy by appealing to the ideals of the capability approach: democracy directly and indirectly enhances individual freedom.

The dissertation concludes in chapter six, which provides a summary of the dissertation and highlights its major conclusions. In addition, the concluding chapter provides some suggestions for future research agendas that may utilise the major findings of the dissertation to guide policy makers in Sub-Saharan Africa.

2. CONCEPTIONS OF DEVELOPMENT

2.1. Introduction

Over the last century, moral and political philosophers have been mesmerised by two aspects of mankind, each formidable, but incomplete without the presence of the other. One aspect observes humans as agents that have various capabilities, whereas the other, perceives human beings as residing in various states of being. Rhetoric that engenders a view of the two aspects mutual independence, while commonplace, is incomplete as a social study should be pluralistic to include both aspects of humans as it will engender a more complete understanding of people, their interaction amongst one another and, in particular, what it means for humankind to develop (Dasgupta, 1990: 1).

On the one hand, perceiving individuals as agents that are capable of deliberation who have the capacity to undertake action leads to a galvanisation of people's natural characteristics of agency, independence and choice. Thereby, it highlights the aspect of self that fashions projects and pursues goals (Dasgupta, 1990: 1). On the other hand, the alternative lens categorises humans – rather classically - by their mental states. Viewing people as states of being entails understanding people as a “loci of possible states of mind, attained by the extent to which desires are fulfilled, by the activities that are undertaken and the relationships enjoyed” (Dasgupta, 1990: 1).

The capability approach embraces both aspects of human kind by interpreting development as the process of enriching people's lives. Accordingly, the approach interprets the end of development as the expansion of individual freedom. In contrast to the capability approach, analysts have consistently interpreted development as an expansion of commodity production (United Nations, 1996:43). It is common for neo-classical development economics, in the spirit of growth theories, to be preoccupied with aggregate measures of income as the primary measure of a nation's level of development. For many years growth has been the end goal of policymakers based on

an ingrained neoclassical assumption that an improvement in living conditions is best served by enlarging the quantity of goods and services. This discrepancy stems from a historical misconceived cleavage of the identity of humankind.

The capability approach's primary premise may be stated simply: incomes and commodities are valued predominantly as instruments or means to other ends. Individuals do not desire these items for their inherent characteristics, but people desire wealth and income for the potential contribution they make in realising the quality of lives that individual's inherently valuable. For example, since an increase in income from low levels assists societies impoverished to become nourished, incomes serve as the means to some greater end: well-being. Thus, a higher income is instrumentally valued as a means to a greater end (Sen, 1998:2).

The capability approach assesses advantage by establishing those agendas that independent and free agents intrinsically value. Therefore, development economists are drawn towards a different empirical focus. At a minimum, the desire to be alive and avoid starvation is intrinsically valuable to all members of society. Within the capability approach, income is merely one of numerous variables that influence basic capability deprivations (Sen, 1998:2–3).

Western conceptions of economic order have been preoccupied with three themes: progress, development and evolution. However, the post World War Two (WW2) consensus has become increasingly focused on development (Martinussen, 2002:34). Even though a precise definition has been elusive, in its broadest sense, development has encouragingly become more pluralistic and multifaceted (Riggs, 1984:17). The chapter articulates the historical morphology of the concept of development and of the development process that has unfolded over the past fifty years. This process has delivered the capability approach, which places individual freedom at the centre of development, offering a broader conception of well-being.

The neoclassical theories of economic development centre on economic growth and modernisation. These theories serve as the starting point for the dissertation. Tracing the theoretical heritage leads towards more multifaceted interpretations of what development entails and allows the dissertation to logically incorporate each additional piece of information included into the developmental literature. The purpose of which is to magnify the key contribution of each theory, discuss the common themes and illustrate the process of informational broadening that has ensued over the last four decades.

2.2. The Development of Development Economics

During the 1940s and 1950s the idea of development generated a great deal of debate and, as a result, various conceptions of the meaning of development came to fruition. The catalyst of these debates was the Bretton Woods conference of 1944. At Bretton

Woods 44 countries met to negotiate the global economic order against the backdrop of the destruction of WW2. As a consequence, the formation of multilateral organisations like the International Monetary Fund (IMF) and the World Bank (WB) occurred. The primary concern of these multilateral organisations and development economics more generally was to improve the economic growth of industrialized countries (Martinussen, 2002:34).

The Bretton Woods discussions centred on the reconstruction of Europe in the aftermath of WW2. The discussions stimulated a broad awareness of the challenges that Europe faced and attempted to engender a European “community of concern” (Martinussen, 2002:34). The fundamental outcome was the creation of the Marshall Plan that encouraged massive sums of loans and capital transfers to Europe. The goal of this resource allocation was to create “a grand scheme for the rehabilitation” and invigoration of post war Europe (Harrod, 1951:246).

The IMF aimed at encouraging international co-operation in the monetary field and with removing exchange rate rigidities. The WB attempted to promote cross border capital investments for the reconstruction of member states. During this period, the economic order was concerned with a narrow notion of development – economic growth - that dominated policy maker’s perceptions of the process (Martinussen, 2002:34–35).

Since the mid-1950s, the development thrust has been redirected away from industrialised Europe towards the countries and population groups of the Third World. During this period, the majority of the Third World was embarking on independence and, parallel to its de-colonisation, the social conditions of these countries increasingly became the object of international attention (Martinussen, 2002: 35). The poor social conditions, in which the populations of these countries lived, were seen as a symptom of a low development levels and dictated their poor economic performance.

Enhancing the economic growth in the Third World was placed at the centre of policy makers and economist’s attentions. Industrialised countries and multilateral organisations perceived the Third World as backward in comparison to the industrialised West. Therefore, policymakers argued that the region required development which would, not only improve the Third World living standards and social conditions, but also benefit the industrialised nations as global aggregate economic activity increased (Martinussen, 2002:35).

During this period, growth and modernization were coupled together and interpreted as the gradual change of the developing world towards greater similarity with the highly industrialized countries (Martinussen, 2002:35). However, even though this interpretation may be considered as the period’s guiding ideology, a consensus regarding the nature of development was illusive and is yet to emerge: according to a study by Riggs (1984:17),

72 different definitions, interpretations and meanings of development have been utilised within the literature.

During the last four decades a general movement to abolish the one-dimensional conceptions of development that focused on economic growth and replace it with multidimensional notions that incorporate non-economic aspects has ensued. To this end, the capability approach represents the crystallisation of this momentum and has revealed itself as a conception of development that may reveal insights into the process for policy makers (Martinussen, 2002:35).

While the aforementioned general expansion has been taking place since Bretton Woods, various alternative strands and schools have been carving out their own space within the subject of development. The chapter attempts to identify the broadest contributions of each of the approaches and to simplify their key principles to serve as an introduction to development. The chapter uses each major contribution as the building blocks of the capability approach to introduce its relatively broader conception of what it means to be underdeveloped. Therefore, it manages to place the capability approach into a useful context and establish a more complete interpretation of well-being.

2.2.1. Economic Growth Theory

Development economics appeared as a distinct sub-discipline of economics in the 1940s and 1950s. The subject centred upon the causes for perpetual poverty, underdevelopment and stagnation in the Third World. From the outset development economics was preoccupied with long term economic growth, which deviated from the mainstream neoclassical economic theories of the period that were preoccupied with short term economic equilibrium analysis (Martinussen, 2002:19 and Snowden, Vane & Wynarczyk, 1994:195–197).

The classical political philosophers provided the theoretical heritage for development economics: Adam Smith underlined of the role of market mechanisms as a source of economic growth; David Ricardo extended the theory beyond capital to include technological innovation and international trade; Thomas Malthus incorporated population growth. These contributions established the fundamental classical contribution to development theory (Heilbroner, 1967:39–41). Common to each of these classical political philosophers was their quest to identify those patterns and relationships between societal conditions that create the environment for growth and change over the short and long term perspective. In short, it is this analytical intension that has been passed down to contemporary developmental research (Martinussen, 2002:21).

In the 1950s, Schumpeter created a distinction between growth and development that has left its legacy in the shape of hypotheses that continue to be debated in

contemporary development economics. Up to that point, growth and development were commonly conflated to mean a gradual extension of the capital apparatus and as an aggregate increase in production levels. In *The Theory of Economic Development*, Schumpeter (1934) asserted that the development process was a function of technological innovations. These technical innovations introduced new production methods, new products and new methods of organising production. It was argued that innovation introduced fundamental changes to economic life. Hence, Schumpeter's belief that technological innovations and innovators were the drivers of growth diverged from the classical conception that capital and savings accumulation were the primary sources of growth (Martinussen, 2002:35).

As a result of humans' ability to "reconfigure physical objects by creating new recipes for their use," it was argued that scarcity may be less perturbing than originally conceived by the classical political philosophers (Kelly, 2005:4). In summary, the number of ways to rearrange objects and to create something of greater value is vast. Therefore, the prospects for economic growth and development are greater than economists' originally believed. It suggests that ideas and innovation manage to outweigh the law of diminishing marginal returns and play a significant role in development.

Initially, Schumpeter's distinction between growth and development was not generally integrated into mainstream development economics. During that period researchers were not concerned with the relationship between growth and development as economic growth was considered an end goal in itself; economic growth was perceived as the primary end and what underdeveloped countries required. Therefore, the natural starting points for analysis were the determinants of and the obstacles to growth (Solow, 1956:45–54).

The development economists of the 1950s believed that economic growth implied an increase in the level of production, consumption and employment, and the standards of living enjoyed by the population. Furthermore, progress in these variables was believed to be reflected in Gross Domestic Product (GDP) per capita or Gross National Income (GNI) per capita. Both GDP and GNI were able to serve as a proxy for economic growth and development. In other words, progress was considered a function of economic growth that was reflected in a country's aggregate level of production or consumption (Martinussen, 2002:36).

Up to the 1970s, aggregate national income was the WB's major source of information for developing countries as there was, typically, a lack of statistics concerning Third World economies. However, the WB and development economists more generally, became increasingly aware that measuring growth and the level of development in terms of increased per capita incomes was potentially faulty and may not provide an accurate reflection of changes unfolding in developing countries: for example, per capita incomes

lacked validity as it was unable to accommodate the increasingly relevant question of income distribution (Hirschman, 1958:54). However, the phenomena of low data quality - a result of the limited resources available and the absence of certain markets in developing countries – left no more reliable alternative. Therefore, the development economists were tied to using aggregate national incomes as an indicator of growth and development (Martinussen, 2002:36).

These two interconnected problems resulted in an adjustment of many of the original conceptions of development; most notably, the question of income distribution. However, there remains no consensus regarding the nature of economic development. In broad terms, according to the development as economic growth perspective, economic development is a “process whereby the real per capita income of a long period of time increases while simultaneously poverty is reduced and the inequality in society is generally diminished” (Meier, 1989:6).

Even though there are differences in empirical and theoretical emphasis within the neoclassical framework of development economics, Sen (1983:746) argues that in terms of policy recommendations a few common themes may be highlighted. Among the major strategic objectives pursued since the establishment of development economics are: industrialisation, rapid capital accumulation and planning with an active state (Rosentein-Rodan, 1943:202-204 and Martinussen, 2002:34).

A neoclassical resurgence has been nourished by the successes and failures of different countries and their policies around the globe over the last three decades; specifically, the high performing economies of South East Asia (SEA), which have been tied to neoclassical liberal market-based institutions. These high performing economies have been contrasted with the low performing economies of Africa and Latin America, which have been associated with relatively high degrees of government intervention (Sen, 1983:180).

A consensus has emerged that acknowledges that growth and development are two different processes as pointed out by Schumpeter (1934), but development economists cannot deny that economic growth is one aspect of the process of development. However, as discussed in subsequent chapter, the exclusive focus on growth by traditional development economics is flawed and insufficient. Yet, given this concentration, the following section examines the appropriateness of this narrow conception of development – formulated in the 1950s – in light of the experiences of Sub-Saharan Africa over the last two decades. The purpose of which is to outline the policy recommendations that are commonplace when development is understood as short and long term economic growth.

2.2.1.1. Economic Growth in Sub-Saharan Africa

The African Development Bank (ADB) in *Selected Statistics on African Countries* (2006:24–35) presents comparative data for the period 2000 – 2005 for African countries. Embracing the WB's dividing lines of \$756 and \$9265 Sub-Saharan African countries have been divided into the classification of low and middle income economies (World Bank, 2006, World Development Indicators). Countries with GNI equal to or below \$755 are considered low income countries, countries with GNI between \$756 and \$9265 as middle income and countries with GNI equal to or above \$9266 are classified as high income countries.

The African Development Bank (2006:24-26) provides data on a group of 44 Sub-Saharan African countries. As a result of insufficient data available on Liberia, the country has been omitted from investigation. Therefore, data on 43 countries are presented in Appendix 1: in which 30 of these countries fall into the WB classification of low-income countries while 13 are classified as middle income countries.

The 30 low-income countries vary in terms of the growth rate of GNI per capita during the period 2000 – 2004 from negative 6.7% for Zimbabwe to 9.6% for Chad. The top three low income countries in terms of economic growth are Chad (9.6%), Mozambique (5.5%) and Tanzania (4.4%). In the middle income group, the growth performance again varies substantially, ranging from negative 2.5% for Cote d'Ivoire to 23.3% for Equatorial Guinea. The highest performers in terms of economic growth are Equatorial Guinea (23.3%), Botswana (5.7%) and Angola (4.1%) (African Development Bank, 2006:24-35).

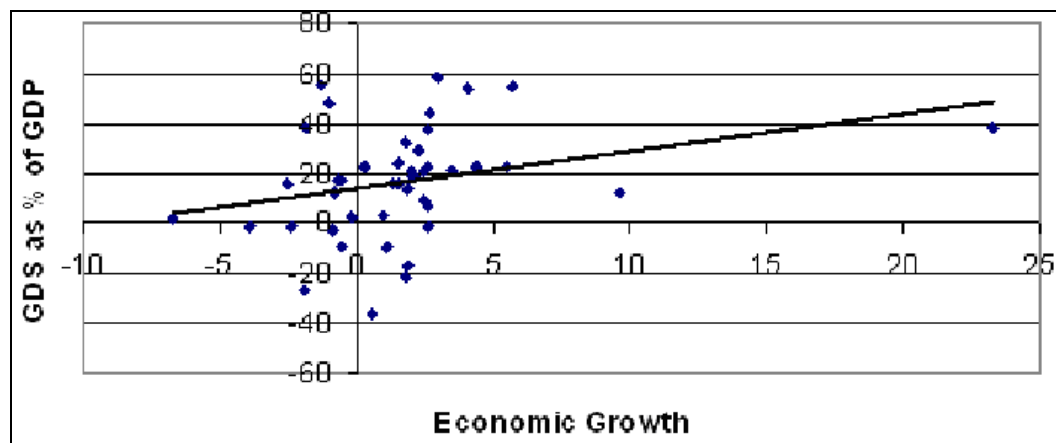
The important question that arises at this juncture is how these high performing countries compare with others in their respective groups and in the region generally in terms of the assumptions associated with the neoclassical theories of development economics that advocate a positive relationship between economic growth and capital accumulation, industrialisation and state activity? Therefore, the following sections of the chapter shall address each of these questions individually.

2.2.1.2. Capital Accumulation and Economic Growth

Starting with capital accumulation, of the top three performing economies, all three also lie in the top four of those that have the highest share of gross domestic savings (GDS) as a percentage of GDP: Botswana (54.4%), Angola (53.7%) and Equatorial Guinea (38.5%). Turning to the low income countries, of the top three economies in terms of economic growth rates, two are placed in the top five: Mozambique (22.3%) and Tanzania (22.5%). Even though Chad (11.9%) lies outside the top five positions in terms of GDS as a percentage of GDP, it does fall in the top half of the 30 low income countries. Thus, if there is anything to be learned from the growth experience of Sub-

Saharan African countries regarding the importance of capital accumulation, reality certainly aligns itself to the traditional consensus of development economics. The positive relationship between economic growth and capital accumulation is depicted in Figure 2.1.

Figure 2.1: Relationship between Economic Growth and Gross Domestic Savings as a percentage of GDP in Sub-Saharan Africa during the period 2000 – 2004.



Source: African Development Bank, 2006:24-35

It may be argued that a more compelling perspective may be created by analysing the failures as apposed to the successes in Sub-Saharan African economic growth. According to Sen (1983:750), the cases of failure are not asymmetrical since failures may be the result of “special bottlenecks” unique to the specific slow growing country even when the overall environment is satisfactory. Nevertheless, the cases of failure in Sub-Saharan Africa in converting capital accumulation into economic growth has relevance as it has been seen as a general force of economic growth by traditional development economics.

The three worst performances in the low income category in terms of growth rate are Zimbabwe (-6.7%), Eritrea (-3.9%) and Guinea Bissau (-1.9%). In terms of capital accumulation, as measured as GDS as a percentage of GDP, of the three countries Guinea Bissau (-26.3%) is ranked second worst. Even though Zimbabwe and Guinea Bissau are not the weakest in terms of GDS, each falls in the lower quartile of the low income group. In the middle income countries, the worst performers are Cote d Ivore (-2.5%), Seychelles (-1.8%) and Gabon (-1%). In addition, Cote d Ivore’s GDS as a percentage of GDP of 16.1% is the third worst performing in the middle income group while the other two countries lie in the median range (African Development Bank, 2006:24-35).

As a repercussion, in terms of those cases of successes and failure, the traditional wisdom of development economics, which views capital accumulation as an essential ingredient to economic growth, is supported by the international comparisons provided in Appendix 1 and illustrated in Figure 2.1.

2.2.1.3. Industrialisation and Economic Growth

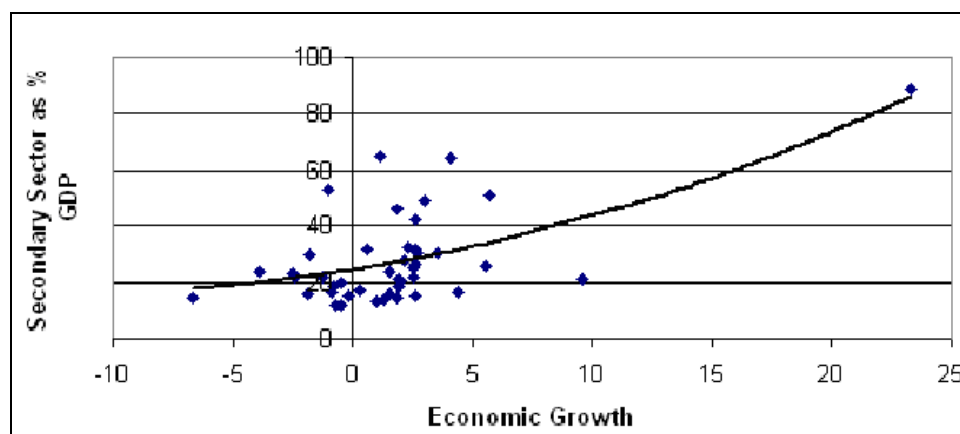
In order to generate insights of the relationship between industrialisation and economic growth the dissertation uses the data provided by the ADB. Using the contribution of the secondary sector measured as a percentage of GDP the section manages to support the conclusions of traditional economic theory. The data is also presented in Appendix 1.

The top performers in terms of growth rates in the low-income countries, Chad, Mozambique and Tanzania, have a secondary sector contribution of 20.9%, 25.6% and 16.2% respectively. Even though neither country leads the group in terms of secondary sector contribution, each lie around the group mean of 21.2%. The top growers in the middle income group, Botswana, Angola and Equatorial Guinea, each lie substantially above their group mean of 43.3% with a secondary sector contribution as a percentage of GDP of 54.7%, 53.7% and 88.6%, respectively (African Development Bank, 2006:24-35).

On the other end of the spectrum, for the low performing countries and middle-income countries, each country except Gabon lies below their respective group mean. In more general terms the group means of 21.2% and 43.3%, for low and medium income countries respectively, illustrate the importance of industrialisation in the process of economic growth. The high performing group has a mean that is double the size of the low performing group as measured as the secondary sector contribution as a percentage of GDP (African Development Bank, 2006:24-35).

The above analysis is supported somewhat convincingly in Figure 2.2. The figure illustrates the secondary sector contribution as a percentage of GDP plotted against economic growth rates. It reveals a strong positive relationship between industrialisation and economic growth and substantiates the claims of traditional economic consensus.

Figure 2.2: The relationship between the Secondary Sector and Economic Growth in Sub-Saharan Africa during 2000 – 2004

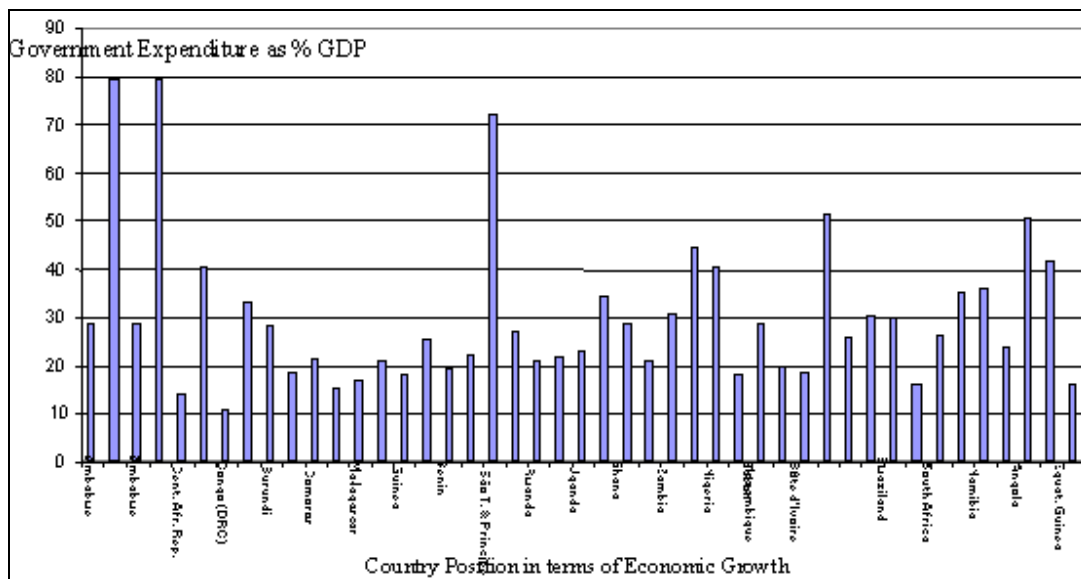


Source: African Development Bank, 2006:24-35

2.2.1.4. State Activity and Economic Growth

The question of state activism is a field in which comparative quantitative data is difficult to find (Sen, 1983:751). However, using the level of government expenditure as a percentage of GDP may shed some light on this question to which the paper turns in the final section. As illustrated in Figure 2.3, there is a varied relationship between economic growth and government expenditure in Sub-Saharan Africa. As a result, it is difficult to determine a coherent trend amongst these different realities.

Figure 2.3: Relationship between State Activism as a percentage of GDP in Sub-Saharan African Countries



Source: African Development Bank, 2006:24-35

In broad terms, the lowest performing economies in GDP per capita terms have relatively high levels of expenditure for their group and the region: Eritrea (79.6%), Zimbabwe (29.1%) and Guinea Bissau (40.8%). Progressing along the GDP per capita growth rates the trend is in favour of lower levels of government expenditure; from the higher achievers in the low income countries: Tanzania (18.4%), Mozambique (28%), Chad (20.1%), to the low performance economies of the middle income economies: Cote d'Ivoire (18%) and Gabon (25%). However, turning to the top achievers the level of government expenditure has an increases trend (African Development Bank, 2006:24-35).

The point being emphasised is not that the government plays a more significant role in high-growth and high performing economies, as the governments is relatively active in almost all developing countries. Rather the issue concerns the systematic involvement of the state in the economic sphere, and the pursuit of planned economic development. In other words, in the context of Sub-Saharan Africa what is significant is the nature of the government intervention in the economy (Sen, 1983:188). In terms of the data presented

in Figure 2.3 and Appendix 1, the relationship between state activity and economic growth is difficult to ascertain.

2.2.1.5. Conclusion

The data in Appendix 1 provided the empirical introduction to the main theses of traditional development economics. These conceptions suggest that capital accumulation, the level of domestic savings and the state play a crucial role in encouraging economic growth. Analysis of Figure 2.1, Figure 2.2 and Figure 2.3 are unable to carve out definitive findings, but does seem to fit relatively neatly with neoclassical theory. The capability approach certainly acknowledges the important contribution of economic growth as the benefits of growth can assist other development objectives. However, the limitation of development economics arises not from the choice of means to the ends of economic growth, but in the underlying assumption of neoclassical economics that economic growth is an end in its own right.

The neoclassical paradigm, as discussed in the above section, serves as the primary benchmark against which the capability approach is measured. The distinction between ends and means to development provides the subject matter for the subsequent section and will clarify the point emphasised above and the unique insight of the capability approach. However, prior to this comparative study, the paper shall briefly introduce alternative frameworks as they each illustrate the manner in which the capability approach emerged in the literature and to the problems to which it attempts to solve. Furthermore, it illustrates the process of broadening the variables that are considered relevant to development that has been commonplace in the development literature over the past half a decade; each theory offers an additional piece of the development puzzle that takes us closer to the capability approach.

2.2.2. Elimination of Dependency

Neo-Marxist theories and conceptions came about in the 1960s and presented an alternative to the neoclassical perspectives of growth and modernisation theory. Basically, Neo-Marxist theories presented two different objectives for the developmental process: developing a country's position in the international system and developing the internal conditions of the Third World societies (Martinussen, 2002:39).

Dependency theorists assigned importance to a country's international position by maintaining that a country's initial position determined the country's development path. The theory considered development as an establishment of national independence and the realisation of a self-centred economic program. Advocates of dependency theory posited that the colonial powers had deliberately underdeveloped the Third World or, at a minimum, impinged upon their developmental efforts. Decolonisation during the 1960s

had not been able to alter the economic order and, as a result, the developing economies needed to detach themselves from the developed world. This detachment was not considered an end in itself, but a means to establish national independence (Martinussen, 2002:39 and Lamb, 1987:211).

Concerning self-centred economic process, the notions were more intricate and debated within the Neo-Marxist school of thought. However, there existed a widespread agreement that a developing country's policy framework had to acknowledge its own unique circumstances. In addition, the perspective suggested that the final objective was the introduction of socialism: socialism was seen as the only mode of production that could ensure that the economic progress would translate into improvements for the previously disadvantaged, marginalised or suppressed class of citizens (Martinussen, 2002:39).

Above and beyond the two common long-term ambitions of introducing self-centred economic programs and increasing national independence, the dependency theorists were less coherent in their conceptualisation of the short and medium-term objectives of development. On the one hand, Marxist economists argued that capitalism was a vital building block for socialism as it could provide the necessary material preconditions and infrastructure to launch development agendas. Therefore, the medium-term objective was to pursue capitalism and, in particular, its typical free market mechanisms and principles in order to create the required infrastructure for socialism (Warren, 1980:73). On the other hand, a second group believed that the crucial element was the aforementioned de-linking from the international forces and the world markets. Through this lens, the essential medium-term goal was the introduction of a socialist centrally planned economy in which the state controlled and organised production towards socialism (Bogolovsky and Solodovnikov, 1975:28).

A third group of Neo-Marxists looked at each country's domestic conditions, circumstances and features. The Neo-Marxists tended to assign emphasis to each country's unique circumstances and formulated the medium-term goals with specific interest for the country in question. However, in the majority of cases, the long-term goal remained to introduce socialism. Therefore, in each variation of dependency theory the long-term goal remained to introduce socialism. This consistent objective provided the school of thoughts binding. However, the short-term goals varied from school to school (Martinussen, 2002:40).

The short and medium term goals of dependency theorists resembled some of the goals that had been formulated by liberalists with a focus on non-economic variables. In this regard, since the 1950s, the general tendency has been a more differentiated and cultural specific definition of development (Martinussen, 2002:40).

2.2.3. Modernisation and Dialectical Transformation Theory

The historical preoccupation with economic growth centres on material conditions. Modernisation theory harnesses this momentum by starting from a similar premise: development is a process of structural change whereby the institutions of the developing world change into forms that have a greater similarity with those in more affluent and developed societies. As a result, development was seen as the progress in the institutions of the developing world (Martinussen, 2002:38).

Modernisation theory believed that the developing economies needed to replicate certain institutions characteristic of the developed world. Specifically, the following institutions were considered in a favourable light by modernisation theory: the division of labour and an increased level in specialisation, high levels of productivity and growth, a well functioning state apparatus, a democratic form of government and equality of all members of society before the law. Hence, modernisation theories interpret development to mean progress towards the replication of these institutions and began to incorporate a broader range of ideas (Martinussen, 2002:38–39).

The conception of development as a process of modernisation has survived the last forty years of development debate. The same applies for development as seen as economic growth. However, alternative conceptions of development have emerged as contenders within the discourse. The plight of development economics to incorporate non-economic variables started with the dialectic transformation theory. Since the 1960s, dialectical transformation has generated increasing volumes of interest. Similarly to modernisation theory, social apparatus were divided into traditional and modern phenomena. The dialectical transformation theory defines development as a process whereby society incorporates more and more modern elements as replacements to traditional forms (Martinussen, 2002:41).

In contrast to modernisation theory, dialectical transformation theory acknowledged that traditional institutions did not necessarily imply development impeding. In contrast, the school highlighted that modern institutions may themselves be responsible for creating a barrier to development as some modern phenomena may function improperly and be incompatible when superimposed onto developing countries (Martinussen, 2002:41).

The school argued that the traditional or developing societies are in many instances dynamic, complex, heterogeneous and capable of preservation under the pressures of the modernisation process. This led to a central idea of “the traditional and modern as social phenomena in a dialectical relationship where both types of phenomena change in the process, and where the result, of necessity, is hybrid” (Gusfield, 1976:376).

The dialectical transformational theory managed to introduce a respect for developing countries that previously was absent from the development literature; it acknowledged the unique circumstances unfolding in developing economies and tied its notions of development to these specific circumstances. This meant that the conception that development was a universal and linear phenomena became refuted. The ability to superimpose modern phenomena onto developing countries became questionable. In contrast, the school interpreted development as a process that had to be case specific given a society's particular circumstances and the preferences of the inhabitants (Martinussen, 2002:40–41).

2.2.4. Capacity Building and Development by People

In the late 1960s and 1970s, development economics shifted emphasis away from superimposing institutions of the industrial countries of the West on to developing countries and to a more explicit focus on non-economic forces. The conception of development morphed as more and more non-economic variables were introduced into its vector of interest. Previous schools of thought ignored human capacity from its sphere of interest: for example, the capacity of individuals within developing societies to make and implement decisions (Martinussen, 2002:41).

According to the capacity building and development by people schools of thought, a society develops primarily through the expansion of the abilities of its populace and an increased in their capacity to make and implement decisions. As a result, the end of development started to shift away from economic development towards human development. The capacity building approach, aligned with dialectic transformation, stressed that each country had its own particular circumstances and the inhabitants had their own priorities; human welfare became the centre around which debate revolved. Accordingly, the conceptions of development tended to share an emphasis on the ability of the people to participate in the decision making process (Martinussen, 2002:41).

Basic needs became the starting point for the developmental process and strategy with these views. The normative premise, upon which capacity-building approaches to development use as its entry point, is that meeting the needs of the people ought to take precedence over all the other developmental goals. To this end, a special strategy and policy framework is required to accommodate people's basic needs. This notion is carved out of the belief that the benefits from growth do not automatically trickle down to the marginalised segment of the population (Martinussen, 2002:41).

The marginalised segments are often removed from the benefits of development, as the economically weak are frequently the politically weak. Therefore, the marginalised are without decisive influence on the formulation of national development goals. In order to alter this state of affairs and ensure the effective participation of the poor in the decision

making process and in defining their own needs, certain institutions are necessary to assist the weak in reaching up to the state and its apparatus. To this end, the decentralisation of power to local authorities is considered a natural progression for the development by the people approach (Martinussen, 2002:41).

2.2.5. Sustainable Development

After the Brundtland Report of 1987, international debate increased regarding the impact of economic growth on the marginalized segments of the populations in countries around the world. Rising from these debates, the concept of sustainable development emerged. The approach perceived development as “a process that fulfils present human needs without endangering the opportunities of future generations to fulfill their own needs” (Martinussen, 2002:43).

Sustainable development theory follows from welfare and human development schools in that its primary end is the fulfillment of basic needs. However, it introduces the welfare of future generations by incorporating what is ecologically feasible over the longer term. In other words, the essence of sustainable development theory asserts that development translates into the enhancement of the values that promote a certain standard of living, but which lies within the limits of what is ecologically feasible and which can reasonably be attained without jeopardizing future generations (Martinussen, 2002:43).

The concept of sustainable development has managed to generate widespread acceptance over a relatively short period of time and has began playing a significant role in most development discussions that take place in the developed and developing world. The fundamental thrust that has been integrated has not been the idea of meeting people's basic needs, but the idea of maintaining a level that is ecological sustainability. However, similarly to the previous theories outlined above, sustainable development theory introduces a new category of non-economic variables into consideration: ecological feasibility and the welfare of future generations (Martinussen, 2002:43).

2.2.6. Increased Welfare and Human Development

Economic growth theories that assert that development ought to be measured by increases in economic growth have been disputed in recent theoretical debate. Economists like Amartya Sen, Paul Streeten and Mahub UI Haq have played a central role in creating an alternative lens through which to view the process of development. Their major point of contention with neo-classical development economics has been the notion that increasing incomes should not be seen as an end; to these economists income growth should be regarded as a means to improve human welfare – a view embraced within this dissertation (Sen, 1981a:440).

Accordingly, human welfare became the overall objective or essence of development: "Increased incomes and national economic growth were crucial preconditions for improvements in the standard of living, but not the only precondition" (Martinussen, 2002:37-38). The point may be illustrated by contrasting the relative GDP per capita in a country and the average life expectancy between two different developing countries. For example, the 2004 GDP per capita in South Africa was approximately \$ 11 100, which dwarfed Sri Lanka's measure of \$ 4 000. However, the relative positions in the context of life expectancy offers a contrasting perspective with South Africa averaging 44.19 years and Sri Lanka enjoying a expectancy of 72.89 (United Nations, 2005a:118).

The point illustrates a potential gap in the literature and an inherent imbalance or vulnerability in narrow conceptions of development that focus on GNI or GDP per capita. The human development view generated a great deal of global support in the early 1990s; for example, the United Nations (1990:42) adopted a more multilayered and comprehensive definition of development: human development is "a process of enlarging people's choices." The Individual choices around which the development theory is centered are as follows: the opportunity to lead long and healthy lives, the opportunity to acquire knowledge and the opportunity to have access to resources needed for a decent standard of living. Moreover, in recent years, the following choices have been included political freedoms, human rights, human development of women, environmental sustainability and citizen participation and the opportunity to effect political decisions in society (Martinussen: 2002:38).

2.3. The relationship between Income Growth and Human Development

The notions that were originally conceived to support the narrow focus of the development literature have become increasingly important as a framework for research. Each school of thought has offered an additional contribution to the concept and meaning of development and underdevelopment. Over the last four decades an increasing number of non-economic variables have been included into the realm of development from an almost exclusive concentration on income and its growth to an inclusion of income distribution, the elimination of dependency, institutions, capacity building, sustainability and welfare (Martinussen: 2002:38).

There is an obvious connection between income and human development in contemporary society. Income assists people to realise the freedoms that they have reason to value and subsequently their well-being. The historical faith in economic growth as a means to enhancing well-being is based on the assumption that the benefits of growth would eventually become widespread. Economists hoped that by introducing liberal policies, the rich may get richer in the short term, but the rewards would create the incentives for innovation, saving and capital accumulation, which would ultimately benefit the poor. Furthermore, economists presumed that during the period of rising inequality,

governments would be positioned to mitigate the suffering of the poor by creating various social networks and other supporting measures in an attempt to create stronger and more cohesive communities (United Nations, 1996:46).

Unfortunately for policymakers in the developing world, the linkage between income and development is less direct than frequently assumed within the development literature and may be contingent upon various different underlying factors (United Nations, 1996:46). The relationship is not conclusive as there are significant external factors that influence choice. Furthermore, the relationship is not uniformed as the impact that wealth has on lives varies considerably from person to person. However, income and wealth are crucial determinants of realised living conditions and on quality of life. Therefore, understanding income's role in the development process remains a fundamental objective for development economists (Sen: 1992:2-4).

Simultaneously, development theory must strive to supercede its tendency to hover around income-metric measures and other income-related variables. While it remains important to acknowledge the importance of economic growth, analysts must look beyond it to more abstract variables: an activity the capability approach has achieved to some degree of success (Sen: 1992:2-4). The essence of the capability approach is that it suggests that development debate and policy prescriptions should center on the end objective of development in contrast to its means. Items such as income levels, income growth, institutions, dependency and others introduced in the previous section are means of development. However, the capability approach focuses on the end of development: the expansion of individual freedom. The concept stems from classical political philosophers like Aristotle, Smith, Marx, Mill and Marshall. For example, Aristotle expressed in *The Nicomachon Ethics* that: "wealth is evidently not the good we are seeking, for it is merely useful and for the sake of something else" (United Nations, 1996:45 and Aristotle, 1980:7). Personal income and affluence play an important role in determining quality of life, but it remains one of many variables to influence human development (Sen, 1999b:13).

The gap between an exclusive preoccupation on economic wealth and a broader focus on the actual lives that people lead is a major issue for the conceptualisation of development. For example, GNI per capita may be a reliable proxy for real income, but it reveals little of the distribution of the aggregate income. Various physical and social conditions will also substantially affect individual quality of life. According to the United Nations (1996:49), investigations into the priorities of the poor have highlighted that other variables have significance: adequate nutrition, accessible safe water, improved medical services, better schooling for their children, affordable transport, adequate shelter, security and satisfying jobs. Increasing income assists in meeting these needs, but does not guarantee them. The point being emphasized by the capability approach is not the

irrelevance of income, but its inadequacy in capturing the causal relationships between a person's quality of life and their survival rates (Sen, 1998:6).

As Aristotle noted, wealth is desired for reasons beyond its own value and, as a result, contemporary economists are required to create a better understanding of underdevelopment beyond the insight offered by the narrow development as growth perspective. In contemporary society it is inadequate to argue for the maximisation of income and wealth over all other variables. Furthermore, economic growth should not be considered as an end in itself. Development is the enhancement of the lives that people are able to realise and the freedoms that they enjoy. Expanding the freedoms of individuals within society is valuable as its success implies that people are able to live richer and fuller lives. An expansion of individual choice engenders a more sociable community orientated existence within which people may operate and addresses the poverty of aspiration and opportunity widespread in Sub-Saharan African countries. Therefore, the capability approach attempts to target the end of development – well-being – to foster a better framework upon which policymakers may make decisions (Sen, 1999b:14).

2.4. Well-Being and Human Development

The capability approach to development embraces a pluralistic definition of well-being. This pluralistic formulation manages to foster a sound notion of development that bridges the gap between the two conceptual interpretations of the nature of humankind: doing and being. Each conception seems to flow into distinct and incompatible channels when one considers the question of that person's well-being (Dasgupta, 1990:1).

One perspective identifies the satisfaction of a physical existence and the ability of people to choose the lives that they desire while the other attempts to satisfy the condition of being human and the perusal of welfare and happiness. Thus, the development of people has two different focal points depending on the perspective embraced by analyst. On the one hand, viewing people through their abilities and capabilities flows swiftly into details of their choices and the realisations of their goals. Therefore, there is a natural and logical progression towards the language of freedom and rights. On the other hand, a metaphysical perspective of people that deals with the internal functionings of mind suggests that utility or satisfaction would be the ideal vantage point from which to embark upon an investigation of well-being (Dasgupta, 1990:1).

In their essence, these are two related topics and there has been a natural tendency for academics and policy makers to conflate the two concepts; there are various examples that manage to use the two concepts intermittently without creating any disturbances in the natural progression towards a viable evaluative conclusion (Dasgupta, 1990:1).

Consider, for example, that the literature frequently appeals to various forms of socio-economic rights when considering alternative policies that may be implemented in developing economies in response to the extent of poverty within a particular jurisdiction. Here one frequently encounters an appeal to basic needs: a person has the right to a specific minimum level of scarce resources. In fact, the United Nations (1990:8) defines poverty as the inability to attain a minimal standard of living; this standard of living may be interpreted to include the consumption of food, clothing and shelter, but also, for example, access to education, health services and clean water. Familiar conclusions are reached by advocating certain positive rights (Dye, 1969:1080 and Gewirth, 1989:46). Elsewhere, economists have also reached the same outcomes based on aggregate utility considerations; for example, grants or in-kind transfers have frequently been advocated for an increase in society's aggregate utility (Slesnick, 1996:1527). The fundamental point, which Dasgupta (1990:1-2) highlights and one that is illustrated tangibly in the above passages is that "it is not immediate if the language of positive rights has any greater cutting power over aggregate-welfare reasoning."

Nevertheless, there are substantial cleavages between these two broad perspectives and there is little guarantee that their fusion does not lead to large ethical mishaps when used to consider alternative policy frameworks. Works by Rawls (1958, 1971, 1980 and 1988) have provided an important warning against conflating the two viewpoints (Dasgupta, 1990:3). In addition, Rawls's works confirm that by focusing on features of justice - necessary for any theory of rights - one is able to illustrate that utilitarianism is an insufficient moral basis for a theory of rights (Mulholland, 1986:325). Therefore, in chapter three the major theories of ethical evaluation, utilitarianism and libertarianism, will be studied and an endeavor to fuse the two perspectives will occur by challenging the assumed incompatibilities of the two viewpoints.

In development economics, the language of rights has been divided into two distinct types: positive and negative rights. Each has made a substantial impact in recent years and has an important role in development economics. Both require consideration in policy debates and the conceptualisation and implementation of adequate policy. However, analytical focus has remained restrictive in the sense that the analysts have focused on either, negative rights and freedoms, such as Bauer & Bell (1999), or positive rights and positive freedoms, such as, Streeten (1994); Sen, (1981a, 1981b, 1983, 1985 & 1990), exclusively. The dissertation develops a notion of rights that bridges the cleavage between people's freedoms (and rights) and welfare (and happiness).

Negative rights may be considered as the environment within which individuals are able to pursue their own conceptions of well-being. Therefore, negative rights concern society's scarce resources and their allocation. In other words, according to Freedom (1990:493), negative rights are the "protective devices that disallow interference with the autonomy and agency of the individual." Hence, they are individual claim rights against

harm. In contrast, positive rights reflect the achievement of the conception of good. According to Quinn (1989:306), they are “claim rights to aid and support.”

By including both positive and negative rights into its investigation the dissertation moves towards a better-conceived group of potential quality of life indices than studies that predominantly focus on one of the alternatives. For example, Sen (1981a) focuses exclusively on positive rights. Subsequently Sen has faced criticism as his approach results in insensitivity to variables that have a profound influence over our lives: for example, ignoring the instrumental role of freedom eliminates a significant level of understanding of what it means to be free (Dasgupta, 1990:2-3).

The dissertation aligns itself with the capability approach to development in its conclusion that developments’ primary target ought to go beyond a study of the level of per capita incomes as it has more significant moral implication of diminished lives, agonised existences and a large percentage of premature preventable deaths (Sen, 1998:2). Therefore, the dissertation advocates a fundamental shift in the measures that economists utilise in their measurement of poverty. Accordingly, the dissertation suggests that the manner in which economists intellectualise the relationship between poverty and the lives that people lead requires alteration. Similarly, Sen (1998:2) argues: “judging a person’s advantage and deprivation, we have to shift our attention from an exclusive concentration on incomes and commodities to things that persons have reasons to value intrinsically.”

The dissertation questions whether one can detect an inherent conflict between the acknowledgment of positive and negative rights in Sub-Saharan Africa by studying the relationship between political and civil rights, on the one hand, and improvements in the indices that are at the heart of welfare and positive rights on the other. Therefore, the capability approach uses a broader information basis that absorbs positive and negative rights. Hence, the fundamental tenet of the dissertation is to confront an ill-conceived complexity that establishes a cleavage between utility considerations and right-based considerations by using the capability approaches broader informational basis of well-being.

2.5. Conclusion

Over the last 50 years development has encouragingly become more pluralistic and multifaceted. Originally conceived as economic growth, the theoretical heritage of development economics has embraced a broader conception of development. Therefore, each contribution to the conception of development has embraced additional non-economic variables. These additions are part of the process known as informational broadening, which is discussed in the following chapter. The aim of this chapter was to

trace these additions to development economics as each takes the subject towards the capability approach to development.

Naturally, the starting point for the chapter was the neoclassical theories that interpret development as economic growth. This interpretation of development led to many studies on the determinants of economic growth. The studies created a general consensus that capital accumulation; industrialisation and state involvement were important contributors to economic growth. The chapter explored the determinants in the context of sub-Saharan Africa and found that, in the realm of economic growth, the region of the African continent manages to fit relatively neatly with the neoclassical consensus.

The capability approach certainly agrees that economic growth matters, but it differs in the sense that it conceives economic growth as a means through which development may manifest in society. Therefore, the capability approach diverges from its classical predecessor in the sense that it creates a clear divide between the means and ends of development: income matters, but only so far as it assist in expanding the lives that people wish to lead. Thus, the section explored the distinction between income and development.

The capability approach to development embraces a pluralistic definition of well-being that manages to bridge the gap between the two conceptual frameworks of the nature of humankind and absorb positive and negative rights. However, in order to achieve this objective, the dissertation turns its attention to confrontation an ill-conceived complexity that establishes a cleavage between welfare and freedom considerations by using the capability approaches broader informational basis for well-being.

The dissertation develops a notion of rights that bridges the cleavage between people's freedoms (and rights) and utility (and happiness). In addition, it questions whether one can detect an inherent conflict between the acknowledgment of positive and negative rights, in Sub-Saharan Africa by studying the relationship between political and civil rights, on the one hand, and improvements in the indices that are at the heart of welfare and positive rights on the other. By asking such a question, the paper attempts to disentangle the relationship and challenge, for example, the assumption that in many underdeveloped countries the people cannot afford political and civil liberties. However, in order to achieve this aim, chapter three investigates the foundations of well being by introducing common ethical evaluations' information basis.

3. THE FOUNDATIONS OF WELL BEING

3.1. Introduction

The capability approach removes itself from the means of development and a preoccupation with growth and income by conceptualising development as the process of expanding the freedoms that individuals themselves value. This leads empirical investigations to a divergence from more common informational bases of ethical evaluations; namely, utilitarianism and libertarianism. In other words, the capability approach leads to an alternative empirical focus that assigns weights to alternative explanatory variables.

Utilitarian and libertarian perspectives are the primary theories of moral evaluation embraced by neoclassical economics. According to the utilitarian philosophy, a branch of consequentialism, morality is entirely a matter of consequences, and the consequences that matter are those that increase happiness. If economic growth increases happiness, then growth may be endorsed from a moral perspective. The crucial assumption of neoclassical growth theories that is challenged in the following chapter is that an increase in income will increase utility as an increase in income leads to the choice of a more preferred combination of goods, thereby increasing utility. In contrast, libertarians have no direct interest in happiness or pleasure; the informational basis libertarianism boasts consists exclusively on individual liberty and rights. Therefore, well-being is a function of unbreakable rules that protect individual freedom (Packer, 1989:432).

In order to justify this necessary divergence from more traditional approaches, one is compelled to examine the respective shortfalls of utilitarianism and libertarianism. The capability approach responds to these shortfalls by offering a synthesis between utilitarianism and libertarianism as a remedy. Therefore, the dissertation undertakes an investigation of the general question concerning the importance of the informational basis used in evaluation judgments. Following, the chapter attempts to identify the informational basis of the utilitarianism and libertarian theories to reveal the various inadequacies of these more standard theories found within the economic literature; each of which has a special emphasis on narrow and exclusive information. The subsequent section shall compare and contrast the two viewpoints and offer the conclusion that the cleavage between the two perspectives may be a misrepresentation of reality and less clinical than assumed. The chapter offers a synthesis that may be applicable for practical application.

3.2. What is an Informational Basis?

Each evaluative approach may be characterized by the information basis that it uses as a foundation for making ethical judgments; “the informational basis of a judgment identifies the information on which the judgment is directly dependent” (Sen, 1990:111). Therefore, a critique of an information basis can either challenge the information that the evaluative approach includes or the information that it excludes when making ethical judgments.

The informational basis for utilitarian methods of evaluation identifies utility as the only basis for the evaluation of different states of affairs, actions, choices or rules. The classical form of utilitarianism, pioneered by Jeremy Bentham in 1789, defines utility as pleasure, happiness or satisfaction (Sen, 1999b:56). All judgments that harness a utilitarian approach depend exclusively on these mental achievements. In contemporary literature, the concept of utility is used more loosely as an “index for what is really an ordinal ranking of individual preferences; all that matters is the relative ranking rather than the actual magnitude” (Farber, 2003:1794). However, true to both the classical and more modern versions of utilitarianism is that preferences are reflected in mental accomplishments and are the primary informational sources upon which ethical evaluations are placed.

This exclusive concentration on mental states place utilitarianists under duress as momentous matters like individual freedoms, rights and other aspects that influence people’s quality of life are not included directly in evaluations. These important notions – included in the capability approach - are only significant in the utilitarian view if they are able to have an indirect effect on utility through an indirect influence on mental satisfaction and happiness. Utilitarianism is frequently accused of being insensitive to the distribution of these utilities as it concentrates on the accumulation of aggregate levels. In summary, the compelling and rich theoretical heritage of utilitarianism relies on a limited informational basis that creates a significant drawback for its notions of well-being (Sen, 1999b:56).

In contrast, libertarianists have no direct interest in happiness or pleasure; the informational basis libertarianism boasts consists exclusively on individual liberty and rights. In the spirit of Kantian ethics, rights are considered rules, which each member of society ought to respect. Therefore, well-being may be considered as a function of certain unbreakable rules (Packer, 1989:429–432).

The different informational bases for utilitarianism and libertarianism prompt different interpretations of well-being. Subsequently, each of these theories has different evaluations on the morality of actions and choices. In each case, the informational basis is narrow and confined, which limits the robustness of the application of its conclusion for policymakers. In short, when faced with certain states of affairs, ethical evaluations hinge,

in a profound manner, on the information that is granted ethical significance and from which ethical judgments are based. When considering the ethical evaluation of action, it is important to identify the impact on those variables that the evaluator considers significant, which are most frequently, defined by their own ethical conception of well-being (Sen, 1999a:358–360).

The merits and limitations of utilitarian and libertarian informational basis are explored in this chapter. In addition, the cleavage between these two conceptions of well-being is detailed with the intention of creating a synthesis between the two perspectives as a broader informational basis is required by the capability approach. As introduced in previous chapter, the capability approach incorporates a broader and more varied set of sensitivities in its informational basis including, most prominently, individual freedoms. This broadening creates a more pluralistic conception of well-being. Therefore, the perspective embraces a wider reach of variables that allows for a more thorough understanding of ethical evaluations and the extent of well-being.

3.3. Utility as the Informational Basis

There are many formulations available in the development literature to evaluate actions; some are simple and others more complex. However, a simple and appealing method has been offered by Narcross (1997:1): “An action is right if there are no available alternatives that produce a greater balance of goodness over badness.” This is a formulation that is compatible with utilitarianism.

Utilitarianism has been the dominant ethical theory, theory on justice and theory of well-being for over a century. The modern form originates from the writings of Jeremy Bentham and John Stuart Mill. Subsequently, utilitarianism has been embraced by economists and philosophers that have had a profound effect on the subject of economics; namely, John Stuart Mill, William Stanley Jevons, Henry Sedgwick, Francis Edgworth, Alfred Marshall and Pigou (Sen, 1999a:56).

Bentham articulated the utilitarian principle as the “greatest happiness of the greatest number” (Burne, 1949:367). According to Sen (1999b:351), Bentham pioneered the use of “utilitarian calculus to obtain judgments about social interests by aggregating the personal interests of different individuals in the form of their respective utilities.” Therefore, the information basis for classical utilitarianism is the utility sum of total the states of affairs. In this context, utility is defined as pleasure or happiness and the fundamental premise of utilitarianism is that well-being is a mental state.

As Brittan (1983:331) suggests, in order to comprehensively understand the appeal and problems of the utilitarian perspective, it is useful to investigate its formulation. Utilitarian evaluations can be broken down into three distinct components. The first component is a

recognition of its consequentialist nature, which insists that all choices must be judged based on their consequences. Moreover, utilitarianism not only gives precedence to utility consequences of actions, but also excludes all other variables from its evaluations. This represents the welfarist second component, which confines judgments of well-being to the utilities attached to the consequential states. These two components combined form the proposition that a choice may be judged by the respective utilities it generates as a consequence of its implementation. Therefore, it places no importance on the notions of rights or duties. The third component of utilitarianism is that it has an unnerving faith in the sum ranking of utility, which by definition sums up different peoples' utilities to get an aggregate level. Therefore, the outcomes grant no ethical significance to the distribution of this utility. In other words, "the utility sum is to be maximised irrespective of the extent of inequality in the distribution of utilities" (Sen, 1999b:59). Similarly, McDermott (1982:572) notes that "utilitarianism is often criticised for being aggregative, or blind to distributional considerations, by implying that any loss can be imposed on a man if this permits gains for others which are greater in total."

These three components combine to form the classical utilitarian formula for judging various choices. In short, this view considers an injustice as an action that causes an aggregate loss for society, *ceteris paribus*. Therefore, an unjust society is one in which people are less happy on aggregate than they necessarily need to be or that circumstances determine, as is the case in many Sub-Saharan African countries.

Since happiness and pleasure are difficult to measure, modern formulations of utilitarianism define utility as a numerical representation of a person's observable choices. In short, if a person would choose alternative *x* over *y*, then the person is assumed to derive more utility from the consequences of alternative *x* than *y*. According to Farber (2003:1794), faced with the difficulties of measuring and comparing utility, economists have tended to adopt a Pareto approach to efficiency. It is therefore natural to turn to this more modern formulation of utilitarianism in a critical assessment of the utilitarian perspective's merits and demerits as undertaken in the following sections. It attempts to illuminate the limitations of an exclusive reliance on utility consequences in interpreting well-being and making ethical evaluations concerning actions or state of affairs.

3.3.1. The Merits and Demerits of a Utilitarian Perspective

The procedure of choice-based accounting – as required by utilitarian principles – has some merits and demerits. While the advantages of the approach are the subject of much debate, it has been credited with making two insightful points: it highlights the importance of taking the results of actions into account and outlines the need to pay attention to the well-being of people involved in the various social arrangements in question (Sen, 1999b:61).

In order to illustrate the relevance of these insights, consider that while constitutive features endorse many social arrangements, the consequences that may follow their implementation are excluded from the information basis when evaluating the arrangement's effectiveness. For example, property rights are frequently advocated based on a belief that they encourage individual independence and, as a repercussion, some policy makers suggest that no restriction should be placed on ownership or inheritance (Gill, 1983:675–677). On the other side of the political divide, in the spirit of Karl Marx, it is argued that the idea of ownership may lead to vast inequalities with some individuals having a great deal and others having little. Therefore, advocates of the latter perspective would argue for the abolishment of private property (Sen, 1999b: 61-63).

A purely consequentialist perspective of private property would, by definition, evaluate the consequences of private property rights exclusively. Economists frequently argue that there are positive repercussions of endorsing and expanding private property rights as they contribute to economic expansion (Gill, 1983:675–677). This positive consequence must occupy a central position in accessing the merits of private property in the consequentialist perspective. However, there is also empirical evidence that suggests that the unconstrained use of private property can entrench poverty. For example, Boserup (1985:385) forwards the argument that in Sub-Saharan Africa, the agricultural system in many countries may be characterised as land that enjoys “a low frequency of cropping” while large areas are left to “grow natural vegetations;” both of which indicates low efficiency and productivity levels. As a result of poor land management, labour usually migrates away from the agricultural areas, as there is little opportunity to earn income as a result of the scarcity of or absence of markets. Hence, private poverty has led to the underutilisation of the land.

As illustrated above, a clear consequentialist outcome-based evaluation is difficult to attain and, in some cases, consequences are varied and difficult to disentangle. However, this conclusion is aligned with utilitarian views that: “The general case for taking full note of results in judging policies and institutions is a momentous and plausible requirement, which has gained much from the advocacy of utilitarian ethics” (Sen, 1999a:61).

The limitations of a utilitarian concept of well-being have generated a large volume of criticism in the literature that may be traced to its narrow informational base (Sen, 2000:477-480). According to Brink (1986:417) most of the criticism aimed towards utilitarianism is “moral criticism” in the sense that it focuses on issues above and beyond the concepts practical and theoretical applicability. In summary, the following are amongst the major deficiencies of a utilitarian approach and remain problematic for the perspective: an indifference to the distribution of utility; a neglect of rights, freedoms and

other non-utility variables and an inability to deal with the widespread process of mental adaptation and conditioning (Sen, 1999a: 61–63).

The utilitarian objective concerns the maximization of the sum total of utility. This aggregation comes at the cost of distribution considerations. As Sen (1999b:352) states utilitarianism may be classified as “the single-minded pursuit of maximising the sum of utilities.” Utilitarian calculus ignores any inequalities in happiness or pleasure as only the sum of utility has a significant meaning regardless of how skewed the distribution may be in reality. Development economics is certainly interested in the aggregate well-being of a particular society, but ought to be equally fascinated by its distribution within that society (Sen, 1980:198-200). Therefore, utilitarian conceptions of well-being face significant criticism.

Furthermore, the utilitarian perspective assigns no importance to rights and freedoms unless they have a direct or indirect influence on utility at an aggregate level. However, as Sen (1999a:62) articulates, a society inhabited by happy slaves ought not to be considered the utopian society simply because people are happy irrespective of their lack of freedom. In other words, as important as happiness should be to policymakers there is a moral obligation to go beyond such a limited information base.

Moreover, a view that includes utility in its informational base may be criticised as being fallible and not very robust, since mental conditioning and adaptive attitudes towards a person’s reality make interpersonal comparisons and measurements difficult to realise. For example, in developing economies many people live below the poverty line and in conditions that are foreign to the relatively poor individuals in more affluent societies (World Bank, 2005). These people, through adapting their expectations, desires and -subconsciously or consciously -conditioning their attitudes to what they consider as feasible possibilities, they may be relatively happy. In summary, according to Robbins (1938:636), the primary utilitarian drawback is that “every mind is inscrutable to every other mind and no common denominator of feelings is possible.”

Social and economic factors, like basic education, elementary health care and secure employment play a significant role in adaptations of expectations. In isolation each social and economic variable contributes to well-being directly or indirectly. However more importantly these combine to play a significant role in giving people the courage, knowledge and freedom to challenge the difficult realities they face on a daily basis. These considerations encourage a broader informational base that focuses on each person’s capability to choose the life that they have reason to value to be utilised when investigating well-being (Sen, 1999b:63).

3.3.2. Utility and Real Income: The Problem of Interpersonal Comparisons

As noted previously, the modern definition of utility is no longer a referral to illusory mental states of affairs that favour the enhancement of pleasure over pain. Rather, more modern formulations of utilitarianism represent a numerical presentation of a person's individual choice vector. This accommodates factors such as mental adjustments that are commonplace in contemporary society (Robbins, 1938:636). As economists became more convinced and aligned to Robbins's perspective, which perceived a methodological problem with interpersonal comparisons of utility, the traditional utilitarian perspective began to make various compromises.

The most common compromise in contemporary versions of utilitarianism is that utility is simply a representation of people's preferences and, therefore reflective of potential choices. Pareto comparisons became the predominant method by which social improvements could be adjudicated (Faber, 2003:1795). In short, the criterion asserts that an alternative may be considered superior if a movement towards that option would increase overall utility (Sen, 1999a:352).

According to Farber (2003:1795), given two alternatives; A and B, A is considered Pareto superior if an advance in favour of A from B will cause an increase in utility. Thus, A is ranked higher than B. If the movement from alternative B to A causes one person's utility to increase without diminishing another's utility, then the move may be considered Pareto superior. The advantage of this approach is that it avoids the difficult exercise of attempting to compare different mental states.

Distributional patterns remain overlooked by this revised edition of utilitarian evaluation as distributional concerns can only be attempted if there are potential conflicts of interest between the alternatives. Therefore, using choice behaviors to reflect utilities represents an attempt to by-pass the problem after Arrow's (1951:404-406) impossibility theorem. However, according to Sen (1999a:358), the primary issue of social choice theory is to create some version of accounting that enables analysts to determine individual advantage or disadvantage. Thus, it is not necessary to compare mental states, but rather that an alternative representation of well-being is made available to policymakers.

Sen (1999b:358) proposes the following: "There may indeed be a case for taking incomes, or commodity bundles, or resources more generally, to be of direct interest in judging a persons advantage." This suggestion is based on various reasons – not merely for the mental states that they may help generate. However, in most cases, this translates to little more than comparisons of real income, which itself may be challenging when confronted with the reality that people have such diverse demand functions, substitution rates and varying preferences" (Sen, 1979b:36).

The largest drawback of using a real-income approach to measuring well-being lies in the natural diversity of human beings. The heterogeneity of people with regard to age, gender, talents, ability, vulnerability to illness make two different people divergent in their opportunities in life even in the case that they share identical commodity bundles. In other words, people are so vastly different that even in the case where the commodity bundles are identical, people will experience a different utility satisfaction in the consumption of the commodity bundle (Sen 1999b:69).

The capability approach offers a subtle change in contact point for an investigation. Similarly to Rawls's version of libertarianism that attempted to achieve a fuller measure of individual advantage through investigating individuals' command over primary goods. The capability approach suggests that rather than identifying the outcomes that individual freedoms may create, development economists ought investigate the freedoms people have available to them (Sen, 1999a:358).

3.4. Liberties as the Informational Basis

By the 1930s, the unquestioning adherence to utilitarian calculus started to fray and was subject of criticism by development economists. Led by John Rawls and Robert Nozick, an alternative conception of well-being emerged. In the following section, the dissertation delves into their offer of libertarianism. The section traces the foundations and formulation of libertarianism. Subsequently, the criticism that libertarianism faces in its application to evaluative judgments is outlined.

In his seminal contribution to development economics *A Theory of Justice* Rawls (1971), managed to highlight the inadequacies of the utilitarian neglect of distributional issues and its preoccupation with sum-utilities. Rawls's introduced a component, called the priority of liberty, which provided the launch-pad for an alternative framework of well-being and contemporary theories of justice (Dasgupta, 1990:3). The priority of liberty assigns a certain class of rights absolute moral and political precedence over the pursuit of all other societal goals. According to Habermas (1995:110), Rawls offers a justification of certain primary principles from which a just modern society ought to be launched. These rights prevail in order to ensure fair cooperation of its populace as free and equal citizens. The primary classes of rights vary from personal liberties to property rights and sit above other goals in the hierarchy of importance.

The essence of the priority of liberty resembles Kantian ethics in the sense that the particular procedures required for protecting these rights are immune to ethical judgment and ought to be accepted regardless of the consequences of their protection. In the libertarian perspective rights take absolute priority over other variables that a society may determine to be desirable. Therefore, libertarianism is in direct contrast to utilitarianism as

utilities, equity or the removal of deprivations are deemed morally inferior to rights (Rawls, 1980:515–517).

Utilitarianism permits a renegotiation of the composition of utility if the greater good of one person requires a sacrifice of the good of another. A motion that may impinge on the rights of the individual are allowed when sum-utility is enhanced. However, according to Rawls, social inequalities may only exist if each member of society benefits from them. In other words, a person may only be worse off than other members if the uneven balance would tip even further as a result of the removal of the imbalance (Lyons, 1972:2).

Rawls's informational basis accredited absolute priority to various personal liberties, political rights and civil rights (Dasgupta, 1990:4). However, this class of rights has been disputed in recent rhetoric as attempts to integrate other considerations have been advocated. In particular, economic needs have been the subject of much debate as Rawls's formulation places economic needs below personal liberties on the ladder of importance. However, in all societies, there are certain circumstances when economic needs may be considered as a matter of life and death and deserve precedence (Habermas, 1995:110–113).

Sen (1999b:64-65) attempts to bridge the issue exposed by Habermas (1995:110-113) by placing the libertarian informational basis in the context of developing economies in contemporary society. Accordingly, the solution to the problem lies in qualifying the priority given to a certain right in a manner that makes it more difficult for economic needs to be overlooked. The essential element in the creation of this protection is to entrench the distinction that Rawls created between his own strict formulation - that liberty should take precedence in all cases - and his more general proposition - that personal liberties should be isolated from other advantages for special treatment.

This division creates the scope for a flexible informational basis that releases development economists from the more rigid first claim associated with the strict formulation. According to Sen (1999b:64), the objective is to determine whether or not an individual's liberty should get precedence, equal or inferior treatment in contrast to other types of advantages. The crucial point concerns the weight that the person would assign to specific sets of advantages when they reflect on their own alternatives and opportunities.

Robert Nozick in *Anarchy, State and Utopia* (1974), continues to strip utilitarianisms applicability to contemporary issues. In conjunction with Rawls, Nozick (1974:xi) states that: "Individuals have rights, and there are things that no person or group may do to them (without violating their rights)." Furthermore, Nozick elaborates that the entitlements that people have in the course of exercising their rights cannot be subject to any sort of consequentialist contingency as rights take priority in each case and cannot be

outweighed by the harmful consequences of their fulfillment. However, this uncompromising perspective is a source of major criticism of libertarianism.

This uncompromising priority of libertarian rights over all other primary social goods can be relatively problematic as the actual consequences of realising entitlements can potentially lead to Pareto inferior results. In particular, the priority of liberty can lead to inevitable violations of those freedoms that individuals have reason to value. These freedoms include avoiding mortality, escaping morbidity, being well-nourished and healthy, and having the ability to read and write. According to the capability approach, the importance of these freedoms should not be ignored as a result of the priority of liberty as established by Rawls and Nozick, (Sen, 1999b:66).

For example, according to Sen (1981a:433) and Kaplan (2003:xiv), disasters like famines are possible without the violation of any libertarian rights; poor people in developing countries may starve because their legitimate entitlements are unable to provide them with sufficient food or nourishment for survival. Similarly, in less extreme examples of deprivation, individual freedom may be violated in the process of protecting libertarian rights. For example, Ryan (1977:137-138) illustrates by contrasting pre-capitalist with capitalist societies that private property ownership may itself create a perpetual interference with the freedoms of the majority. Therefore, while liberties such as private property are in place, individuals may be left marginalised. Similarly, in South Africa, while the need for access to Anti-Retroviral pharmaceuticals are high, individuals suffering from HIV/Aids may be experiencing a reduction in their freedoms to live long healthy lives while private and intellectual property rights are honouring the right for private individuals to determine their own price and supply levels (Statistics South Africa, 2004:4.16).

A theory of political priority that is independent of consequences marks a theory that shares indifference to the freedoms that people have their own reasons to value. It seems inappropriate, faced with the severe challenges facing many developing countries, to accept rules irrespective of the consequences that result from upholding the priority of liberty. In terms of its informational basis for evaluation the evidence suggests that congruent to the utilitarian perspective, the libertarian approach is simply too limited, as it simultaneously ignores those variables that both consequentialist and utilitarian perspectives hold in high esteem – sum-utility consequences – while ignoring the freedoms to which people themselves attach great importance – the right to live long lives.

3.5. Consequentialism versus Deontological Evaluations

The cleavage between utilitarian and libertarian methods for reaching ethical evaluations has been illustrated in the previous section. However, this cleavage is indicative of a

more general distinction within moral philosophy for reaching ethical judgments; namely, consequential and deontological reasoning.

The essential element of deontological reasoning is the recognition of the priority of the right over the good, as embraced by the libertarian perspective (McMahon, 1991:350). In contrast, the primary tenet of consequentialism is the reverse; it acknowledges the good over the right by identifying desirable social goals and insists that agents in society ought to deliberately seek them out. Therefore, consequentialist theories are often referred to as goal-based theories (Harris, 1989:90).

The following section attempts to draw in elements of both perspectives into the informational basis to provide a more inclusive and pluralistic conception of well-being. The underlying tensions between the two perspectives are explored and detailed in an attempt to bridge these differences as required by the capability approach to development. The dissertation finds that the crucial distinction between an act and its consequence is far more difficult to discern in practice than in theory. In addition, both forms of public judgments rely on some level of aggregation with the difference being the extent of the aggregation. As a result, both theories may be considered less distinct than originally conceived and may be integrated into the broader informational basis as demanded by the capability approach to development.

3.5.1. Acts and their Consequences

Consequentialism adjudicates an action, and more generally the policies that govern actions, solely in terms of their consequences: “They identify desirable social goals, for example the maximisation of aggregate welfare, and they insist that agents in society ought deliberately seek and realise an aggregate of them” (Dasgupta, 1990:7). Therefore, utilitarianism’s preoccupation with welfare consequences is by definition a consequentialist theory.

There are numerous versions of consequentialism, but the binding glue among various theories is an emphasis on certain social goals. Basically, the various strands simply advocate different social goals. However, each branch shares the fact that they “evaluate states of affairs by their aggregate desirability and thereby judge actions and policies in terms of an aggregate of their consequences” (Dasgupta, 1990:7-8). Importantly, the central focus of consequentialism is not optimal actions or policies, but rather the aggregate consequences of each action or policy.

It is argued that consequentialism presents a stark contrast to deontological judgments. Deontological reasoning estimates rightness or wrongness of an action without any reference to its consequences. Each branch of deontology judges rightness or wrongness differently, but shares the view that “each one of us is a rational moral agent

and is protected by a cloak of rights, which even the general good is unable to override” (Dasgupta, 1990:8). This method of evaluation fits neatly with the libertarian perspective Nozick (1974:xiv).

In summary, it is leveled that the two perspectives differ as a result of their different relative concerns for the individual versus the aggregate masses. In the deontological perspective the individual takes primacy over all, whereas in consequential theories, the aggregate masses take precedence over the individual. Hence, society as a whole may be considered by the extent to which it protects the individual from the aggregate desire of the majority (Dasgupta, 1990:8).

The obvious criticism of any consequential theory is that an individual’s liberty is vulnerable to the whims of the aggregate whole. For example, Cumminsky (1999:586) states: “In principle, if not in practice, a consequentialist may be required to sacrifice an innocent person for the sake of greater good.” This criticism has continued to be levelled against consequentialist theories. However, according to Dasgupta (1990:8), this criticism fallibly assumes that one is able to create a distinction between an act and its consequence, which is more difficult in practice than in theory: “One reason is that they are parts of a more general, more fundamental notion, and one which is more familiar to economists: that of a state of affairs, or a social state.”

A social state is a complete description of the world that includes the past, present and future. Hence a social state includes “past, present and future experiential states, the production and distribution of goods and services, and economic and social interchanges” (Dasgupta, 1990:9). Therefore, in order to evaluate a social state the evaluator requires complete knowledge of the known past through to the infinite future, which is at a minimum, highly problematic and improbable.

According to Dasgupta (1990:9), introducing the concept of a social state manages to highlight that consequences matter in deontological theories and reasoning; the distinction between an act and consequence breaks down in many instances making the cleavage between consequentialist and deontological reasoning tedious, complicated and, in some instances, impossible to resolve. Logically, if an action is deemed wrong because it violates a moral right, inductive reasoning suggests that the consequence of such an action is the violation of that same moral right. In other words, actions may become part of the description of the consequences. Therefore, the distinction between an action and its result becomes distorted and the assumed cleavage of the aggregate measurements of consequentialism versus the individual interest of deontology is misinformed.

More accurately, the discrepancy centers on each theory’s relationship with the past. Consequentialist theories consider the past as insignificant when moral judgments are

made; for example, murder is wrong, by definition, based on the consequence or impact of that action on the future. Therefore, the past is insignificant and an emphasis is placed on the future. In contrast, deontological evaluations would consider an action wrong if it violated a person's rights even if it were to have no impact on the future (Dasgupta, 1990:9).

Dasgupta (1990:9-10) emphatically suggests that it is the manner in which consequential and deontological theories deal with the past and the future that distinguishes the two theories from one another. Therefore, it is not each perspectives tendency to aggregate as both theories to some extent find it necessary to utilise aggregation to some degree. The argument that there is an inherent conflict between the two concepts based on their relationship with aggregate measures is based on uncertain foundations and does not present an obstacle to a broader informational basis for evaluation as required by the capability approach.

3.5.2. Public Judgments and the Aggregation of Well-being

The economic literature on the aggregation of welfare consistently appeals to the degree to which "an ethical theory justifies trade-offs between one person's interests and those of another" (Dasgupta, 1990:11). Aggregate utility in the context of utilitarian theories implies the summation of society members' individual utility. However, there are numerous methods of welfare aggregation, each of which embraces a different ethical perspective (Faber, 2003;1794). The general argument that the aggregate considerations of utilitarian theories leave the individual at the disposal of the majority has been discussed in the literature, but is fallible as each theory accepts aggregation and it depends on the type of aggregation being advocated and, following, the ethical perspective being engaged.

A minor adjustment in the classical version of utilitarianism may lead to a satisfactory solution. The classical version of utilitarianism is vulnerable to the accusations that it is unable to protect the individual from the demands of the masses, but more modern formulations may have remedied the criticism. Theories that permit some degree of trade-off once a member's utility becomes low enough are not vulnerable to such an accusation. For example, one method of protecting an individual's utility level is to prohibit the decline of an individual's utility to submerge bellow a stipulated level. This jeopardises the classical version of utilitarianism as introduced by Mill and Bentham. Nevertheless, remains a consequentialist version of ethical evaluation and remains utilitarianist as it exalts actions on the basis of their utility consequences (Dasgupta, 1990:10).

Utility may take various different shapes or forms; stricter definitions confine utility to mental states, which reflect satisfaction or happiness. However, in other versions like

social choice theory, it could be seen as a numerical value reflecting an ordinal preference of states of affairs; and yet, in other versions, it could be a numerical representation of ordering social states on the basis of a person's actual choices (Faber, 2003;1794 and Dasgupta, 1990:10).

On the other hand, rights are seen as a basis for protecting various human interests, such as agency, independence, choice and self-determination. An individual has a cloak of rights assigned to him or her when there is reason to award them liberty, opportunity or commodity even though utility considerations may not warrant such action. Importantly, rights do not impinge upon the concept of interest, but "reinforce some interests against the claims of other, less urgent or vital interests" (Dasgupta, 1990:11).

Rights create a method to distinguish between different states of affairs that may have the same utility consequences. Thus, libertarian theories diverge from utilitarian theories as they distinguish between different types of interests by evaluating certain features of the state of affairs, which consequently give rise to the utility ramifications. In Dasgupta's (1990:11) words: "Ethical theories which totally ignore human welfare are rationally repugnant and are therefore in error."

A recurrent perception of the concept of rights is that they are absolute; in the sense that once an individual has been assigned rights, others may not violate them for any reason (Rawls, 1980:17). This translates to a set of rigid constraints on what people may and may not do rightly. Consider Nozick (1974:166) who advocates that any states of affairs in which one or more rights is violated must be expelled from consideration and only once these possible states of affairs have been eliminated from consideration should one then evaluate the others with regard to social choice.

However, as highlighted by Dasgupta (1990:12): "The presence of deontological considerations tells us how the aggregation is to be conducted, it does not offer an alternative to aggregation." Similarly, according to Dasgupta, Rawls's (1972) theory suggests that there is a hierarchy of rights that enables society to order the states of affairs in a manner that will direct or inform superior social choices (Dasgupta, 1990:12). Therefore, libertarianism argues that rights are absolute and do not permit trade-offs among individual interests. Therefore, they differ from utilitarianism that does permit such a trade-off.

According to Dasgupta (1990:12), rights are not absolute: when dealing with interests there are degrees to their frustration. If one allows trade-offs between rights and utility, provided the trade-off is within an appropriate context, one can see that the cleavage between libertarian and utilitarian theories does not hinge upon the libertarian's avoidance of aggregation, but rather in their stipulation of the class of objects that is to be

aggregated. Therefore, the primary criticisms discussed in the previous section are bridged by Dasgupta's (1990) discussion of the different ethical perspectives.

3.6. Conclusion

The informational basis for ethical evaluations of advantage and disadvantage has a significant influence on the understanding of well-being when faced with numerous alternatives. In the above chapter the dissertation attempted to illustrate the significance of the informational basis and to explain how viewing reality through a different lens will create different ethical judgments. Hence, evaluation is largely a subjective matter.

The utilitarian perspective, both in its classical and contemporary formulation, is unable to deal effectively with either distributional considerations or with interpersonal comparisons of advantage and disadvantage. Libertarians, with their priority of liberty, are unable to successfully counter the criticism that individual freedoms may be violated through the protection of other rights and liberties. Hence, in some cases there may be an unavoidable trade-off that violates the precedence of liberty.

Both share a rich theoretical heritage and various methodologies have been implemented in an attempt to engender interpersonal comparisons. Though these methods have their own obstacles and drawbacks, the combined impact of each contribution has fostered a better understanding of advantage. The possibility of both constructive utility-based economics and social choice theory hinges on the need for broadening the informational basis.

The purpose of this chapter was to introduce the broader concepts that provide the foundation of utilitarian and libertarian approaches; namely, deontological and consequential reasoning. The intention has been to deal with the two major differences between the methods of inquiry that have frequently been articulated in the literature. The chapter finds that the distinction between an act and its consequence is far more difficult than it to isolate in practice than in theory. As a result, both theories tend to use a more blurred perspective in passing ethical evaluations. Moreover, the issue of aggregation hinges on a difference in which variables each theory allows aggregation and to what degree. Therefore, the view that these perspectives are incompatible may be largely misinformed.

As a consequence the dissertation encourages a different view from which to form the basis of public action that embraces the utility considerations and the rights of people, which stems from the aggregation of individuals' well-being. For an individual's well-being is morally significant as it reflects an ethically noteworthy and legitimate interest. In addition, a public action that contradicts a person's well-being could be rejected by that same person. The relevance of this stems from the question regarding the legitimate role

of the state and its ability to make claims on others within the social union. The capability approach is offered in the next chapter, focusing on a certain set of human interests that manifest themselves in claims for goods in an attempt to establish a logical progression from a focus on well-being to a discussion of commodity needs.

4. WELL BEING, FREEDOM AND THE CAPABILITY APPROACH TO DEVELOPMENT

4.1. Introduction

The previous chapter discussed the broad cleavage in the literature between deontological and consequential reasoning and managed to illustrate how this distinction is theoretical and unreliable in its application to public policy. This chapter attempts to introduce a practical fusion between consequential and deontological reasoning by using a broader conception of well-being. This broader framework of the development process enables the dissertation to place the capability approach to development into a useful perspective for policymakers.

The chapter shall draw from the pioneers of the capability approach and introduce the its key ingredients, theoretical heritage and illustrate its universal practical applicability. Subsequently, the chapter highlights the strengths of the pluralistic conception of well-being and articulates how it is able to overcome the obstacles faced by its more narrowly-focused predecessors. Therefore, the chapter attempts to confront the issues of interpersonal comparisons of mental states, the incorporation of non-income measurements, methods of dealing with inequality and manners of understanding unemployment.

The capability approach investigates people's entitlements, which are interests that routinely manifest in various claims on goods. These claims on goods are facilitated by the freedoms enjoyed by the people in society. The primary purpose of the dissertation is to suggest that a broader conception of well-being that centers around freedoms will enhance the understanding of underdevelopment in Sub-Saharan Africa.

The narrow informational bases of the dominant evaluative theories within the economic literature, which are embraced by utilitarianism and libertarianism, have been reviewed in the previous chapter. The paper argued that the appropriate space for measuring well-being is neither that of utilities as claimed by the utilitarianists like Bentham, nor is it rights as argued for by libertarians like Nozick or Rawls. Rather, aligned with development economists like Sen (1981, 1988, 1998, 1999a & 1999b), Dasgupta (1990) and

Nussbaum (2000), well-being should be measured by the freedom that people have to pursue those items and activities that they deem valuable.

The aim of the chapter is to illustrate how the capability approach offers fresh insights into the development debate and engenders a fuller conceptualization of deprivations and poverty than those offered by utilitarian and libertarian conceptions of well-being. By illustrating development as a production process, the chapter attempts to steer public policy towards a broader interpretation of what it means to be underdeveloped and impoverished.

4.2. Development as a Production Process

The basic needs approach was developed in the 1970s and offered development economists a more direct objective than its predecessors. The approach argued that all individuals deserved the basic means of well-being: food, health and education. Therefore, the approach identified those inputs that it determined influenced well-being and attempted to provide individuals with these items (United Nations, 1996:49).

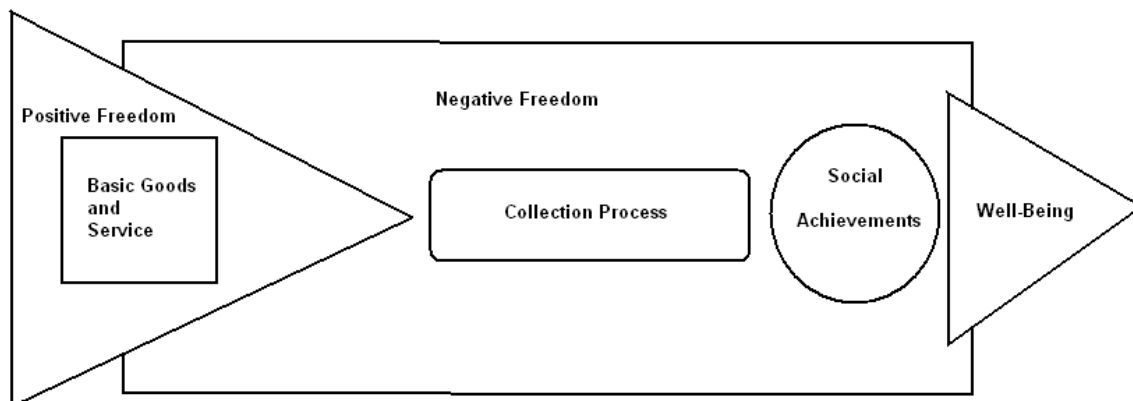
The approach had three primary parts: first, it highlighted the importance of increasing incomes through labour intensive production; second, it emphasized the crucial role that public services and policies had in reducing poverty; and finally, it altered the understanding of people participation in the decision making process by suggesting that planning and delivery of services ought to be carried out by the people for the people (United Nations, 1996:49).

In practice, the basic needs approach failed to deliver on its promise because many governments focused exclusively on the second tenant: the delivery of basic public services. The approach has faced stern criticism for being excessively top-down and for being overly materialistic as it failed to empower poor people with the ability to improve their own standard of living on a long-term or sustainable basis. However, a positive contribution that may be sourced to the introduction of the approach is that it was able to realign policymakers and development economists with a fundamental of development: meeting the needs of the people. Moreover, it provided the momentum for broadening the information basis of development economics and provided the foundations for the capability approach (United Nations, 1996:49).

In contrast to the neoclassical theories that use resources as their primary departure point, the capability approach, like the basic needs approach, may be provided by the notion of needs. Appealing to the concept of needs enables development to be viewed as a complex production process with commodity consumption as an input, freedom as the background environment, and welfare and individual functionings as an output vector. Therefore, using the notion of needs as its starting point, the capability approach

manages to link rights, utility, welfare and freedom in a manner that is easily digested when a broader conception of well-being is utilised (Dasgupta, 1990:14). This relationship is presented in Figure 4.1.

Figure 4.1: The Development Process



The purpose of the diagram is to provide a point of reference for the relationship between freedom and well-being. The entire development process occurs within a negative freedom. Positive freedom provides an individual with access to basic goods and services (or at least access to the basic goods and services that a particular society has). The collection process unfolds based on the allocation of resources free individuals have chosen and these choices manifest in social achievements.

The principal components of the development spectrum are inputs such as clean water, sanitation facilities and medicine required for survival. In crude terms, social indicators, such as the percentage of the total population with access to water and sanitation or the number of hospital beds per 100 000 people articulate the achievements that individuals attain in the space of commodities. In short, these values and measures attempt to capture the input side of this development process (Dasgupta, 1990:15).

Development economists frequently use indices that attempt to capture the negative-rights of the population within a social union. Therefore, economists are familiar with indices that measure negative freedoms: the freedom of speech enjoyed by members of society, the protection from physical abuses, and so on. According to the capability approach, these measures provide the background environment within which people engage a production process. This production process is labeled the collection process in Figure 4.1. The collection process is one of converting commodities and services into living (Dasgupta, 1990:15). Negative freedom may be seen as the degree to which an individual may pursue an activity without interference. In other words, as defined by Hayek (1958:240), negative freedom is “the state in which a man is not subject to coercion by the arbitrary will of others.” Therefore, negative freedom is the infrastructure within which the collection process occurs.

Positive freedom deals with ability of people to decide for themselves, as willing and able agents, upon their own fate and formulate their own ideas (Steiner, 1994:305). Positive freedom involves individuals' relationship with societies scarce resources. As the dissertation will discuss in subsequent sections, it deals in the realm of access.

On the output side the development production process are various social indicators, which measure the achievement of a society in realising its freedoms. These measures include: adult literacy rates, infant mortality rates and life expectancy. The initiative being formulated is that these variables have more relevance to policymakers than aggregate utility measures, as they are measures of the extent to which certain real interests of persons are being served, protected and promoted. According to Dasgupta (1990:15), outputs ought to be interpreted as "measures of the extent to which certain real, vital interests of persons are being supplied and encouraged." Therefore, the capability approach argues that economies ought to be evaluated on such bases.

The difficulty of using commodity needs, as a starting point, is that they are abstract and subjective in the sense that they are person specific and fluctuate for each person over time. Furthermore, certain needs are complicated to observe as they are frequently psychological and deal in the realm of feelings and sensations. However, certain needs - commonly called basic needs - are relatively constant over time and may be treated as a lowest common denominator for all people and may provide a sound starting point for investigation (Dasgupta, 1990:15).

Human development ethics suggests that basic needs are a matter of survival and should take precedence over other commodity needs. For example, people can postpone the consumption of a compact disk (and their choice of artist may change over time), but the capability approach argues that it would be wrong postpone the consumption of water to the thirsty. Therefore, political morality urges development economists to prioritise access to basic needs and place them at the pinnacle of any hierarchy of policy importance (Dasgupta, 1990:15).

Viewing development as a production process in which basic goods serve as the inputs means that needs serve as a guide for public policy makers: "the political and economic structure of a society influences the distribution of benefits and burdens within it" (Dasgupta, 1990:16). Even though some forms of commodity needs may be subjective, it is foolhardy to banish them from the subject of political economy. However, an emphasis on commodity needs does imply a level of scarcity. Therefore, the freedom to actively pursue those needs becomes a partial contributor to an understanding of deprivation. Hence, the following section discusses different types of freedoms and highlights the relationship between these freedoms and needs.

4.3. Freedom: The Means and End of Development

The section commences by looking at the role of freedom in human development. Subsequently, it creates a distinction between different types of freedoms: positive and negative freedom. The section discusses the difference between functions and capabilities as this distinction provides the foundation for overcoming those criticisms that were leveled against utilitarianism and libertarian conceptions of well-being. Finally, the section explores how placing freedoms at the center of developmental debate illuminates a better understanding of issues such as inequality and unemployment

There are two contrasting perceptions of the development process within the economic literature: one view sees development as a fierce process littered with periods of attrition (Barro, 1996:2). This zero-sum perspective demands tough policy decisions and implies substantial trade-offs. In particular, the process demands a calculated neglect of various concerns, such as social safety nets that protect the very poor and vulnerable members of society, in favour of tough and disciplined policy frameworks (Sen, 1999b:15).

In this perspective, ideals of positive freedom like political and civil liberties, are considered ill afforded luxuries that must linger until the development process has borne sufficient fruit (Sen, 1999b:15). Barro (1996:2) provides a good example of empirical work supporting this perspective and stresses that there is an advantage of dictatorships over democracy stems from the formers ability to ignore demands that conflict with economic growth or efficiency.

An alternative view of the development process characterises the relationship between economic variables and social rights as friendly. This positive sum perspective may be exemplified by the mutually beneficial exchanges discussed by Adam Smith in his *Wealth of Nations* (1776), which sees the scope for working social safety nets, political liberties and social development (Sen, 1999b:15).

Various empirical studies have attempted to unpack the relationship between economics and political achievements. However, the results are varied. Alvarez, Cheibub, Limongi & Przeworski (2000) finds that there is no essential difference between the growth rates of dictatorships and democracy. Papers by Sen (1999a), Nussbaum (2000) and Dasgupta (1990) meanwhile advance the capability approach to development, which embraces Smith's friendly understanding of development. Sen (1998:7) provocatively suggests that democracy is intrinsically valuable by observing that famines have occurred exclusively, throughout history, under dictatorial regimes. Furthermore, Besley & Burgess (2001) enhance Sen's view by investigating the determinants of government responses to natural disasters; their study supports Sen's (1998) hypothesis.

Bardhan (1993:44-49) provides a synopsis of the recent economic consensus, which views positive freedoms' contribution to development in a positive light (Sen, 1999b:38). Using the momentum provided by Sen (1998) and Bardhan (1993), the section discusses the relationship between freedom and different forms of political and economic structures through the lens provided by the capability perspective.

4.3.1. The Constitutive and Instrumental role of Freedom

Development, according to the capability approach, is a process that attempts to enhance and expand the freedoms that people enjoy and desire. Within this perspective, an expansion of freedoms is seen as both the primary end and the principle means of development; the ends and means of the developmental process may be labeled the constitutive role and the instrumental role of freedom respectively (Sen, 1999b:38). Chopra & Duraiappah (2001:2) summarise the objective of development as embraced by the capability approach as the quest to reach a global order wherein people have equal freedom. This goal does not necessarily imply or lead to equal wealth. However, as elaborated in the basic needs approach, people require equal instruments to achieve the realisation of their freedoms.

The constitutive role of freedom may be interpreted as those freedoms that directly augment human lives. This includes elementary capabilities, such as those that allow individuals to avoid deprivations like starvation, morbidity and mortality, as well as positive capabilities, such as being literate, numerate, enjoying political participation and freedom of speech. Therefore, the assessment of a countries development should be informed by these considerations (Sen, 1998:39).

The instrumental argument for freedoms has a different shape as it identifies the potential link between freedoms and rights, on the one hand, and economic or social progress, on the other. Therefore, it interprets freedoms as a means to an end. This role contrasts with the constitutive interpretation that interprets freedoms as the end objective of development (Nussbaum, 2000:103). The instrumental role of freedom focuses on the way different kinds of rights; opportunities and entitlements contribute to the expansion of human freedom and promote development (Sen, 1999b:37).

This instrumental role goes beyond the obvious fact that if freedom is an end in itself then an expansion directly enhances development. It recognises that an enhancement of freedom will harness the positive links between different kinds of freedoms. Therefore, the institutional argument explores how advancing one freedom frequently leads to the advancement of others creating a virtuous cycle. While development analysis must as a priority concerned themselves with society's achievement in its objective to expand freedoms, it must also acknowledge and harness the empirical linkages between distinct

types of freedoms. This virtuous natural cycle strengthens the importance and relevance of the capability perspective (Sen, 1999b:38).

There are five instrumental roles of freedoms that are worth isolating and discussing as they have particular relevance to development in Sub-Saharan Africa: political freedoms, economic facilities, social opportunities, transparency guarantees and protective securities (Sen, 1999b:38–40). The manner in which each of these relate to one another is central for a complete understanding of the role of freedoms in development and provides the foundation for the claim that freedom is both the primary end of development and the principle means for its manifestation (Sen, 1999b:39). Therefore, the section shall discuss each of these instrumental roles of freedom shall be discussed in turn.

4.3.1.1. Political Freedom

Political freedoms and civil rights refer to the opportunities that individuals have at their disposal to dictate who should be responsible for governing society. These freedoms determined the shape and principles that shall govern a society by making provisions for public scrutiny. In this regard, the freedom of political expression and an uncensored press to supply important information to communities play an important role in development as they combine to engender intelligent choices (Bardhan, 1993:46-47).

4.3.1.2. Economic Facilities

Ever since Adam Smith (1776) penned that “consumption is the sole end and purpose of production” economic facilities have been thrust into the focus of economic theory (Boulding, 1945:1). Economic facilities refer to the opportunities available to members of society to enjoy, independently and collectively, a society’s various economic resources for the purpose of consumption, production and exchange (Sen, 1999b:40). Economic entitlements depend on the resources available for their exchange. These resources depend on the relative prices of products and the degree to which markets operate. To this end, national aggregates of income and the distribution arrangements of this wealth are of particular importance and should both be included in a thorough investigation (Sen, 1998:2-3).

4.3.1.3. Social Opportunities

Social opportunities refer to the arrangements that societies have in place for base facilities: for example, access to basic education and health care. The base facilities have a significant impact on a society’s realisation of its freedom to live better, especially in relatively poorer societies. These variables are important for individual development as they contribute to living healthy lives as they prevent morbidity and mortality. Moreover,

they engender more active participation in economic and political activities (Dreze & Sen, 1997:1421-1423)

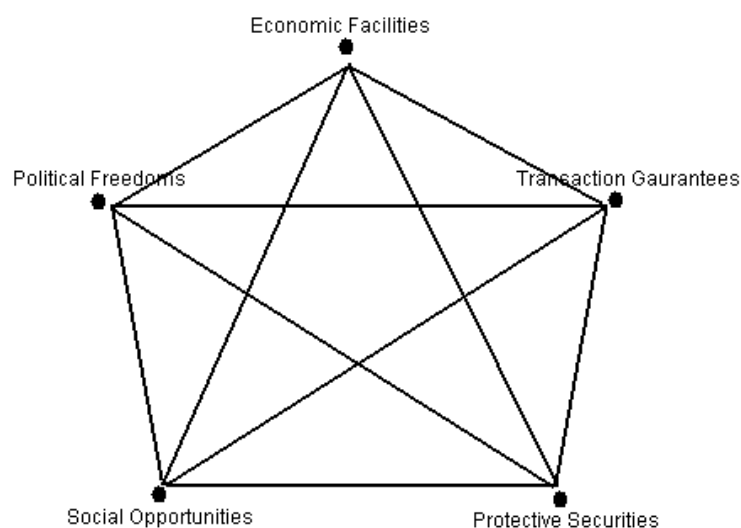
4.3.1.4. Transparency Guarantees

Transparency guarantees concern the necessity for openness between people when faced with an asymmetry of information. In other words: “the freedom to deal with one another under guarantees of disclosure and lucidity” (Sen, 1999b:39). Various interactions among people require a number of presumptions that expectations shall be met. Guarantees create the framework for accurate assumptions by social agents. When this trust is violated the lives of many people may be affected by the lack of clarity rising from that darkness. Thus, guarantees have an important instrumental role in preventing corruption and other forms of deceit that may transpire without protection (Snowdon, et al, 1994:71).

4.3.1.5. Protective Securities

Protective securities provide vulnerable societies with a safety net by establishing a poverty floor beyond which no individual may surrender. This threshold ensures that people cannot succumb to severe depressions and unfreedoms as a result of material changes that adversely affect their lives. The domain of protective security includes institutional arrangements like disability grants, unemployment insurance funds, welfare grants, antiretroviral rollouts and other ad hoc emergency measures, (Sen, 1999b:39).

Figure 4.2: The relationship between Instrumental Freedoms



As illustrated in Figure 4.2, each of these distinct forms of social arrangements interact with one another in a manner that can be positive or detrimental for development. The instrumental role of freedom embraces each of these arrangements in order to expand

freedom. Frequently, an expansion of one form will lead to a virtuous cycle that lends itself to an expansion of another. This multiplier effect is the cornerstone of the capability approach. By using a pluralistic conception of well-being each arrangement may contribute directly and indirectly to the development of a society. Thus, each requires equal weight when policymakers determine strategies for development. In addition, development economists are required to acknowledge how each works together in order to harness the potential reinforcing contribution that each can make to one another. Hence, the capability approach offers policy makers with a profound tool in which to interpret development.

4.3.2. Positive and Negative Freedom

There is an inherent connection between basic needs and human rights. For, if people did not have a minimum denomination of needs, then people would not need rights to provide them with claims on such goods. Furthermore, if people have rights then they require the freedom to enjoy the pursuit of those goods they need and to enjoy the realization of their rights (Stewart, 1989:349). This section elaborates on this relationship and discusses two different types of freedoms and the manner in which each, independently and collectively, interact with the notion of rights.

To understand the relationship between rights and freedoms more clearly Berlin (1938) divided freedom into two distinct forms: negative and positive (Dasgupta, 1990:11). On the one hand, negative freedom may be seen as the degree to which an individual may pursue an activity without interference. In other words, as defined by Hayek (1958:237), negative freedom is the state in which all individuals are not subject to coercion by the arbitrary will of others. On the other hand, positive freedom deals with ability of people to decide for themselves, as willing and able agents, upon their own fate and formulate their own ideas (Steiner, 1994:305).

In many cases the literature has erroneously conflated the two types of freedom (Dasgupta, 1990:25). This conflation seems natural on one level as the two concepts share an interest in the extent to which a person has the freedom to shape their own life aligned with their own conception of well-being. However, the two versions of freedom flow into alternative paths and build two distinct facets of society. Dasgupta (1986:25-26) argues that one convincing method of identifying the difference between them is to look at the sources that potentially obstruct them: negative freedoms are essentially an absence of deliberate interference by others and deal with the relationships amongst people; in contrast, the domain of positive freedom appears to be a relationship between people and societies' resources.

Perceiving development through a broad perspective, provided by the capability approach, demands that we confront the extent to which one's choices may be realised.

It is insufficient to attach oneself to negative freedom exclusively because development concerns itself with the extent to which individuals have control over the course of their own lives. The thorough investigation of well-being insists on involving both positive and negative freedoms. Therefore, quality of life indices, based exclusively on positive freedoms, as articulated by Sen (1981a), are lacking as the investigation neglects an entire class of primary liberties. Similarly, studies that harness negative freedoms exclusively are impotent in creating sound theories and engendering a comprehensive understanding of the nature and extent of deprivations.

Centering development debate on freedom suggests that the departure point for development economics ought to be an investigation into the manner in which individuals engage within society. The product of this relationship is the realisation of those activities that, upon rational deliberation, contribute to well-lived lives. The entire concept of a well lived life is rife with complexities, but the central role of social organisation and its role in resource allocation is clear enough: "It lies in the fact that the social life is an expression of a person's sense of social unity, commodities and an absence of coercion are the means by which persons can pursue their own conception of good" (Dasgupta, 1990:18).

The notion of positive rights, by definition, implies a certain level of scarcity to provide the natural limit to the claims of society. In contrast, the negative right to not have something done to a member in society does not have an inherent natural parameter. The natural feature of resource limitations provides motivation as to why negative rights and freedoms have enjoyed the limelight and enveloped moral sensibilities: "It is always feasible to honour negative rights – there are no direct resource costs – but it may not be feasible to honour positive ones as the economy may simply not have sufficient resources to enable all to enjoy adequate nutrition" (Dasgupta, 1990:19). Hence, the argument suggests that positive rights are more difficult to ensure in comparison to negative rights.

This lends itself to the common conception that negative rights are absolutely required, while positive rights are violable as they may be more difficult to honour. However, as argued in the previous chapter, simply because a right is violable and implies a potential trade-off does not necessarily imply any level of inferiority. Furthermore, even though members may not have an inviolable right to resources, each member does have an inviolable right to access whatever scarce resources an economy may process. Moreover, no matter what else persons may want and need, each member of society wants and needs to be positively and negatively free and equal (Dasgupta, 1990:20).

On the output side of the development process are indices that measure well-being. In contrast, on the input side of the equation there are the indices that measure availability of basic goods and other resources. In order for this process to unfold freely, the environment in which it occurs must be absent of coercion. Viewing society through this

lens, the state should concern itself, first and foremost, with the protection of negative freedoms and societies social achievements. Therefore, the state ought to provide the necessary inputs for the exercise of negative freedom. This conception of the role of the state is discussed in the final chapter of the dissertation. However, at this stage, it is worth articulating the implications that the capability perspective may have on the states functionings.

Importantly, for individuals to remain negative free, the state cannot coerce people to employ certain resources. An extension by the state beyond this function would encroach upon the negative freedom of society. In other words, a social contract that enabled the government to force individuals to use the resources would be unfree. However, the state may provide individuals with the choice to do so, which would directly expand individual freedom. In order for choices to be well informed, the state is responsible for the provision of information (Dasgupta, 1990:19–21).

Each side of the development process reflects specific features of the state of affairs. Social achievements are commonly publicly observable, but the innate abilities of individuals are not. At best, it is possible for analysts to provide average estimates of the base needs associated with various states in the life cycle of people. However, these aggregates are not robust since interpersonal discrepancies are widespread. As Dasgupta (1990:22) details; “there are many needs that are not easy to ascertain in public, and this creates problems if one were to try and tailor resource allocation to persons according to their specific needs and ultimately according to person specific well-being”. Hence, the states attention and analysis should focus on resource allocation as apposed to the distribution of outcomes.

An allocative role for the state does not undermine the ultimate importance of well-being, but rather acknowledges various information constraints that force analysts to evaluate the performance of governments by resource distribution and the extent of negative liberties enjoyed by the populace. A second reason why development economists should focus on the input side of the equation is that by focusing exclusively on achievements one would ignore the resource cost which was employed to realise the achievements. However, without knowing the costs analysts will be unable to look at opportunity cost or distinguish where the resources could have been better invested.

4.4. Functionings and Capabilities

The capability approach to development offers a broad normative framework for the evaluation and assessment of individual well-being. This evaluation includes a society’s social arrangements, the shape of its governments’ policies and the various proposals concerning social change. The primary features of the approach are that it is highly interdisciplinary and dedicated to the multidimensional aspect of well-being. The

approach emphasizes the inherent difference between the means and ends of development. Furthermore, it acknowledges the distinction between the substantive freedoms people enjoy and the achieved functionings they realise (Robeyns, 2005:93).

The goal of the capability approach is two-fold: firstly, to provide the philosophical underpinning for the basic constitutional principles that should be implemented by all governments, regardless of the country's level of development, which establishes a bare minimum standard in respect for human dignity. Secondly, it specifies an alternative space to utility and rights in which quality of life comparisons may occur and yield insightful results. More specifically, it identifies how the people in society are actually doing (Nussbaum, 2000:124–125).

The primary objective is to focus on the genuine opportunities of people in society to pursue their own agenda. To this end, it advocates an explicit account of the primary goods and the personal characteristics that people have inherent in them (and available to them) to convert goods, with their abilities, in manners that promote their individual ends. For example, a disabled member of society may find it more challenging than an able-bodied person to convert the same bundle of primary goods into well-being. Similarly, an elderly person will most probably need a larger bundle of goods to avoid illness than a more able-bodied member of society. These cases exist in all societies and require a developmental theory that assigns an appropriate sensitivity to them (Sen, 1999b:74).

According Nussbaum (2000:124), the capability approach strives to create a consensus of society's conception of what well-being is. This consensus emerges when development economists focus on human capabilities. In other words, the capability approach centers on what people are able to do and to be in reality. Therefore, the perspective embraces the concepts of functionings and capabilities as introduced by philosophers like Aristotle.

Functionings reflect the various actions a person may value either doing or not doing. The functionings themselves vary from the elementary, such as the desire to be adequately nourished, to more complex activities or mental states, such as being able to integrate into society and attain self-respect. A person's capability, according to Sen (1999b:75), refers to the alternative combinations of functioning that are feasible for a person to achieve. Therefore, a person's capability is a function of freedom in that a person requires the freedom to achieve their various functioning combinations to achieve a quality of life.

The capability approach to development treats each person's capability set as the primary end of development; these capabilities ought to be pursued by each person in a manner that treats each capability as an end and none as mere tools of the ends of

others. Therefore, the capability approach is indeed universally applicable in the sense that the capabilities are important to each individual, in each country and each is treated as an end (Nussbaum, 2000:125).

The capability approach to development presents development economists and policy makers with a broader information basis upon which ethical evaluations of advantage may be evaluated. The amount or extent of the functionings enjoyed by a person may take various forms. Each person will have a functioning vector. The capability set would then consist of various functioning vectors that each person may choose from when faced with a particular circumstance. Therefore, the combination of a person's functionings reflect their actual realized achievements and their capability set would reflect their freedom to pursue the various functioning combinations from which an individual may choose (Sen, 1999b:75).

The evaluative focus of the capability approach potentially takes two forms: a person's realisation of functionings (achievements) or the realisation of the capability sets (opportunities) that the individuals may choose between. Each evaluative focus provides a different kind of information to economists and policymakers (Sen, 1999b:77).

Focusing on the realisation of functionings provides economists and policy makers with information on the activities that a person actually does or their achievements. While, focusing on capability sets offers information about a person's real opportunities or the activities that they have the opportunity to pursue (Sen, 1999b:77).

The capability approach measures an individual's well-being in terms of the capabilities (opportunities) that these individuals have to enjoy the kind of life that they have reason to value. This perspective offers development economists an alternative to more mainstream neoclassical that focus on achievements. Therefore, the capability approach interprets, for example, underdevelopment as the profound deprivation of basic capabilities rather than simply an insufficient level of income, utility or rights.

Typically, as explored in chapter two of the dissertation, poverty is conceived as a lowness of income and has traditionally been measured by summing the volume of people living below the poverty threshold. For example, the WB measures poverty as a based on incomes or consumption levels. Therefore, according to the WB, a person is deprived when their consumption or income level falls below the minimum level necessary to meet basic needs (World Bank, 2005).

Sen (1999a:360) presents two relevant questions: are low-income levels a sufficiently robust measure of poverty? And, if so, is poverty reflected in an aggregate head-count? The capability perspective presents a broader conception of poverty as it interprets deprivation as the lack of opportunity to lead an acceptable life. Deprivation is influenced

by a number of considerations including personal income. However, income is merely one of many factors influencing well-being. The capability approach includes various physical and environmental characteristics into its informational basis (Sen, 1999a:360). In other words, one of the defining characters of poverty is a low-income level, but the capability version of poverty, while acknowledging this, extends beyond narrower parameters common to neoclassical development theories.

There are three important advantages of broader conception of development over the more narrow interpretations. Firstly, the capability approach exclusively concentrates on deprivations that are intrinsically important – capabilities (opportunities) – unlike low incomes that are merely important in an instrumental sense. Secondly, it includes other factors over and above low incomes that influence capability deprivations, which in reality, influence real poverty and underdevelopment in marginalised societies. Thirdly, the relationship between income and low capabilities levels varies amongst communities, societies, families and individuals. Moreover, the impact of income on capabilities is contingent and conditional. Therefore, in some instances, low income levels may be an inaccurate reflection of poverty (Sen, 1999b:87-88).

The capability approach offers an insightful framework for policy makers as it targets the ends of development. Chapter three dealt with two mainstream foundations of well-being and highlighted various inefficiencies within each. Most prominently, the chapter highlighted the following issues that libertarianism and utilitarianism could not overcome: interpersonal comparisons of mental states, their relationship with poverty and income and inequality. The following section takes up these matters and examines how the capability perspective overcomes its predecessor's shortfalls. In addition, the section attempts to illustrate how the capability approach may offer a better understanding of deprivation.

4.4.1. Interpersonal Comparisons and the Capability Approach

The capability approach has two immediate advantages over alternative methods for the evaluation and assessment of well-being. First, the capability approach finds it easier than other approaches to undertake interpersonal comparisons of mental states by focusing on individual functionings or achievements. Second, the approach manages to surpass the realm of mental parameters, as many functionings are non-mental (Sen, 1999b:75-77). The purpose of this section is to go beyond overcoming the criticisms leveled against previous perspectives and to introduce the fresh advantages of the capability approach.

Interpersonal comparisons of individual advantage or disadvantage require a large degree of aggregation over heterogeneous components of age, ability and other person-specific variables. As a result, the capability approach offers a pluralistic notion of well-

being that manages to encompass each individual's means and ends. There are two primary reasons for the pluralistic conception of well-being. Firstly, it allows space for different types of functionings with different levels of superiority or status being assigned to each one. Secondly, it is non-exhaustive in its scope and range, meaning that it is able to morph its shape to attach importance to not only freedoms, but also various rules or procedures (Sen, 1999b:77).

This plurality is the primary advantage of the capability approach in the sense that it allows for the necessary flexibility required for evaluation by economists and policy makers. It uses a space for measuring well-being that draws from a diverse range of evaluative reasoning beyond any narrow conceptions discussed in the previous chapters of the dissertation (Sen, 1999b:77).

For example, utilitarianism focuses on pleasure, which is a disadvantage for its' informational basis as it ignores freedoms and rights. According to Sen (1999b:77), focusing on one homogenous objective for measuring well-being denies two of the defining characters of human beings: our ability to reason and our natural diversity. The reality is that there is a heterogeneous set of factors that influence each individual's advantage and disadvantage. This natural heterogeneous nature of mankind is overlooked when development economists assume a homogenous objective to measure each persons overall advantage. This quest is folly and leads to the downfall of the capability approaches predecessors, which in turn, represent a significant advantage for the capability approach.

4.4.2. Poverty and Income as the Deprivation of Capabilities

Income levels influence the well-being of people in varied degrees as a result of different age, desires, expectations, needs and tastes. According to Sen (1999a:361) there are at least four reasons for the variation in people's ability to convert income into a minimally accepted livelihood. These include personal variations, environmental diversities, variations in social climates and the relative deprivations of people in different societies. This contingency and conditionality of incomes on capabilities is particularly important in the context of public policymaking. Therefore, it is useful to emphasize some of them in the context of this chapter.

The disadvantage of income deprivation and converting income into functionings frequently works in tandem: a poor person with a low-income level will frequently find it difficult to convert their capabilities into functionings. Hence, income deprivation may only articulate a part of the person's deprivation or disadvantage. Sen (1999b:89) provides the example of an ill person that has a low earning capacity as a result of their sickness. The person requires a higher income to purchase their medication and reach the same level of functionings as able-bodied members of society. The example illustrates the coupling

effect of disadvantage where income deprivation and the convertibility of income occur simultaneously. This relationship is a crucial component in assessing public actions aimed to assist the vulnerable segments of a country as the deprived are at a disadvantage in income and converting the income they generate into functionings.

The distribution of income within the family unit raises further complications for policy makers in using income as a measure of poverty. If the family income is skewed in favour of a certain portion of the family members, then family income remains a weak indicator of the extent of deprivations for the individual household members. The inequality in the intra-family distribution of income has generated a large volume of empirical investigation, for example Kyrk (1950:334) and Blank & Schoeni (2003:304). However, income aggregates remain widespread as measures of poverty.

In addition, being relatively poor in a wealthy country can lead to large capability handicaps even when one's absolute income is high in comparison to other countries. In the jargon of the capability approach, relative deprivations in terms of income can yield conclusions of absolute deprivation in terms of capabilities. For example, in a more affluent country, an individual may require more income to buy the commodities that will achieve the same social functioning than would be attainable in poorer societies. For people unable to reach a specific level of income, an inevitable unfreedom of social exclusion - a form of capability deprivation - may result and inflict a reduction upon that person's well-being (Sen 1999b:89).

The capability approach argues that the deprivation of individuals is more accessible by looking at capability deprivations as opposed to income analysis (Sen, 1999b:88). The capability perspective of poverty enhances the general understanding of the nature, cause and course of poverty and well-being. It achieves this realignment by shifting its attention away from the means of poverty and, in particular, one of the means – income – towards the ends that people have reason to pursue. As a result, those freedoms that facilitate the realisation of these ends through the conversion of resources become central to development debate.

On a conceptual level, as articulated above, there is a distance between the notions of poverty as a lowness of income and poverty as a deprivation of capabilities. This is caused by incomes inherent lack of malleability in dealing with a heterogeneous subject matter. However, as Sen (1999a:360) highlights, the two perspectives are interrelated since income is an important facilitator of capabilities. In addition, enhancing a person's capabilities would lead to an increase in that person's productivity level, *ceteris paribus*.

Understanding the nature of poverty and attempting to enhance well-being in impoverished societies highlights the connectivity of poverty as a lowness of income and poverty as a deprivation of capabilities. This connectivity assists policymakers if policies

are made in a manner that is able to manifest in both directions. For example, not only will an improvement in basic education improve a person's quality of life directly, but it would also improve a person's ability to earn an income. Education expands a person's functionings (achievements) directly by improving the person's knowledge and indirectly by enhancing capabilities (opportunities) by increasing potential or realised productivity. As a result, more inclusive policies like the provision of basic education and health care are more likely to simultaneously expand overall capabilities and avoid income poverty (Sen, 1999b:90).

Dreze and Sen (1997:1421-1423) advanced the understanding of the variable's interconnected nature in their dealings with economic reforms in India. In numerous ways, economic reforms managed to expand the Indian population's economic opportunities that had been suppressed by limitations like the Raj. However, the empirical evidence suggested that the ability to convert these opportunities into new possibilities was contingent on the social preparation that the population had received prior to the reforms. Thus, the economic reforms were less effective than they could have been had the social reforms been done in preparation.

According to Sen (1999b:90), in contrast to the Indian experience, many Asian economies, such as Japan, South Korea, Taiwan and Singapore, have been relatively successful in disseminating economic opportunities through a social framework that supports them, such as high literacy rates, good basic education, sound health care facilities and completed land reforms. It seems that Asia's high levels of social infrastructure prepared its countries with the tools to reap the rewards of economic progress.

Sen (1999b:91-92) provides further evidence that the social infrastructure has a critical role in the elimination of various forms of deprivations. Using a region within India called Kerala as a catalyst the study provides a tangible piece of evidence that refutes the claim that social development requires the impact of economic growth to trickle down to the other variables. In Kerala, where there has been moderate economic progress and low GDP per capita, using the expansion of basic education and health care, Kerala has managed to reduce income poverty faster than any other region in India. Finally, Sen (1999b:91) warns that while the examples manage to highlight the intermingled nature of income and capability, one should not revert back to a narrow conception of poverty – such as income deprivation – as that would be symptomatic of confusing the ends and means of poverty. In summary, the economic reforms of policymakers are contingent upon other variables and this understanding is a feature of the capability approach.

Personal income ought to be acknowledged explicitly for its significant role in determining an individual's survival and quality of life. As investigated in chapter two, GNI serves as a good proxy for real income. However, GNI reveals very little about the distributional

patterns of income. In addition, social and environmental concerns are also prohibited from appearing in an income measure such as GNI. Therefore, there are many important factors not included in the accounting of personal incomes that can factor in the life and death of people, but are ignored from evaluations if exclusive interest to income is undertaken (Sen, 1998:6).

Well-being perceived through the lens of the capability approach forces development economists to understand that the deprivations erode the general freedom of people to choose the life they desire. An expansion of human capabilities focuses on the ends of development by expanding capabilities through an expansion of freedoms. It is plausible that these activities directly and indirectly increase productivity and potential earnings respectively. Therefore, the kinetic energy sitting dormant in these linkages provides further evidence of the potential of the capability approach to development and its interpretation of well-being.

4.4.3. Inequality and Capability Deprivation

Inequality in social-economic theory has created a great deal of attention in the literature (Bishop, Formby & Thistle, 1992:553). Inequalities in societies are socially unattractive as they represent Pareto inefficient arrangements. In this regard a person's well-being may be improved without a loss being imposed on other members of society. In addition, an underlying inequality in society may potentially erode social cohesion and provide a barrier to efficiency (Sen, 1999b:92).

In the eighteenth century, Adam Smith (1771) in his *Theory of Moral Sentiments* expressed his concern for the interests of the poor and his outrage over the natural tendency for these interests to be ignored (Sen, 1999b:92). Using an imaginary impartial observer, Smith offered a tool for investigating fairness within society that lead to effective insights into the dynamics of modern society.

Similarly, Rawls (1958:169) approached the subject in *Justice as Fairness*. In the paper, Rawls argued that inequality would be less frequent in a hypothetical original position chosen when society's members were unable to predict their status within the society. Rawls assumed that societies are made up of self-maximising units that are rational and have similar needs and desires. Based on the assumptions of the nature of people, Rawls (1958:169-172) introduces the "impartial spectator" and argues that given a choice concerning the nature of a society, each member would choose a fair and just structure before they were plugged into it. This tendency would ensure the fairest society and eliminate imbalances that favoured small minorities. In other words, self-maximising agents would create a just society, as each agent would not know where they would lie within the society. Thereby, a fair society would enable people to improve their prospects fairly once entered into society.

Attempts to eradicate inequalities can, in some cases, lead to losses for some members of society. Models of justice involving, for example, the impartial spectator are compelled to take note of these considerations. As a repercussion, a large volume of academic interest has been diverted to the potential conflict between aggregative and distributive considerations. In this regard, Mirrlees (1971: 175) developed an argument in favour of a progressive taxation scheme in societies in which equality was desired. Engerman & Sokoloff (1994:218) have pursued this appropriate and important problem. In addition, Rodick (2000) discusses the causes of inequality in Sub-Saharan Africa and suggest numerous institutional remedies for the imbalance. As a result, methods have been shaped and tailored to take into consideration both the aggregate and distributional impact when evaluating social justice.

According to Sen (1999:92-94), there remains a different class of conflict that relates to the choice of space being used to measure well-being. As highlighted in the previous section, inequalities of incomes differ from inequalities of other variables, such as freedom and quality of life. This contrast between the different perspectives of income and capability has a direct bearing on the space in which inequality should be scrutinised. For example, a wealthy person left without an avenue of political expression is not poor in terms of income. However, the person is poor in the context of their freedom of expression.

Similarly, an unemployed person may be given a government unemployment grant that will assist them in terms of income. Thus, the person will appear less deprived in the space of income, but has been profoundly affected by the lack of opportunity to enjoy a fulfilling occupation. Thus, the broader informational basis allows for a better understanding of inequality and is inclusive of variables that enhance the understanding of the nature of inequality.

4.4.4. Unemployment and Capability Deprivation

The loss of income as a result of unemployment can to some extent be alleviated by income supports, such as unemployment benefits and insurance. However, as indicated in the previous section, income loss is not the only loss encountered when an individual is left on the wrong side of the labour market. The capability approach offers a multilayered understanding and interpretation of the phenomena. The broader understanding of the nature and repercussions of unemployment may assist policy makers in formulating policies aimed at alleviating the disadvantage. Therefore, the following section elaborates on the capability approaches interpretation of employment and serves as a further example of the superior vantage point it provides for development.

There is a large proportion of empirical evidence that suggests that unemployment causes significant and far-reaching effects over and above income loss. These include: psychological harm (Clark, Georgellis & Sanfey, 2001:223), loss of motivation (Chiricos, 1987:188), loss of skills and self-confidence (Edwards, 2001:3-4), and disruptions of social and family relations.

According to the International Labour Organisation (ILO) (2005:34), developments in Sub-Saharan Africa galvanize the connection between measurements of low productivity, low GDP growth rates, increasing unemployment and stagnation in the employment to population ratio with poverty. Given the extent of unemployment in contemporary Sub-Saharan Africa, an exclusive concentration on income inequality would be an insufficient and deceptive understanding of deprivation.

In a study comparing the income, inequality and employment rates of the United States and Western Europe prepared by Atkinson, Rainwater & Smeeding (1995:20-24), relevant conclusions were established that are applicable to the policy makers of Sub-Saharan African as they manage to enhance the understanding between three variables that have an important role in the development of the region: income, inequality and unemployment.

Looking at income, Europe tends to have achieved better results both in terms of levels and equality. However, when the dissertation shifts its attention to employment rates, one finds that unemployment rates are higher and rising faster in Europe than they are in the United States (Sen, 1999b:95).

According to the study, the contrast between the two continents and the individual countries within these territories highlights an important, more general, point of departure. It seem as though American social ethics is relatively comfortable with a non-supportive state where the poor may be left impoverished. In contrast, the Western European states, with more entrenched welfarist ideals, tend to be more supportive of its most vulnerable people. Simultaneously, where the Americans find unemployment intolerable, the Western European societies have managed to absorb it into its social fabric (Atkinson, et al, 1995:20 - 22).

In excess of 40 million American citizens are without any form of medical insurance, which reflects the society's diminished commitment to basic health care. In Europe, medical insurance is considered a basic right irrespective of a person's means and possible pre-existing medical conditions; these two factors are frequently cited as the causes of the US' low level of medical coverage. The limited response by the US government in assisting a large proportion of its population in their basic health would be unacceptable in European states, which have deeply welfarist ideals inherent in its organisations (Sen, 1999b:97).

On the other hand, the increasing double-digit unemployment rates that are commonplace in Europe would be intolerable in the US since such high levels are considered indicative of an inability of people to realise their desired level of well-being. Political pressures by the people on the government would most probably force the US state to assist in rectifying the high levels of unemployment. Therefore, the nature of political commitments differs fundamentally between these two regions and the differences relate to the informational base upon which well-being is measured (Sen, 1999b:98).

The inequality between the realities that different racial groups encounter in South Africa, for example, has received a large amount of attention over the past three decades. For example, according to Statistics South Africa (2004:2.14), 5.1% of South Africa's White economically active population is unemployed. In contrast, 31.6% of Black Africans, 19.8% of Coloured and 18% of Indian find themselves without employment. Moreover, the inequality takes a different shape along gender lines revealing a distinct imbalance in favour of men, in that 26.7% of African males are unemployed in comparison to 37% of Black African women.

Among Sub-Saharan Africa, South Africa (SA) is considered wealthy and its population enjoys a relatively higher income than any of its neighbours. However, is income the best measure, space or informational basis to make such comparisons? This paper advocates that it is the capacity of individuals to live long lives without violence or succumbing to premature mortality that ought to serve as the vantage point for analysis. Through this lens, South Africans have a life expectancy of 49 years whereas the global average is 67 (United Nations, 2005c, World Development Indicators). Countries like Mauritius, Cape Verde, Benin, Gambia, Comoros and other developing nations enjoy life expectancies that far exceeds South Africa's, while their GNI per capita is significantly lower.

This example provocatively supports the capability approach to understanding the process of development, as it illustrates comprehensively how social values and norms may provide a partial explanation of high unemployment rates in Europe and the low social security nets in the US. A narrow perspective of development and well-being would be unable to decipher these important relationships. Hence, the process of information broadening may serve as a remedy for this case and numerous others that could unfold in our increasingly complex societal structures.

4.5. Conclusion

The broadening of the informational basis from income, utility or rights towards a more pluralistic approach of individual functions and capabilities enriches our understanding of well-being, inequality and poverty in important ways. When analysts focus on the abilities of members of society's abilities to be employed and to enjoy the various benefits of

employment, European states and, even more so, Sub-Saharan African States, are experiencing quite dismal realities. However, when the investigation turns its attention to inequality, Sub-Saharan realities are more closely mirrored by the United States and, in particular, African-Americans.

The capability approach manages to overcome obstacles that its predecessors have been unable to overcome using a broad conception of well-being. Understanding development as a dual process of expanding functionings and capabilities promotes a better understanding of what it means to be deprived. Thus, the idea of well-being surpasses the limitations of narrow conceptions. The pluralistic conception integrates important variables into its space of considerations and enables policy makers a better framework in which to outline wider reaching and more effective policies. Using this introduction, the paper directs its attention to Sub-Saharan Africa and readdresses the issue of poverty and well-being.

5. DEVELOPMENT IN SUB-SAHARAN AFRICA

5.1. Introduction

The capability perspective to development constitutes a core contribution to contemporary development research. The perspective has been integrated in the United Nations Human Development Reports. Accordingly, the United Nations (1990:38) comments on the process of development:

We are rediscovering the essential truth that people must be at the centre of development. The purpose of development is to offer people more options. One of their options is access to income – not as an end itself but as a means to acquiring human well-being. But there are other options as well, including long life, knowledge, political freedom, personal security, community participation and guaranteed human rights, (United Nations, 1990: iii).

As articulated in Fukuda-Parr (2003:301), the approach constitutes a paradigm shift based on an underlying confidence in the potential for a broader conception of development. It focuses on the end objective of development – expanding freedoms, but it remains removed from any defined set of prescriptions. Therefore, it serves as broad conceptual framework for public policy, suggests an alternative to mainstream neoclassical theory and details a more useful formulation of well-being.

The previous chapters of the dissertation reflected on the contribution of the capability approach and embraced the paradigm shift in favour of its broader informational basis. To this end, in light of the shift in emphasis, the empirical study undertaken in this chapter recognises the insights that the paradigm may offer policymakers. Prior to the empirical

study, the chapter provides a sound summary of the current state of affairs in Sub-Saharan Africa.

The chapter discusses the initial social, political and economic arrangements that Sub-Saharan countries inherited at independence in the 1960s. Africa's development process post independence runs parallel to the expansion of development theory and, therefore, provides a useful empirical example of the contribution of the capability approach to the development literature by offering an expanded conception of the development process (Arnold, 2005:55). Furthermore, it provides a sound platform of which an introduction into contemporary Sub-Saharan Africa may transpire. Following, the chapter draws together this discussion and applies the capability perspective to development in Sub-Saharan Africa. Specifically, a regression model for the determinants of the Human Development Index (HDI), in light of the theoretical framework provided by the previous chapters, is undertaken to illustrate the insights that a broader conceptual framework offers development economists and policy makers in the context of Sub-Saharan Africa.

5.2. Poverty and Human Development

The early development theories paid little attention to those variables that went beyond economic income metric measures. Interest in non-income variables remained confined to their contribution and functional role in the growth process and remained relevant insofar that they served as a means to an end. However, from the 1960's these issues became increasingly relevant (Ayres, 1975:507).

During the 1960's and 1970's the poor segments of developing countries were largely considered as passive members of society. Therefore, it was argued that they should be "helped out of their economic misery" (Martinussen, 2002:296). Over time the poor became seen as individual actors that were able, capable and willing to act for their own benefit (Fatton, 1990:455). In addition, they became seen as individuals who had dormant potential to help themselves out of their poverty cycle or to generate positive growth cycles in the societies in which they lived (Martinussen, 2002:297).

The shifts in perspective corresponded with a movement away from neoclassical theories and strategies, which focused on macroeconomic growth towards more pluralistic microeconomic strategies. Development economics introduced pluralistic strategies that interpreted only the poorest minority as passive receivers of aid and the majority, both poor and wealthy, as producers who make a net contribution to an economy's aggregate growth (Martinussen, 2002:297). Hence, during this period, development theory commenced the process of informational broadening, which the capability approach has contributed towards.

In order to facilitate the informational broadening of development theory, development economics established a composite set of indicators to measure welfare and the quality of life enjoyed by members of society. The natural progression led development theory to the basic needs approach (Martinussen, 2002:297). The basic needs approach to development represented a thrust towards a continued commitment to industrial growth combined with special measures aimed at helping the poorest proportion of society in developing countries (Ayres, 1975:507). The central proposition of the basic needs approach is that an exclusive concentration of policy on economic growth is unable to create the employment opportunities or increase in the incomes of those who fell behind the development process. Therefore, a diffusion and reallocation of the country's resources was necessary and obligatory for policymakers.

In summary, the basic needs approach, dominated the 1970s and represented an attempt by policy makers and development economists to provide members of society with the physical, mental and social development that they required to lead the lives that they desired. The perspective recognised that poverty was a dynamic and complex concept and established a fundamental shift away from the neoclassical focus of income. It suggested that being poor and living in poverty had far-reaching effects on people lives. Therefore, poverty's reversal required a more comprehensive and multilayered framework (Rosen, 1977:88). For example, poverty cycles became an important tool for investigation as they acknowledged that those trapped in poverty would be the last to benefit from economic growth and to receive any gain from aggregate growth (Martinussen, 2002:297).

The basic needs approach advocated a special development strategy for the poor, such as targeting the potential high returns of investing in the poor. The approach was based on an assumption that the relative price of employment of the poor was lower, while simultaneously, their potential for rapid productivity gains was higher in poorer labourers (Martinussen, 2002:299). Therefore, the paradigm shift was accompanied by a reversal from the policymaker's faith in the trickle-down appeal of economic growth to a trickle up effect, which saw these productivity gains as potential areas for expansion.

In the 1980s the subject of poverty reemerged as structural adjustments that had been introduced in developing countries, in the spirit of the Washington Consensus, had caused various detrimental social implications. The structural adjustments failed as a result of a "lack of distributional analysis and by poor sequencing of reforms" (Collier & Gunning, 1999b:640).

The poor results lead the WB to established clearer formulations for poverty alleviation that argued for a more direct approach for poverty's reversal. In summary, the perspective argued that in order to combat poverty the people required access to economic opportunities; the opportunities could promote the livelihood of the poorer

segments of the populace. Furthermore, it stressed that people that were living in poverty ought to be empowered through participation in political, economic and social life. Therefore, the process of informational broadening accelerated as policymakers began looking beyond income and other narrow perspectives (Martinussen, 2002: 302).

The momentum provided the framework for the United Nations to create the first Human Development Report (UNHDR) in 1990, which was aligned with the capability approach to development. The report perceived growth as a means to the improvement of human welfare. The report defined development as “the process of enlarging people’s choices in a much broader sense than those proposed by mainstream economics (United Nations, 1990:10).

The United Nations (1990:133) introduced and unpacked the capability approach to development. Accordingly, it interpreted human development as the process of expanding people’s choices to enable them to live long, healthy and fruitful lives. Expanding choice entailed that each person ought to have access to resources, education and social, political and economic freedoms. Thus, the process of development implied that individuals be provided with the framework within which they may enjoy their human rights, self-esteem and various other opportunities to enjoy creative and productive lives. However, as this chapter explores, these goals, conceived over the last 20 years have managed to make little impact on the realities facing many people in Sub-Saharan Africa.

According to Haq (1995:12), the undeniable link between human welfare and income growth means that human development requires a conscious effort through public policy; adequate public policy required the targeting of the provision of services and opportunities as equitably as possible. The school of thought originally conceived three important cornerstones for viewing society’s development; namely, the ability to lead a healthy life, the opportunity to acquire knowledge and to have access to those resources needed to achieve a decent standard of living. In contemporary formulations there are additional ingredients incorporated, but the essence of human development remains closely tied with the original measurements.

5.3. Human Development in Sub-Saharan Africa

The African Development Bank (ADB) (1995:3) in the *African Development Report* shared the enthusiastic outlook for Africa’s future that was encompassed by the Washington Consensus and passed on to the developing countries. However, this initial optimism has been overtaken by more pessimistic interpretations of Sub-Sahara Africa’s growth and poverty alleviation policies.

The literature cites numerous different variables that are suspected to have contributed to Sub-Saharan Africa's poor development over the past 50 years and its overall failure to integrate into the global economic order: Ayitty (1999:152–156), Collier & Gunning (1999b:6), Easterly & Levine (1997:5) and Lubeck (1992:7). It would be superfluous to echo all of these arguments as the subject falls outside the scope of the dissertation. However, some of the relevant explanations may assist in creating an accurate reflection of contemporary Sub-Saharan Africa and are discussed in the following section.

5.3.1. Economic and political arrangements in Sub-Saharan Africa

During the 1960s, even though there were numerous obstacles to development, there was an underlying optimism across newly independent Africa that filtered its way South of the Saharan Desert (Ndulu & O'Connell, 1999:42). Independence and liberation of Sub-Saharan Africa had theoretically created a free continent. Yet millions of contemporary Africans live in circumstances that are characterised with words like lawlessness and cohesion. These circumstances manifest in low life expectancy, high morbidity and mortality, low literacy and high levels of income poverty (Bauer, 1993:211).

Each African country inherited, at independence, varying levels of inequality depending on the level of functioning of its various economic, social and political structures (Arnold, 2005:65 & Kayizzi-Mugerwa, 2000:2). However, despite the formidable problems faced by African states at independence, the decade of the 1960s may be characterised as one of hope and freedom that had just been won (Arnold, 2005:75).

One of the predominant characteristics of Sub-Saharan countries is that they are relatively well endowed with land, raw materials and labour, which lends itself to subsistence cash-crop farming (Boserup, 1985:363 & Lamb, 1987:138). However, there is also an inherent unequal allocation of resources that leads to the stylized fact that Sub-Saharan countries have dual economies; one part is capital intensive, which operates hand-in-hand with a more backward rural part. Similarly, there are inequalities in the mineral distribution between and within Sub-Saharan countries. As a result of various mineral pockets and deposits, discrepancies in economic activities prevail and manifest in wealthy enclaves with substantially poorer majorities (Kayizzi-Mugerwa, 2000:3). Hence, there is widespread and prevalent inequality within the Sub-Saharan region.

The political regimes inherited at independence were largely state controlled; economic controls had begun to form in the 1930s, while countries were under colonial rule, and accelerated through WW2, during the post war years and into independence. According to Bauer (1993:215), the controls included state control of the major branches of industry and commerce: notably, import and exports, including agriculture; numerous state operated and owned enterprises; the licensing of commerce; control of international

transactions; widespread price controls; large scale support of co-operative societies and the enforcing of minimum wages.

During the years of 1960-1973, growth began to gather momentum in Sub-Saharan Africa and it seemed that political independence and economic development seemed to be working in tandem. However, during the 1970s, political and economic environments deteriorated (Ayittey, 1999:152 and Collier & Gunning, 1999b:3). The initial condition of high levels of inequality, centralized authoritarian governments, low levels of development and infrastructure, represented a formidable challenge to the development agenda of numerous African countries. Unfortunately, the majority of African countries have failed to come to terms with these obstacles.

Totalitarianism was a major repercussion of the political legacy of colonialism (Lamb, 1987:120). The results of this legacy and the corresponding controls on the economy were: a dislocation between supply and demand, increases in costs from the quotas and entry restrictions, creation of scarcity and the emergence of privileged elites. These problems were further exacerbated by the ethical, tribal and geographical discrepancies in human, physical and financial resources Bauer (1993:216).

The evidence suggests that these imbalances and various obstacles were certainly surmountable (Ayittey, 1999:6). During the first half of the century, Sub-Saharan Africa grew more rapidly than South East Asia (SEA), and it was considered, better positioned in its development prospects than SEA (Collier & Gunning, 1999b:3). The consensus suggested that independence had provided African governments with the necessary authority to respond to the needs of its people (African Development Bank, 1995:2). Therefore, the outlook for the entire continent's future and potential was a positively enthusiastic. However, in contrast to SEA's successes over the past three decades, Sub-Saharan Africa is now the poorest region in the world with 32 countries poorer than they were two decades ago and a substantial number of Africans living less free than they were before colonialism (Bauer, 1993:211).

Various reasons for Sub-Saharan Africa's decline have been advocated in the development literature, such as Ayitty (1999:152–156), Collier & Gunning (1999b:6), Easterly & Levine (1997:5) and Lubeck (1992:7). As noted previously, a detailed review of these authors is beyond the scope of this dissertation. However, certain causes of the regions poor performance are worth identifying as they provide a productive introduction to the challenges facing African economies in the contemporary context.

Kayizzi-Mugerwa (2000:6) argues that the burden of responsibility for the poor performance belongs to the various development strategies adopted by Sub-Saharan African governments since independence. These strategies contributed to the discrepancy between the achievements of SEA and the Sub-Saharan African countries.

The consensus suggests that independence encouraged governments to incorporate, adopt and accelerate a stance based on state control and centralisation, which resulted in incentive distortions, small pockets of ownership and omnipresent scope for corruption (Lamb, 1987:212–216).

Economic controls and international aid have frequently been cited as factors that contribute in eroding political freedom. According to Bauer (1993:217), Sub-Sahara African leaders have concerned themselves with maintaining personal power and to extend it as far as possible. For this purpose, the leaders would reward their supporters and subdue their potential rivals and opponents (Lamb, 1987:57). The preoccupation with economic controls diverted the attention of policy makers and the resources at their disposal from the basic task of protecting the lives, rights and freedoms of their societies. In addition, government's directly diminished public security through widespread maltreatment of its subjects. This mistreatment has led to massacres, killings and the forced relocation of people into communal villages (Bauer, 1993:217–218). Thus, the early progress evaporated as the political environment deteriorated with arrangements and controls becoming increasingly comprehensive.

Studies by Ayitty (1999:152–156), Collier & Gunning (1999b:6), Easterly & Levine (1997:5) and Lubeck (1992:7), each stress that the leadership and policy makers have been generally inadequate in Sub-Saharan Africa. Therefore, poor leadership is frequently mentioned as a primary source for the hardships and unfreedoms that are commonplace in Sub-Saharan Africa. In addition to poor leadership, Kayizzi-Mugerwa (2000:2) identifies the following as the most significant factors hindering Sub-Saharan Africa's development: "the paucity of institutions, poor asset distribution, persistence of civil strife and disease." Moreover, Lamb (1987:9–14) highlights tribalism, poor infrastructures, excessive expenditure on military and defense, poor policy decisions and nepotism to have contributed to the continent's poor development progress.

GDP growth in Sub-Saharan Africa has stagnated or declined in most Sub-Saharan countries and economies have become increasingly reliant on mineral exports, foreign investment and aid (Collier & Gunning, 1999b:3). These difficulties have resonated into the political and social arrangements and achievements in Sub-Saharan countries. As a result of these economic and political failures, many of the African leaders slid further to the right hand side of the political spectrum and authoritarian African leaders became widespread (Fatton, 1990:456). Typically, during the first thirty years of independence, African governments were not elected and have changed through military coups, civil wars or the death of the previous ruler. (Bauer, 1993:218 & Lamb, 1987:59).

The neoclassical resurgence of the 1980s placed a great deal of pressure for Sub-Saharan African economies to undertake economic policy reform (Kayizzi-Mugerwa, 2000:6). In contrast to the poor post independence performance of sub-Saharan African

countries, South East Asian economies, which embraced market based development policies, had grown rapidly.

For example, Singapore has become a global city and has enjoyed significant economic growth with social stability. Its per capita GNP has increased from \$475 at independence to over \$25 000 in 2006 (Singapore Department of Statistics, n.d). With the exception of contraction in 1985 and crisis in 1997-8, Singapore generally enjoyed economic growth, full employment, low inflation and high productivity. Similarly, Hong Kong represents further support for the neoclassical resurgence; driven by market based policies and without development aid, Hong Kong faced with high population density and dependent on imports for food, raw materials and capital, has managed to grow its economy in excess of fifty times since independence (Rabushka, 1993:152).

The economic reforms embraced by Sub-Saharan Africa that were spurred on by the Washington Consensus were, by and large, unable to achieve their desired intentions (Collier & Gunning, 1999:64). The failure is a repercussion of the poor environment in which these reforms were implemented and the inadequate institutions responsible for carrying the recommendations out. Moreover, the uneven distribution of Africa's integration into the world economy is predominantly as a result of an over-exposure to international price fluctuations and decreasing terms of trade (Ayttey, 1998:30). The United Nations (2002:17) highlight the following factors that have negatively impacted on the regions progress; a high occurrence of armed conflict, an increase in regionalisation in a global sense, which has left Sub-Saharan Africa marginalized; dependent on exporting primary goods; a limited market size and low capacity for economies of scale.

In summary, over the last 50 years development economic theory has undergone a process of informational broadening which culminated in the introduction of the capability approach by the United Nations (1990). Simultaneously, Sub-Saharan African countries went through a period of transition from colonial rule to independence. At the outset, there were difficult barriers to its progress and it has, collectively, failed to integrate with the global economy or increase living standards. Numerous reasons have been suggested in the literature for this failure and have been introduced in this section. In contrast, SEA has managed to enjoy social, political and economic development over the same period and, even though both regions shared similar starting points. Asia has outstripped Sub-Saharan Africa substantially in aggregate terms. Simultaneously, the SEA region has managed to improve the standard of living for its populace, which we be discussed in the previous section. The dissertation wishes to identify how the capability approach to development may enlighten the policy makers of the region. Hence, the following section interprets Sub-Saharan Africa through the lens of the capability approach and compares its results with other developing regions.

5.3.2. Sub-Saharan African Development through the Capability Approach

The capability approach investigates people's entitlements and interests that routinely manifest in various claims on goods. One of the defining features of the capability approach to development is that it is pluralistic as it approach attempts to create a well-rounded functional understanding of how the different variables combine to contribute to development (Dasgupta, 1990:10–11). The capability perspective has an advantage over other developmental theories in that it interprets the developmental process as a functional relationship between needs, rights, freedoms and welfare.

By appealing to the concept of needs, the development process may be interpreted as a functional production process; commodity consumption may be conceptualized as the input, negative liberties as the background environment in which the process unfolds and individual functionings as an output vector (Dasgupta, 1990:14). The capability approach offers a conceptual framework where the linkage between these important variables is easily digested and leads to a broad conception of what it actually means to be underdeveloped.

This section provides an empirical study of development in Sub-Saharan Africa using the broader informational basis suggested by the capability approach to identify its explanatory variables. The section isolates the inputs, environment and outputs of the development process in an attempt to determine the distribution of well-being amongst each of the variables and their relationship with HDI.

The starting points for the development process are commodity needs, such as clean water, sanitation faculties and medicine required for survival. These commodity needs may be interpreted as the inputs of the developmental process. Social indicators, like the number of physicians per 100 000, access to improved water sources and sanitation, malnutrition of children under the age of five, the HIV/Aids infection and prevalence rate and health care expenditure, are all attempts to measure the functionings (achievements) that individuals are free to enjoy at the input side of the development process (Dasgupta, 1990:14).

Table 5.1 presents four common social indicators that capture the functionings of the input side of the development process. In addition, Appendix 2 provides a more detailed group of social indicators for the five regions, which includes infant mortality, literacy rates, GDP per capita, literacy rates and the Gini Coefficient. Each variable in Table 5.1 and Appendix 2 measures the achievements that people and countries in Sub-Saharan Africa enjoy relative to four other developing regions: the Arab States, East Asia and Pacific, Latin America and South Asia. The empirical evidence suggests that on an aggregate level the Sub-Saharan Africa countries fare relatively poorly in each of the functioning measurements.

Table 5.1: Selected Aggregate Social Indicators for the period 1990 to 2003

	Births attended by skilled health personnel (%)	Population with sustainable access to improved sanitation (%)		Population with sustainable access to an improved water Source (%)		HIV prevalence (%)
		1995 - 2003	1990	2002	1990		2002	2003
Arab States	70	61	66	83	84	0.3
East Asia and the Pacific	86	30	49	71	78	0.2
Latin America	82	68	75	81	89	0.7
South Asia	38	20	37	71	86	0.7
Sub-Saharan Africa	41	32	36	48	58	7.3

Source: United Nations, 2005a, *State of Human Development*

These results introduce the scope and nature of deprivation to various important resources in Sub-Sahara Africa. The variable births attended by skilled health personnel is the only variable where sub-Saharan Africa's functioning is not the poorest with an average of 41 percent (better than South Asia's 38 percent). However, in each of the other measures Sub-Sahara achieves lower levels of success than all of the other regions. Thus, the table manages to illustrate the serious challenge for policy makers (United Nations, 2005a, *State of Human Development*).

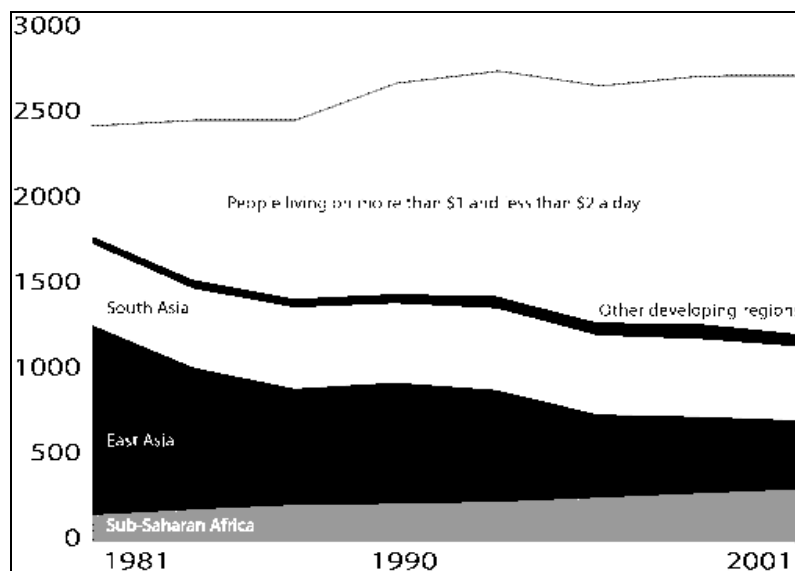
Development economists frequently use indices that attempt to capture the negative-rights of the population within a social union: for example, the freedom of speech enjoyed by members of society or variables that measure individual protection from physical abuse. These measurements of negative rights, according to the capability approach, should be seen as "the background environment within which people can engage in what we may regard as a production process, converting commodities and services in conjunction with effort and ability and ingenuity into living" (Dasgupta, 1990:15). In other words, they are the stage upon which individual agents within society act out their own choices. In Appendix 3 a number of these variables are presented: namely, government indices, regulatory barriers, government expenditures and access to information.

According to the Freedom House (2006), the political arrangement within many Sub-Saharan African countries provides a weak (and in some cases absent) framework for the protection of individual negative freedom. In an index that measures the level of democracy in each country ranging from ten to negative ten, where ten is the highest ranking and negative ten is the lowest ranking, Sub-Saharan countries averaged a score of negative three. Correspondingly, the region achieved an average negative one ranking for its level of political competition. Furthermore, according to a freedom of press index that ranges from zero to 100 where 0 is the best rank, Sub-Saharan Africa had a mean rank of 59. Therefore, in terms of negative freedoms, the individuals in Sub-Saharan Africa are severely deprived and, as a result, are unable to enjoy their freedom of choice, independence or voice criticism. Hence, their political capability is severely stunted by political arrangements.

On the output side of the development processes are various social indicators, which Dasgupta (1990:14) labels social achievements. In the terminology of the capability approach these social achievements may be called functionings. They reflect the achievements of society's realisation of freedom. These include, for example, adult literacy rates, infant mortality rates and life expectancy.

As illustrated in Figure 5.1 and Table 5.2, hundreds of millions of sub-Sahara's people are trapped in income poverty. Almost half (46.4%) of the global population living on less than one dollar a day may be found in Sub-Saharan Africa where poor health and a lack of access to basic education deprive people of productive employment (World Bank, 2006). In addition, environmental resources have been depleted or spoiled and corruption, conflict, and mis-governance preoccupy the attention of public resources and discourage private investment (Martinussen, 1995:57-59). Furthermore, as a result of the aforementioned deprivations, not only is a large percentage of Sub-Saharan African people in the vicious poverty cycle, but one also finds that the absolute figure is increasing over time; from 217.2 million people in 1987 to 313 million in 2001 (World Bank, 2005c, World Development Indicators).

Figure 5.1: Regional Composition of People Living on One Dollar a Day



Source: World Bank, 2005c, World Development Indicators

Table 5.2: Change in the Percentage of World Population Living on Less than One Dollar a Day Living in Sub-Saharan Africa

	1987	1990	1993	1996	1998	2001
Number of People in Sub-Saharan Africa living on less than 1 \$ a day (millions)	217.2	242.3	273.3	289	290	313
Percentage of the world population living on less than 1\$ a day in Sub-Saharan Africa	18.4	19	21	24	24.3	31
Percentage of Sub-Saharan Africa's Population living on less than 1 \$ a day	46.6	47.7	49.7	48.5	46.3	46.4

Source: World Bank, 2005c, World Development Indicators

In the context of Sub-Saharan Africa, the evidence provided in Table 5.2 suggests that the virtuous achievements and environments that manifest in high levels of self-esteem, independence, choice and political, civil and social freedoms are largely absent. Extreme poverty is largely concentrated in Sub-Saharan Africa. Reinforcing the arduous picture is the fact that Sub-Saharan Africa is the only region to be experiencing an upward trend of this figure over the last two decades (World Bank, 2005c, World Development Indicators).

The potential positive contribution of policy reforms has been impinged upon by civil wars, civil strife and disease. Most notably, HIV/Aids has had a devastating affect on Sub-Saharan African populations and has lead to dramatic declines in the life expectancy in the region. The HIV prevalence rate of 7.3% provided in Table 5.1 is confirmed by Table 5.3, which illustrates that life expectancy at birth in Sub-Saharan Africa, have made almost no improvements in the last 30 years. In contrast to Latin America's increase of 17 percent, South Asia's increase of 26 percent and a global average improvement of 11 percent, Sub-Saharan Africa has managed to improve by a marginal half a percent during the 30-year period in its life expectancy at birth figure (United Nations, 2005 a, State of Human Development)

Table 5.3: Life Expectancy and Infant Mortality for periods; 1970-1975 and 2000-2005

Region	Life Expectancy at Birth (Years)		Infant Mortality Rate (Per 1 000 Births)	
	1970-1975	2000-2005	1970	2003
Latin America	61.1	71.7	86	27
South Asia	50.1	63.2	130	66
Sub-Saharan Africa	45.8	46.1	143	104
World	59.9	67	96	54

Source: United Nations, 2005a, State of Human Development

In short, this translates to the stylized fact that, on average, a child born in South Asia has the capability to live and realize functionings for 17 years after the death of a child

born in Sub-Saharan Africa on the same day (United Nations, 2005a, State of Human Development). Similarly, the United Nations (2005a) provides a composite life expectancy index, which gives each country and region a rank out of 100 points. Sub-Saharan Africa ranked behind all other areas with 0.35. In contrast, South East Asia generated 0.65 points and the global average was 0.7 (United Nations, 2005a, State of Human Development).

Sub-Saharan Africa has 11 percent of the world's population or, in other words, 1.69 billion people, living within its territory (CIA Fact book, 2006). In excess of 60 percent of the global volume of people living with HIV (25.8 million people) resides in Sub-Saharan Africa. Therefore, a significant unfreedom is unfolding in the region as peoples lives are taken from them prematurely. For example, in 2005 alone an estimated 3.2 million people in the region were infected with HIV and 2.4 million adults and children died from Aids. There is a staggering seven-times increase in the chance of a person, between the ages of 15 and 49, living in Sub-Saharan Africa contracting HIV than the global average. Similarly, one is 10 times more likely to have HIV in Sub-Saharan Africa than in South East Asia (United Nations, 2005a State of Human Development).

Improvements achieved in the rest of the world with regards to reducing infant mortality have been unable to penetrate sub-Saharan Africa. Table 5.3 provides evidence that Latin America and South Asia have both managed to reduce the prevalence of infant mortality by 50 percent. In contrast, Sub-Saharan Africa has managed more modest success in reducing the infant mortality by 27 percent over the same 30 years. Once again, Sub-Saharan Africa is faring relatively poorly when compared to other developing regions (United Nations, 2005a, State of Human Development).

The introduction to Sub-Sahara's economic and social indicators creates a pessimistic account of the state of affairs and reflects widespread obstacles to the expansion of individual freedom. Civil wars, civil strife, corruption, poor leadership and mismanagement tend to diminish the likelihood of integration into the global economy. Simultaneously, disease erodes the human resource base and infrastructure, thereby, squeezing-out the scope to increase capacity and productivity (Kayizzi-Mugerwa, 2000:3).

As a repercussion of the HIV/Aids pandemic and other factors, many Sub-Saharan African countries are experiencing a significant decrease in their HDI. The HDI is a composite index that measures "the proportion of people below a threshold level in basic dimensions of human development" (United Nations, 2005b:133). Over the last 15 years, only twenty countries have experienced a decline in their HDI, thirteen of which fall in the Sub-Saharan Region. This translates to the stylized fact that one in three people in Sub-Saharan Africa is living in a country whose HDI performance has declined since 1990

representing a serious concern for policy makers on the continent (United Nations, 2005b: E-5-1).

There has been an upward trend of primary school enrolment on the continent over the past decade. For example, the African Development Bank (2006:5) posits that during the period 1992 - 2002 the gross primary enrolment has increased by 10 percent in gross terms to 89 percent. However, 13 African countries have registered declines in primary school enrolment, nine of which fall into the Sub-Saharan Region. According to the United Nations (2005, State of Human Development) the mean primary school enrolment rate for females in Sub-Saharan Africa has decreased from 56 percent in 1990 to a current level of 51 percent. In contrast, the measurement for male primary enrolment has declined from 61 percent to 56 percent during the same period. The experience for all African countries has seen an increase in the enrolment rate, which has been evenly distributed along gender lines with both primary enrolments for boys and girls increasing by 12 percent. However, there remain large gender inequalities in 80 percent of the countries on the continent. Furthermore, at high levels of education, the gap becomes substantially wider in each country.

The United Nations (2005a, State of Human Development) estimates that the adult literacy rate in Sub-Saharan Africa has enjoyed an increasing trend from 38 percent in 1980 to 61 percent in 2002. The increase has been driven by an increase in youth literacy: youth literacy rate measures the literacy of youths between the ages of 15 and 24. The literacy rate figure has grown from 53 percent in 1980 to 73 percent of youths in 2002. These improvements reflect an expansion of the freedom for a large portion of the individuals in Sub-Saharan Africa. However, there remain a large number of vulnerable individuals who remain marginalised and have not enjoyed the expansion in freedom (Sen, 1999b:24).

In 2003 the adult illiteracy rate was estimated at approximately 35 percent, which unpacks to 155 million Africans: female illiteracy stood at 60 percent and contributed to the majority of this number. This is reflected in the female to male ratio of illiteracy of 1.59 (African Development Bank, 2006:5). Hence, large disparities in gender equality continue to manifest at an increasing rate from primary level of school into adulthood.

5.3.3. Informational Broadening

According to the United Nations (2005a:9), extreme poverty and deprivation is concentrated in South Asia and Sub-Saharan Africa and that this marginalisation reflects in the two regions low levels of GDP per capita. The capability approach argues that development theory is required to go beyond the narrow focus on income metric measures. According to Sen (1999b:99), focusing on income does not provide development economists or policy makers an adequate idea of the nature and content of

their respective deprivations, nor their comparative poverty. In other words, interpreting poverty as the deprivation of basic capabilities, leads to more wide reaching investigation and results in a more illuminating picture to policymakers.

Appendix 2 presents GDP per capita and various social indicators for Brazil, Sri Lanka, South Africa, India, Mozambique and Mali. Based on income measures South Africa may be considered the most developed country with the highest GDP per capita of \$10 346. However, expanding the information basis creates a different perspective and yields significantly different results: South Africa's life expectancy has declined by 8.75 years to 49 years in 2003. All other countries have managed to improve this social achievement (United Nations, 2005b).

In contrast, India has marginally over a fifth of the GDP per capita that South Africa has at \$2892, but has managed to improve its life expectancy by over 25 years over the last 30 years. Furthermore, it has managed to half its infant mortality rate to 63 estimated deaths per 1000 live births. Moreover, the distribution of the GDP per capita is substantially more evenly distributed in India than any other country under review with a Gini Coefficient of 0.32 points. Yet, India's gender inequality remains a large handicap and source of unfreedom. Similarly, Mali with less than a tenth of the GDP income has managed to equal (or better) South Africa's functionings (achievements) in all the variables except illiteracy rate. Sri Lanka has a third of the GDP per capita of South Africa, but has managed to enhance its social achievements to outstrip all the other countries under review convincingly (United Nations, 2005a, State of Human Development).

The purpose of this section goes beyond the information on Table 5.2 or Appendix 2. The investigation serves as a catalyst for broader conclusions about various methods of comprehending poverty. Most prominently the example illustrates how the link between income and individual capability and functionings is neither uniformed nor constant between countries. According to Sen (1999:109), "different types of contingencies lead to systematic variations in the conversion of incomes into the distinct functioning we can achieve, and that affects the life styles we can enjoy."

5.4. Case study: The Determinants of HDI in Sub-Saharan Africa

The dissertation suggests that the capability approach to development serves as a credible and accurate manner from which to view development. Placing individual freedoms at the centre of the developmental process creates a strong case for examining the determinants of freedoms. In this regard, the literature pays homage to various social influences, including state activities, which influence the nature of individual freedoms. Social arrangements have a dual impact on expanding individual freedoms: they safeguard the liberties that serve as a vehicle for exchange and the support the provision

of various facilities, such as health care and education, which play a central role in the formation of individual capabilities (opportunities) and functionings (achievements) (Dasgupta, 1990:4).

Using the momentum of the capability approach, an empirical investigation of the development achievements of Sub-Saharan Africa seems relevant. As discussed in previous sections, income is a weak informational basis for measuring well-being and is unable to provide an adequate picture of the development process in isolation. A narrow focus on liberty, utility or income is unable to create a sound picture of the development process. If poverty is interpreted in the spirit of the capability approach and, therefore, as the deprivation of basic capabilities that facilitate a free life, a more articulate and illuminating picture and understanding is possible. In addition, by focusing on the ends of development, the capability approach may offer a perspective that recognises the critical role that non-income variables play in expanding individual freedoms.

The extended discussion in the dissertation of the concept of welfare, utility and freedom provides a robust framework for an empirical investigation. The dissertation is conceptual in nature and, as a result, shall remain general to the region. The intention is to investigate the relationship between a number of variables in Sub-Saharan Africa for the period under review: the decades of the 1990s and 2000s. This will provide empirical evidence regarding the relationship between the variables on a cross-country basis. The investigation is an attempt to use the tools available in conjunction with the conceptual framework outlined by the capability approach to form a sound interpretation of the current state of Sub-Sahara African development.

The premise remains that development centers upon the expansion of individual capabilities through an expansion of individual positive and negative freedom. Therefore, the study identifies those variables that influence the HDI. The purpose is to measure the relative performances of Sub-Saharan countries in reversing the process of marginalisation of its peoples as discussed in the previous section. In addition, it attempts to determine the distribution of well-being among explanatory variables that the capability approach identifies as meaningful. Therefore, the following section shall identify the variables that the capability approach embrace and determine the relationship between them. Subsequently, a model shall be presented that is able to provide tangible evidence of the usefulness of the capability approach and the paradigm shift it suggests is required. Finally, the section will unpack its empirical findings and reflect on how the results align with the framework developed in the paper.

5.4.1. Objective of Regression Analysis

Regression analysis provides an economist with a useful tool with which to summarise complex relationships between variables into a concise, disentangled and relatively

accurate model (Koop, 2000:37). The dissertation, thus far, has presented has created the normative framework within which one can understand the process of development. Embracing the capability approach to development, the paper favours a broader more pluralistic conception of what it means to be deprived.

A broad definition of development introduces the following questions: Does human development lend itself to measurement and qualification? Is it operational? Can it be monitored? (United Nations, 1990:11). In a system of measuring human development, the appropriate method would be to obtain as comprehensive picture as possible. However, too broad a conception would produce a perplexing and distracting picture for policy makers. Therefore, the United Nations developed a comprehensive index for measuring human development known as the HDI.

The initial aim of the empirical investigation is to present a feasible, practical and precise database of the pertinent variables that shape the HDI in Sub-Saharan Africa. Additionally, the dissertation utilises the data set to create a model that can unpack the determinants of HDI in the context of Sub-Saharan Africa. Therefore, the chapter shall estimate the regression coefficients for HDI in Sub-Saharan Africa. An important aim of the dissertation is to develop a regression model using the theoretical framework provided by the capability approach. The aim is an attempt to crystallise the notions developed in previous chapters to test the practical relevance of the capability approach to development.

Unfortunately, in providing those individuals involved in discourse with a model of the determinants of HDI, one is not providing stakeholders with a lens through which the future may be predicted. As economics is largely a human science, the endeavour of economists to predict with scientific certainty is largely an unattainable objective. Scientific enquiry entails establishing facts beyond refute and, as economics is a human science, economics is vulnerable to the uncertainty that are omnipresent in human society (Roux, 2002:9).

However, the future is closely linked to the present and the previous roles and relations that govern society. Thus, understanding of the role that the present plays in shaping the future encourages economists to establish manners and means to measure the nature and patterns of change and any built-in factors that provide the fertile top-soils for change. According to Roux (2002:9), "it is not possible to have knowledge of the future, but only to have knowledge about the factors shaping the future." Therefore, the section attempts to unpack and confront the complex nature of well-being in order to gain some insight into the factors that shape it in the Sub-Saharan Africa.

5.4.2. Method of Estimation

The development of an econometric model comprising of the variables that effect HDI is the principal objective of the section. According to Koop (2000:12), "econometrics is the name given to the study of quantitative tools for studying econometric data." A branch of econometrics is cross-sectional regression analysis which uses cross sectional data. Cross-sectional data refers to data collected by observing many subjects at a common period of time. Therefore, it provides an analyst with a cross section of information.

Appendix 3, *Selected Variables for Sub-Saharan Countries* provides the cross sectional data used in the following empirical investigation. The regression model used the ordinary least squared method, which attempts to minimize the sum of the squared residuals between the best fitting linear relationship and the actual data (Koop, 2000:81). The objective of the method is to uncover the underlying relationship between HDI and various explanatory variables chosen as implied by the capability approach.

5.4.3. Specification of the Regression Model

A brief review of the chosen variables represents, in crude terms, the following: that the dependent variable, HDI, measures the achievement of each country in terms of human development. The second and third variables, civil rights and democracy, measure each society's negative freedoms; the environment in which individual members of society actively engage one another and measures the ability of people to pursue their own conception of good. Finally, the third, fourth, fifth and sixth variables - total primary school enrolment; physicians per 100 000 people, health care expenditure by government and fertility rate - reflect the positive freedoms that individuals share in their society. Thus, the variables cover the entire developmental process as unpacked in the previous chapters of the dissertation and presented in Diagram 4.1.

Each variable has been verified by other sources in order to ensure that the figures are consistently accurate. The data reflects the end result of identifying relevant variables, checking their availability and testing their accuracy: only those that were available and reliable have been included in the empirical study. The data is coarse, being merely aggregates for each country and offer little information about the distribution of well-being within each country. However, the regression model will assist in establishing how or, in what way; the explanatory variables - civil rights, democracy, total primary school enrolment, physicians per 100 000 people, health care expenditure by government and fertility rate - are associated with one another and the dependent variable, HDI. The following section interprets each of the explanatory variables' relationship with HDI in turn as predicted by economic theory.

5.4.3.1. Dependent Variable: Human Development Index (HDI)

HDI embraces the broader perspective conception of development and serves as an expansion of the informational basis: it represents individual achievements in each society. The dissertation has chosen HDI to measure well-being as it provides a composite index that measures a combination of variables that reflect individual living standards (United Nations, 1990:12).

The HDI provides a metric to compare the well-being of “the most deprived people in the community” (United Nations 1997:20). It is a non-income metric that is made up of three primary components. The first component measures longevity or, more formally, life expectancy at birth. The second component measures knowledge and uses literacy figures as a crude measure to reflect access to good quality education. The third component of human development measures the command that the individuals have in garnering the resources that they may require for a satisfactory standard of living. To this end, the HDI uses real GDP per capita income, although this component is adjusted to account for difficulties in converting income into capabilities (United Nations, 1990:12).

HDI serves as a comparable index that reflects sectors of a of society’s choices and human freedoms. For example, if people’s realisations of creativity or productivity were impinged upon then it would reflect on the HDI through income and literacy estimates. The United Nations (1990:10) cautions that it does leave out many variables that individuals do value. In particular, it is an aggregate measure and therefore is unable to measure inequality. Therefore, interpretations have in built parameters that analysts are required to confine themselves to. Accordingly, the United Nations (1990:16) concludes that the virtue of broader coverage must be weighted against the inconvenience of complicating the basic picture that it allows policy makers to develop.

In Table 5.4 the aggregate level of HDI is provided for each region on the globe: Sub-Saharan Africa, at 0.515, captures the region’s poor achievement in expanding individual functionings and capabilities within its territory. In contrast to each region: the Arab States (0.678), East Asia and the Pacific (0.768), Latin America and the Caribbean (0.797) and South Asia (0.628); Sub-Saharan African people have limited freedom to live lives that integrate their own conception of well-being. Similarly, the Sub-Saharan region fares poorer than the low-income countries and the world average: in fact, Sub-Sahara’s average of 0.515 is responsible for pulling down the global and low-income average (United Nations, 2006).

Table 5.4: Human Development Index (HDI) for Global Regions 2003

Region	HDI Value 2003
Least developed countries	0.518
Arab States	0.679
East Asia and the Pacific	0.768
Latin America and the Caribbean	0.797
South Asia	0.628
Sub-Saharan Africa	0.515
High income	0.91
Middle income	0.774
Low income	0.593
World	0.741

Source: United Nations, 2005a, State of Human Development

Human development is a multifaceted process and therefore an index attempting to capture this complexity should incorporate a range of variables (United Nations, 1990:13). However, in order to identify the core contributors to the poor HDI performance in Sub-Saharan Africa, one must first unpack the HDI figure. Unpacking the figure into its various components enables the development economist to determine the primary contributing factor to the regions poor performance, reflected in the figure: is it being brought down by one area specifically or is it a general inferiority across each figure?

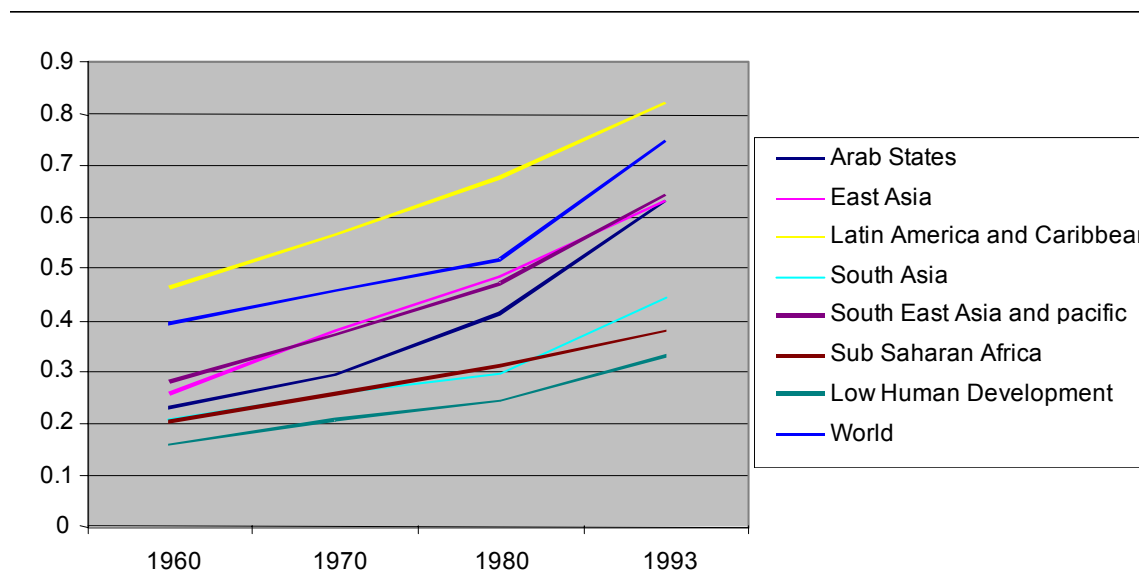
Table 5.5. Components of HDI in 2003 for each Global Region

Country	GDP per capita (PPP\$)	Life expectancy at birth (Years)	Adult literacy rate (% Ages 15 and above)	Infant mortality rate (Per 1,000 live births)
Arab States	5,685	67	64.1	48
East Asia and the Pacific	5,100	70.5	90.4	31
Latin America and the Caribbean	7,404	71.9	89.6	27
South Asia	2,897	63.4	58.9	66
Sub-Saharan Africa	1,856	46.1	60.5	104
Low income	2,168	58.4	60.6	80

Source: United Nations, 2005a, State of Human Development

Table 5.5 provides the value of each component of HDI for each global region: GDP per capita, life expectancy, adult literacy rate and infant mortality rate. Sub-Saharan Africa's GDP per capita average of \$1856 is dwarfed by each of the four other regions; life expectancy at birth of 46.1 years is 20 percent lower than South Asia and 30 percent lower than Latin America and the Caribbean, the best performer. Infant mortality per 1000 live births is almost double each regions value. The only component in which Sub-Saharan Africa averages better than the low-income average is adult literacy rate; South Asia has the lowest literacy rate of 59 percent with Sub-Saharan Africa at 60.5 percent. In all other components Sub-Saharan Africa is below the average for low-income countries. Thus, the evidence suggests that, in general terms, Sub-Saharan Africa achieves poorly in each of the components of HDI (United Nations, 2006).

Figure 5.2: Improvements in Global and Regional HDI, 1960 – 1993



Source: United Nations, 1996, Human Development Report

Comprehensive analysis requires that HDI for each region is placed in its own historical context. Therefore, Figure 5.2 illustrates the trends in HDI over the period 1960 to 1993 for each global region, the world and low-income countries. The slope of each curve indicates the rate of change for HDI in each region. Since 1980 each region has experienced acceleration in HDI improvements except Sub-Saharan Africa and East Asia; both regions have improved relatively constantly over time, but Sub-Saharan Africa's trajectory has been slower than that of East Asia.

Each region under investigation commenced with an HDI figure below 0.29, but only Sub-Saharan Africa's value in 1993 remained below 0.4 and, as illustrated in Table 5.4, in 2003 Sub-Saharan African countries continued their poor relative HDI performance. Sub-Saharan Africa's starting point of 0.201 is almost mirrored by South Asia's, at 0.206; in addition, in 1980 their values of 0.312 and 0.298 respectively indicate that Sub-Saharan Africa had exceeded the functions of South Asia's. However, in contrast to South Asia's current HDI of 0.628, Sub-Saharan Africa's value marginally exceeds 0.5. Thus, in the last two decades, while South Asia has doubled its HDI value (and performance), Sub-Saharan Africa has continued to move sluggishly (United Nations, 1996, Human Development Report).

5.4.3.2. Explanatory Variables

At the principle end of the development process are inputs (factors) that are required by people for survival. These are frequently called social indicators. Four variables have been used to measure the achievement of Sub-Saharan Africa in realising success in accessing these contributors to well-being: primary school enrolment rate, physicians per

100 000 in the population, health care expenditure by the government per capita and the fertility rate. Each of these explanatory variables attempts to measure the achievements that individuals are free to realise on the input side of the development process (Dasgupta, 1990:14). Therefore, the four explanatory variables are inputs in the development process and measure the positive freedom within Sub-Saharan Africa.

The HDI is a measure of the functionings that a population is free to enjoy. The value incorporates GDP per capita, adult literacy rates, infant mortality rate and life expectancy. Therefore, it may seem obvious that the explanatory variables will naturally have a positive link with HDI. However, the paper attempts to determine if this assumed link is reflected in the data as the nature of the relationship may steer policy makers in their decisions: a significantly positive relationship indicates that policy makers need to actively improve the positive freedoms enjoyed by the population through creating the necessary framework to increase primary school enrolment, attract physicians into the labour market and raise government health expenditure. Importantly, through the instrumental and constitutive roles of freedoms, such positive freedoms will both directly and indirectly contribute to development.

1. Primary School Enrolment Rate

Economic theory predicts that the rate of primary school enrolment will have a positive relationship with HDI. As noted in the previous section, one of the components to the HDI is literacy rate and as literacy rate is a function of education, the economic consensus suggests that the two variables will be positively correlated (Blaug, 1966:393). According to the language of the capability approach, this interpretation of the relationship between HDI and primary school enrollment centers on the constitutive and instrumental of freedom. The relation is constitutive as an increase in primary school enrollment and will directly augment individual freedom or positive capability (Sen, 1998:39).

In addition, an increase in literacy levels may create separate opportunities and entitlements that contribute to the expansion of human freedom and promote development (Sen, 1999b:37). This instrumental role goes beyond the obvious fact that an increase in primary school enrollment should increase literacy rates that, in truth, should improve HDI. Certainly, expansion in literacy rates is an end in itself and an expansion directly enhances development. However, the instrumental element recognises that an enhancement of a freedom will harness the positive links between different kinds of freedoms.

While development analysis must as a priority be concerned with society's achievement in its objective to expand freedoms directly, it must also acknowledge and harness the empirical linkages between distinct types of freedoms. This virtuous natural cycle strengthens the importance and relevance of the capability perspective (Sen, 1999b:38).

2. Physicians per 100 000 people

The economic theory predicts a positive relationship between physicians per 100 000 people and HDI. The inclusion of the explanatory variable (physicians per 100 000 people) is an attempt by the regression model to deal with the question of access. Positive freedoms deal in the realm of people's relationship to society's scarce resources. In developing countries, access to medical facilities has attracted much interest in the literature (Attridge & Preker, 2005; Horten, 2000 and Mills, 1995).

The overwhelming consensus suggests that there is a positive relationship between access to medical services and human development (Attridge & Preker, 2005:2). Therefore, the dissertation expects that the explanatory variable, physicians per 100 000 people, should reflect this positive relationship with HDI. Furthermore, the variable is expected to have a constitutive and instrumental contribution to well-being, therefore enhancing development. Therefore, its relationship should tangibly illustrate to policy makers the importance of variables outside income measures in development and the enhancement of people's freedoms.

3. Government Expenditure on Health Care

The explanatory variable, government expenditure on health care, has been measured as the real per capita expenditure by government. As the other variables, both explanatory and dependent, are indices or percentages, the variable has been adjusted by taking its natural logarithm. Similarly to physicians per 100 000, the variable has been chosen as it manages to capture the populations aggregate positive freedom. However, it manages to create a more direct relationship between policy and development. Certainly, policies can be created to enhance the number of physicians per 100 000 people or any of the explanatory variables, but real government expenditure on health care is a far more obvious connection. As illustrated in the cases of India and Sri Lanka, the consensus suggests that there will be a positive relationship between HDI and government expenditure on health (Sen, 1999b: 98). Furthermore, there should be evidence of its constitutive and instrumental impact on development.

4. Fertility Rate

The fertility rate introduces the concept of sustainability into the empirical analysis. According to the consensus, "the increasing pressure of population (growth) on limited resources results in the destruction of carrying capacity" (Kalipeni, 1995:286). As populations in the developing world grow in number, the resources available to them diminish, which results in a decline in living standards. Therefore, the fertility rate is a measure of positive freedom.

Economic consensus suggests that there should be a negative relationship between HDI and the fertility rate (Kalipeni, 1995:286). According to Bongaarts & Watkins (1996:3): “economic and social changes such as industrialization, urbanization, and increased education first lead to a decline in mortality, and subsequently also to a decline in fertility. In the developed world, the fertility rate is typically lower than for the females in developing countries (Ahn and Mira, 2002:667). Therefore, the consensus suggests that the fertility rate should have a negative relationship with HDI meaning that as the fertility rate declines a country will experience and increase in its HDI.

5. Civil Liberties

The Universal Declaration of Human Rights in Article 19 states: “Freedom of expression is not the product of any political system or ideology. It is a universal human right, defined and guaranteed in international law...Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media regardless of boundaries” (Ayittey, 1999:204). The consensus suggests that there is a positive relationship between civil liberties and human development (Bollen, 1986:578).

Sub-Saharan Africa fares relatively poorly in all forms of negative freedoms, indicating the environment in which individuals may pursue their own conceptions of well-being is significantly constrained. For example, the relationship between the press and governments is, at best, cooperative; the African elites who succeeded as rulers after independence use the mass media to consolidate and reinforce their positions (Barland, 2005:81).

According to Lamb (1987:246 – 247), in the mid 1960s there were 299 daily newspapers in Africa, but by the 1980's the figure had diminished to 150. Certainly, government constraint is not the sole reason for the decline of the African newspaper; others include: high illiteracy rates, the radio, high production costs and high numbers of rural populations without access to papers. However, in many cases in Sub-Saharan Africa, the political landscape has a significant role in crushing newspapers. At worst, the relationship between the media and governments may be described as brutal; where the governments maim and kill journalists to stamp out any internal criticisms. According to Dudge (2005:1), four journalists were killed in Sub-Saharan Africa in 2006 and governments imprisoned many more. In addition, many Sub-Saharan states in Africa close their borders to outside journalists.

The civil rights variables in the model have been adapted from *Freedom in the World 2006: Survey Methodology* by Freedom House, (Freedom House, 2006). Civil liberties encompass the freedom of the press, court protection of the individual, the freedom of expression for the individual and free choice in education, occupation, religion and so on.

The opposite extreme is fear, little individual expression and swift imprisonment by the police state (Bollen, 1986:578).

Countries are rated on a seven-point scale. The ranking system assigns a value between one (most free), three to five (partly free) and seven (not free). The rank depends on the strength of the protection of civil liberty (Rabushka, 1993:152). A one represents the most freedom while seven represents the most repressed countries (Freedom House, 2006). There is a wide range of civil liberty ranks in Sub-Saharan Africa representing a significant diversity within the region. For example, in 2003, Zimbabwe was ranked at six while, its neighbour, South Africa, was ranked at two. Therefore, two countries sharing the same borders have vastly contrasting realities.

The idea of the chapter is to identify the relationship between the environments in which people live with the achievements in poverty alleviation. In order to capture the dynamic nature of development, the variable has been adapted to illustrate the achievement over the period of 1980 to 2003 in civil liberty protection.

6. Democracy

The second variable to represent negative freedom in the regression model is a measure introduced by the United Nations, which measures the level of democracy. According to Ayittey (1999:204), of the 42 African countries, only 14 of them may be classified as democratic: Benin, Botswana, Cape Verde, Central African Republic, Madagascar, Malawi, Mal, Mauritius, Namibia, Sao Tome & Principe, Senegal, Seychelles, South Africa and Zambia. Therefore, over three decades after independence, uncertainty and fear remain commonplace in Sub-Saharan Africa. In many cases, the fight for political freedom has been dubiously rewarded with tyranny and oppression by governments (Lamb, 1987:116).

The democracy variable ranks countries according to level of democracy. It is a proxy for political freedom that measures the presence of a fully competitive electoral process, to a limited role for opposition parties in a one party-state system, to complete absence of elections (Freedom House, 2006). The rankings range from negative ten to positive ten where the higher the score the better the functioning of the democracy and its apparatus. Appendix 3 provides various measures for political and civil liberties for a selection of Sub-Saharan African countries.

In addition, as will be articulated in the following sections, the democracy measure provided by Freedom House was checked for consistency by an alternative measure provided by the United Nations, 2005c). Similarly to the civil rights measure, the countries were ranked from one to seven where the closer to one a country is, the higher its level of political freedom. Furthermore, a measure of political competition has been used to

enhance the understanding of negative freedoms. This figure ranks the level of political competition in a country between the score of zero and five, where five is the best possible outcome (Freedom House, 2006).

The economic consensus suggests that there is a positive constitutive and instrumental relationship between democracy and human development (Bollen, 1986:597). In order for the development process to unfold freely, the environment in which it occurs must be free of coercion. When political rights are present, the government derives its authority from its population. Viewing society through the capability approach, the state should concern itself, first and foremost, with the protection of negative freedoms and societies social achievements. Therefore, the state ought to provide the necessary inputs for the exercise of negative freedom, which include democratic institutions to facilitate an expansion of choice (Sen, 1999b:56).

5.4.4. Estimation of the Regression Model

Regression analysis is a tool of the applied economist to understand the relationship between more than two variables. It assists economists in unpacking complicated relationships into an equation known as a regression line. The regression model posits a linear relationship between the variables in question in order to provide an approximated value of the true relationship (Koop, 2000: 37–40).

The capability approach's rich theoretical heritage provides the development economist with the conceptual framework for developing a regression model for HDI. As articulated in the previous section, the intention is to launch the model from the perspective that views the process of development as a functional relationship between social indicators, negative freedoms and social achievements (Sen, 1999b:28).

The model attempts to explain fluctuations in a dependent variable through movements in the explanatory variables. It estimates regression coefficients for each variable, which may be interpreted as the marginal effect of a change in the particular explanatory variable on the dependent variable, *ceteris paribus*.

In short, regression analysis manages to create a best-fitting line through actual data points. The line minimizes the sum of the squared residuals. In other words, the line predicts a value for the dependent variable based on the data; the estimated value of the variable less the actual value multiplied by itself - in order to account for positive and negative values – creates a best-fitting line. Therefore, the model provides the analyst with a coefficient for each variable and an intercept. The estimated coefficient serves as a proxy for the marginal effect of a change in that variable on the dependent variable. The intercept provides the dependent variables starting point (Koop, 2000:37–44).

Table 5.6 presents the regression model that has been estimated in this dissertation. This model has estimated the coefficients of the determinants of HDI in Sub-Saharan Africa in the context of the capability approach. A regression model faces three evaluative criteria, which are used to determine the models applicability, accuracy and robustness. The first evaluative exercise is to determine whether the model makes economic sense. The second evaluative exercise looks at the model's statistical reliability. The third evaluation uses econometric tests to determine the model's robustness. The aim of this section is to carry out each evaluative exercise in details to determine the level of confidence the dissertation can reasonably assign to the relationship it finds between the explanatory variables and the dependent variable.

Table 5.6: The Specification of the Function and Estimated Coefficients

HDI = C + a Physicians per 100 000 people + b Primary School Enrollment + d log (Health Care Expenditure) + e Fertility + f Civil Rights + g Democracy	
Where a, b, d, e, f and g are estimated coefficients	
	C = Intercept
And	HDI = Human Development Index
	Primary School Enrollment = Total Primary School Enrolment Rate
	Physicians per 100 000 people = Physicians per 100 000 of the population
	Health Care Expenditure = Real Gov. Health Care Expenditure per Capita
	Fertility = Fertility Rate
	Civil Rights = Civil Rights Ranking change from 1980 to 2003
	Democracy = Level of Democracy
The regression model's substituted coefficients are as follows:	
HDI = 0.4139286954 + (0.00137) Physicians per 100 000 people + (0.00183) Primary School Enrollment + (0.0302) log (Health Care Expenditure) - (0.0298) Fertility - (0.00066) Civil Rights - (0.0068) Democracy	

Source: Eviews Results

5.4.4.1. Economic *a priori* criteria of the Regression Model

The ordinary least-squared method of regression provides estimates for the intercept and slope of the approximated regression line. Each coefficient is the "slope of the best fitting straight line" and can be interpreted in multivariate regression as "the marginal effect of X on Y and is a measure of how much X influences Y" (Koop, 2000:42-43). In other words, each estimated coefficient is a measure of how much the dependent variable tends to change in response to a one unit change in the explanatory variable under the microscope, *ceteris paribus* or holding all other explanatory variables constant.

The HDI is a composite index of life expectancy, literacy rate and real GDP per capita. It ranges for zero to one. One is the highest rank and zero is the lowest. Therefore, an improvement in social achievement and an expansion in social, political and economic

freedom will appear as an increase in HDI (United Nations, 1990:12). According to Dasgupta (1990:15), outputs like HDI “measure of the extent to which certain real, vital interests of persons are being served and promoted, and to evaluate economies on such bases.”

The results of the regression model for the determinants for HDI are presented below in Table 5.7. At a glance, the model shows that there is a positive relationship between HDI and the following variables: primary school enrolment rate, number of physicians per 100 000 people and health care expenditure; while there is a negative relationship between HDI and the fertility rate, civil rights and democracy. The following section provides an economic criterion for the regression model to determine how the estimated coefficients relate to the economic theory discussed previously.

To illustrate the capability approach’s ability to highlight different variables of influence than models that target GDP or other interpretations of development, the Appendix 6 represents the regression output for the same model, but with GDP per capita replacing HDI as the dependent variable. The outcome is entirely different: four of the six explanatory variables are statistically insignificant and one variable’s sign has reversed indicating a completely different relationship. Therefore, two policy makers faced with the same information set may potentially create two different models. Hence, they may make two different recommendations.

Table 5.7 Regression Model for Human Development Index in Sub-Saharan Africa

Dependent Variable: HDI					
Method: Least Squares					
Date: 11/23/06 Time: 23:31					
Sample: 1 39					
Included observations: 33					
Excluded observations: 6					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C	0.413929	0.085736	4.827950	0.0001	
Primary School Enrolment Rate	0.001380	0.000685	2.013943	0.0545	
Physicians per 100 000 people	0.001896	0.000911	2.082163	0.0473	
LOG(Health Care Expenditure)	0.030250	0.015156	1.995875	0.0565	
Fertility Rate	-0.029858	0.010313	-2.895129	0.0076	
Civil Rights	-0.000665	0.000255	-2.609046	0.0149	
Democracy	-0.006866	0.002126	-3.229178	0.0034	
R-squared	0.817442	Mean dependent var	0.444242		
Adjusted R-squared	0.775313	S.D. dependent var	0.099719		
S.E. of regression	0.047268	Akaike info criterion	-3.080132		
Sum squared resid	0.058091	Schwarz criterion	-2.762691		
Log likelihood	57.82217	F-statistic	19.40341		
Durbin-Watson stat	1.938937	Prob(F-statistic)	0.000000		

Source: Eviews Results

7. Primary School Enrollment Rate

The regression model presents a positive relationship between the primary school enrolment rate and the HDI in Sub-Saharan Africa. More specifically, the regression

estimates that a one-percentage increase in the primary school enrollment rate will lead to a 0.00138 unit increase in a country's HDI achievement, *ceteris paribus*. Therefore, the regression model aligns with the theory advanced in the previous section that predicted a positive relationship between the explanatory variable, primary school enrollment rate, and the dependent variable, HDI.

8. Physicians per 100 000 People

The regression model presents a positive relationship between the number of physicians per 100 000 people and the HDI in Sub-Saharan Africa. More specifically, the regression estimates that a one-doctor increase in the number of physicians per 100 000 people will lead to a 0.001896 unit increase in a country's HDI achievement, *ceteris paribus*. Therefore, the regression model aligns with the theory advanced in the previous section that predicted a positive relationship between the explanatory variable, the number of physicians per 100 000 people, and the dependent variable, HDI.

9. Real per Capita Government Expenditure on Health Care

The only adjustment that is made to any of the variables in the regression model is that the logarithmic of real per capita government expenditure on health care has been used. Therefore, the health care expenditure variable may be interpreted as a percentage and takes into account the diminishing marginal returns of human capital (United Nations, 1990:12). Appendix 5 presents the model without taking the logarithm of real government expenditure per capita on health care. The result is that the variable is statistically insignificant and the model's explanatory power diminishes to 74 percent from 77 percent: meaning its explanatory power declines.

The regression model presents a positive relationship between the logarithmic of real per capita government expenditure on health care and the HDI in Sub-Saharan Africa. More specifically, the regression estimates that a one-percentage increase in the real per capita government expenditure on health care will lead to a 0.030250 unit increase in a country's HDI achievement, *ceteris paribus*. Therefore, the regression model aligns with the theory advanced in the previous section that predicted a positive relationship between the explanatory variable, the real per capita government expenditure on health care, and the dependent variable, HDI.

10. Fertility Rate

The regression model presents a negative relationship between the fertility rate and the HDI in Sub-Saharan Africa. More specifically, the regression estimates that a one-percentage increase in the fertility rate will lead to a 0.029858 unit decrease in a country's HDI achievement, *ceteris paribus*. In other words, in order to generate positive achievements in HDI a country is required to lower its fertility rate. Therefore, the

regression model aligns with the theory advanced in the previous section that predicted a negative relationship between the explanatory variable, fertility rate, and the dependent variable, HDI.

11. Civil Rights

The regression model presents a positive relationship between the civil rights enjoyed by the people and the HDI in Sub-Saharan Africa. Importantly, the civil rights index measures improvements in civil freedom as a decrease in the index value and a deterioration in civil freedom as an increase in the index value. In other words, the theory discussed in the previous section would anticipate a negative relationship between the civil rights measure used in the regression model and HDI, because a decline in the civil rights index represents an expansion in civil freedom. More specifically, the regression estimates that a one-percentage deterioration (increase) in civil freedom (value) will lead to a 0.000665 unit decline in a country's HDI achievement, *ceteris paribus*. Therefore, the regression model aligns with the theory advanced in the previous section that predicted a positive relationship between the explanatory variable, civil freedom, and the dependent variable, HDI, even though the sign is negative.

12. Democracy

In contrast to the capability approach and the neoclassical consensus, the regression model posits that there is a negative relationship between HDI and the level of functioning of the democracy. The capability approach suggests that countries with high HDI would have high scores on their political rank (Sen, 1999b:142).

In the reverse of the example of civil liberties, the ranking used in the regression model for democracy assigns a high value (close to ten) for well-functioning democracies and a low value (close to negative ten) to those with poor democratic systems, (Freedom House, 2006). In other words, the capability approach would anticipate a positive relationship between the democracy measure used in the regression model and HDI because an increase in the democracy index represents an expansion in political freedom.

The regression model presents a negative relationship between the democracy and the HDI in Sub-Saharan Africa. More specifically, the regression estimates that a one-percentage increase in the democracy value will lead to a 0.006866 unit decline in a country's HDI achievement, *ceteris paribus*. The model identifies a significant negative relationship between the realisation of democratic ideals and human development. In Appendix 7 an alternative measure of democracy is used as an explanatory variable for HDI. The secondary regression model attempts to disprove the evidence of a negative relationship between democracy and HDI. However, using the ranking methods of

Freedom House, the result is the same: the relationship between democracy and human development, in the context of Sub-Saharan Africa is statistically negative.

It would be premature for the dissertation to use this regression model to advocate views that suggest there is a general negative relationship between democracy and HDI. However, the evidence does suggest that in the context of Sub-Saharan Africa, HDI is negatively related to democracy. Therefore, in subsequent sections of the chapter (section 5.5) the dissertation shall investigate the arguments for and against democracies in the context of Sub-Saharan Africa in an attempt to shed light on the model's conclusions.

5.4.4.2. Statistical Criteria

Hypothesis testing is another exercise implemented by applied economists in measuring the accuracy of a particular model. "Classical hypotheses' testing involves specifying a hypothesis to test. This is referred to as the null hypothesis, and is labeled as H_0 . It is compared to an alternative hypothesis, labeled H_1 " (Koop, 2000:67). A widely used hypothesis test measures whether the slope of the coefficient is equal to zero. More formally $H_0: \beta = 0$ against $H_1: \beta$ does not equal 0. Therefore, this hypothesis test questions the ability of a particular variable to provide any explanatory power and, if $\beta = 0$ then the slope of the coefficient is zero and should be omitted from the model, having no explanatory power.

Coupled with the values of each explanatory variables estimated coefficients, the regression output provides each coefficient's standard deviation or standard error. Standard error measures the volume of dispersion or variability of the respective variable. Large values of standard error mean that there is evidence of large fluctuations in the predicted values of the regression model and the actual values. Therefore, large standard errors imply that the interpretation of the relationship between the explanatory variable and the dependent variable is subject to high degrees of uncertainty (Koop, 2000:62). As a result, standard error is a means through which an applied economist may measure the accuracy of the estimated coefficient.

A simple technique of testing the statistical significance of the coefficients is to use the t-statistic, which is equal to the coefficient divided by the standard error. The t- statistic tests whether the slope of the coefficient is significantly different to zero. In summary, large values of the t- statistic imply that estimated coefficient is significantly different to zero whereas small values indicate that the estimated coefficient may be equal to zero. If the coefficient slope is equal to zero it means that the estimated coefficient cannot be interpreted as statistically significant and that the explanatory variable and the dependent variable may have no statistical relationship. "In a formal statistical sense, the test statistic is large or small relative to a critical value taken from the statistical tables of the student-t distribution" (Koop, 2000: 68).

Fortunately, the regression output provides economists with a user-friendly method for determining the relative size of the t-statistic through the P-value. “A useful intuition would be to interpret the P-value as measuring the probability that $\beta = 0$ ” (Koop, 2000:68). Consequently, a P-value of less than 0.05 may be understood as security in concluding that, at a 95% confidence level or 5% significance level that the coefficient does not equal to zero.

In the regression model provided in the dissertation, each of the explanatory variables is statistically significant at a 95% confidence level. This information is reflected in relatively high t- statistics and low standard errors. Therefore, all the explanatory variables have explanatory power and constitute a partial contribution to an explanation of the fluctuations of HDI in Sub-Saharan Africa. Therefore, the following statements can be made:

- The regression model suggests that there is a statistically significant positive relationship between primary school enrollment rate and HDI at a 95 percent confidence level in Sub-Saharan Africa ceteris paribus,
- The regression model suggests that there is a statistically significant positive relationship between the number of physicians per 100 000 people and HDI at a 95 percent confidence level in Sub-Saharan Africa, ceteris paribus
- The regression model suggests that there is a statistically significant positive relationship between the real per capital government expenditure and HDI at a 95 percent confidence level in Sub-Saharan Africa, ceteris paribus
- The regression model suggests that there is a statistically significant negative relationship between the fertility rate and HDI at a 95 percent confidence level in Sub-Saharan Africa, ceteris paribus
- The regression model suggests that there is a statistically significant negative relationship between civil rights and HDI at a 95 percent confidence level in Sub-Saharan Africa, ceteris paribus (a decrease in the civil rights index indicates an increase in civil freedom)
- The regression model suggests that there is a statistically significant negative relationship between democracy and HDI at a 95 percent confidence level in Sub-Saharan Africa, ceteris paribus

R-squared and adjusted R-squared measure the overall explanatory power of the regression model. In the case of multivariate regression, adjusted R-squared is used as it adjusts the value for the number of explanatory variables used in the regression model (Koop, 2000:72). Adjusted R-squared indicates that the regression model manages to explain 77 percent of the fluctuation in HDI in the region.

Similarly to testing the slopes of the coefficients, an applied economist may test the hypothesis $H_0: R\text{-squared} = 0$ against $H_1: R\text{-squared}$. Basically this hypothesis test investigates whether the entire model has any explanatory power by testing whether the slopes of all the coefficients simultaneously equal to zero. “The strategy and intuition involved in testing $R\text{-squared} = 0$ proceed along the same lines as above. That is, the computer software calculates a test statistic which you must then compare to a critical value” (Koop, 2000:72). Alternatively, one may use the equivalent of the P-value for the entire model, to determine the likelihood of the slope of all the coefficients equalling zero.

This P-value is known as the Prob (F-statistic). In the regression model for HDI in Sub-Saharan Africa, the Prob (F-statistic) equals zero, allowing the dissertation to conclude that the regression has a collective explanatory power of 77 percent at a 99 percent statistical significance.

5.4.4.3. Econometric Criteria

Regression analysis uses the least-squares fitting procedure and is as a purely descriptive technique that describes a behavioural process. The procedure has strong theoretical justification based on a number of assumptions about the data. These assumptions are the platform upon which the model's econometric criteria are evaluated and serve as the subject matter of the section. The section looks at common problems associated with regression models: multicollinearity, heteroskedacity and autocorrelation.

13. Multicollinearity

Regression analysis assumes that the independent or explanatory variables are linearly independent. This linear independence translates to the inability of any independent variable to be expressed as a linear combination of the remaining independent variables. In a linear regression model the co-dependence among two or more independent variables is known as multicollinearity. The failure of this assumption clearly makes it infeasible to disentangle the effects of the supposedly independent variables on the dependent variable (Berkley University, n.d: 1).

The problem of multicollinearity exists when there exists a linear relationship or an approximate linear relationship between two or more of the explanatory variables in a regression. The consequences of multicollinearity are: low t-stats, a number of variables that are statistically insignificant and a high R-squared despite the statistical insignificance of the explanatory variables (Irving Vassar University, n.d:1).

The primary tool used by applied economists for detecting multicollinearity is the correlation matrix of all the explanatory variables. The aim is to determine whether two or more explanatory variables are highly correlated with one another. A positive or negative correlation above 0.8 is typically a concern for a regression model. In the event that there is a high correlation between two variables, the regression model will find difficulty in determining which variable is influencing the dependent variable. The remedy for multicollinearity is to increase the sample size or to remove one of the two variables.

The correlation matrix for the regression model of the dissertation is provided in Table 5.8. The correlation matrix confirms that there is no multicollinearity in the model as none of the explanatory variables are highly positively or negatively correlated with one

another. Therefore, the assumption that the explanatory variables are linearly independent is sound and valid.

Table 5.8: Correlation Matrix for the Regression Model

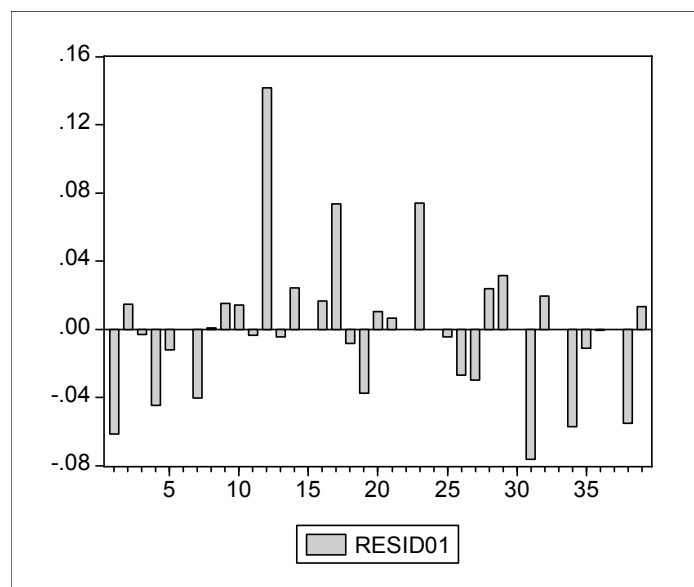
	Primary School Enrollment Rate	Physicians per 100 000 people	Real per Capita Gov. Expenditure on Health Care	Fertility Rate	Civil Rights
Primary School Enrollment Rate	1	0.536487	0.598961	-0.65293	0.17022
Physicians per 100 000 people	0.536487	1	0.723204	-0.48439	-0.1682
Real per Capita Gov. Expenditure on Health Care	0.598961	0.723204	1	-0.47469	-0.0017
Fertility Rate	-0.652927	-0.48439	-0.474685	1	-0.0981
Civil Rights	0.170217	-0.16815	-0.001706	-0.0981	1
Democracy	0.119118	0.292856	0.368008	-0.32358	-0.4997

Source: Eviews Results

14. Heteroskedacity

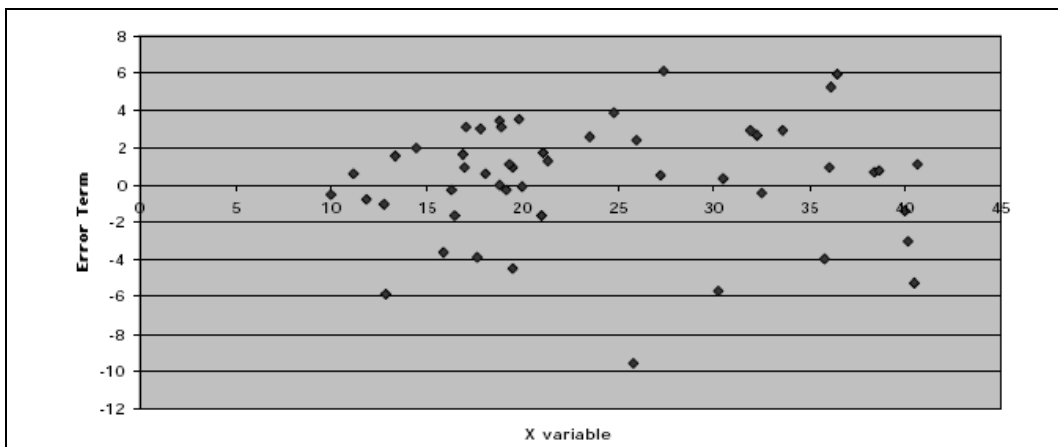
Regression assumes that residuals are a constant variance and normally distributed. It is a good idea to plot the residuals against the independent variables to see if they show a trend. There are a few possible behaviours that applied economists are warned to identify: correlation between the residual and explanatory variables (for example, the higher the independent variable, the higher the residual), non-linearity and heteroskedacity (Instituto Nacional de Pesquisas Espacias, 2006:7). Appendix 8 presents the residuals for the regression model plotted against each explanatory variable. Each variable has a random relationship with the residual. In addition, Figure 5.2 illustrates that the residual is randomly distributed.

Figure 5.2: Residual for the Regression Model



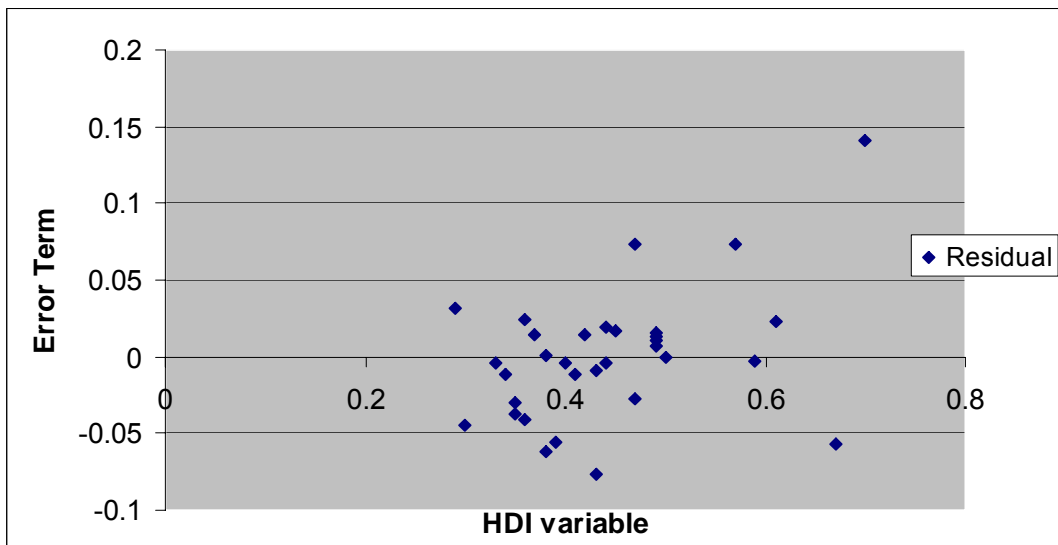
Regression analysis assumes that the disturbances are homoskedastic. In other words, it assumes that the variance of the residual is random. Heteroskedasticity means that the variance of the disturbance is the same for each observation, which translates to the residual being consistently random rather than having an identifiable pattern over time (Berkeley University, n.d:1). Figure 5.3 provides a graphical representation of homoskedastic error. Figure 5.4 provides the error for the regression model of HDI in Sub-Saharan Africa plotted on an X-Y scatter. The figure indicates that the error is homoskedastic in distribution. However, in order to provide a more robust test, the dissertation uses the White Heteroskedasticity Test.

Figure 5.3: Example of Homoskedastic Errors Plot



Source: Berkeley University, n.d

Figure 5.4: Error Plot for Regression Model



Source: Eviews Results

Appendix 9 presents the results from the White Heteroskedasticity Test. An abridged version is included in Table 5.10. The White Heteroskedasticity Test obtains the residuals of the estimated regression equation and uses the square of the residuals as the dependent variable to rerun the regression model. The aim is to test the joint hypothesis that all the coefficients are zero. The regression model for the determinants of HDI in Sub-Saharan Africa used in the dissertation has homoskedastic error as evident from the results of the White Heteroskedasticity Test. The Obs*R-squared probability is substantially higher than 0.05, indicating an absence of heteroskedasticity.

Table 5.10: White Heteroskedasticity Test

White Heteroskedasticity Test:			
F-statistic	0.820416	Probability	0.629472
Obs*R-squared	10.88574	Probability	0.538735

Source: Eviews Results

15. Autocorrelation

Regression analysis assumes that the disturbances are not autocorrelated. Autocorrelation means that the error term is correlated with the lag of itself rather than the explanatory variable included in the regression model (Koop, 2000:202). In short, correlation is the mutual relationship between two or more random variables, while autocorrelation is the correlation of a signal with itself (Parr & Phillips: 1999). The Durbin-Watson Statistic of 1.9389 indicates the probability that autocorrelation is absent from the regression model. However, a more general and competent test for autocorrelation is the Breusch-Godfrey test for Serial Correlation. Table 5.11 illustrates the results of the Breusch-Godfrey test. The Obs*R-squared probability value of 0.85 indicates that autocorrelation is absent from the regression model. Appendix 10 provides the entire Breusch-Godfrey Serial Correlation LM Test, which confirms these results.

Table 5.11: Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.117863	Probability	0.889329
Obs*R-squared	0.320972	Probability	0.851730

Source: Eviews Results

5.4.4.4. Summary of findings

The regression function for the determinants of HDI in Sub-Saharan Africa used in the dissertation is: $HDI = C + a \text{ Physicians per } 100\ 000 \text{ people} + b \text{ Primary School Enrollment} + d \log(\text{Health Care Expenditure}) + e \text{ Fertility} + f \text{ Civil Rights} + g \text{ Democracy}$.

The section evaluated the model according to three primary criteria: economic, statistical and econometric.

The economic criteria served as a starting point as the estimated coefficients signs require interpretation. Apart from the democracy variable, each of the six variables estimated fitted the economic literature neatly. Accordingly, physicians per 100 000 people, primary school enrollment rate, real per capita spending by government on health care had a positive relationship with HDI. Fertility rate had an expected negative relationship with HDI. In addition, civil rights - where the index valued low as good levels of civil rights - had a negative relationship with HDI. The unexpected negative relationship between democracy and HDI shall be discussed in more detail in the following section of the chapter.

The statistical criteria used various measures to determine the regressions of statistical feasibility: the Prob (F-Stat) indicated the model had explanatory power, the adjusted R-squared figure indicated that 77 percent of fluctuation in HDI was explained within the model and each variables T-stat and P-Value confirmed that each variable was statistically significant at 95 percent confidence.

The econometric criteria tested for the presence of multicollinearity, heteroskedacity and autocorrelation in the regression model. Each econometric test resulted in a negative indicating that the regression model is viable. Thus, the model is economically, statistically and econometrically viable and suggests that the capability approach provides a sound tool for investigating HDI in Sub-Saharan Africa.

5.5. The Importance of Democracy in the Development Process

The statistically significant negative relationship between democracy and the HDI functionings (achievements) realised in Sub-Saharan Africa found in the regression model presents a superficial difficulty for the capability approach. This relationship serves as the subject matter for the final section of this chapter. The capability approach vehemently suggests that political freedoms play a central constitutive and instrumental role in the expansion of freedom. Therefore, this section attempts to reconcile the specific evidence presented in the regression analysis with the broader conception of development and well-being favoured in the dissertation.

The following section shall look closer at the relationship between democracy and freedom within the capability perspective. It will provide motivation for an expansion of political freedoms, including democracy, by illustrating the important role that democracy plays in the process of development. The objective is to support the capability approach's broader conception of well-being. To this end, the dissertation discusses the arguments in favour and against the role of democracy in human development. In addition, the

results of the empirical investigation undertaken in the previous section will be explained in a manner that is harmonious with the ideals of the capability approach.

It is frequently suggested that the force of economic needs in many third world countries significantly outweigh all other needs to such an extent that individuals may risk their own safety, and that of their family members, in the pursuit of income (Sen, 1999b:142). In such cases, the forces of economic needs are so powerful and immediate that it may seem futile to venture into the sphere of political and civil rights. Therefore, the negative relationship may be interpreted as the result of the rational decision of placing the economic agenda above the political.

As the argument runs, democracy and more generally political liberties are a luxury that poor countries can ill-afford. Frequently, totalitarian policies are excused as necessary for economic progress and for fostering nationalism. The advocates of nation building disregard the human aspect of people and consider them as tools for nation building. For example, Lamb (1987:57) states in response to the question of whether or not democracy is pertinent to the needs of Africa: "The splintered, struggling Africa of today cannot afford the luxury of multiparty and independent presses...governments are not cohesive enough to endure forces motivated by anything less than nationalistic concerns. At this stage most African countries are best served by dictators. Democracy can come later, if it is to come at all."

Pro-totalitarian views are prevalent in the development debate and are embraced by certain developing nations themselves: why should one allow the finesse of political liberty to draw energies away from the grotesque intensity of economic needs? For example, many delegates during the Vienna Conference on Human Rights in 1993, such as China, Singapore and others from East Asia, argued against the general endorsement of basic political and civil rights around the globe. Rather, it was suggested, that the focus should be on economic rights relating to important and crucial material needs (Badhwar, 2005:113).

The regression model of the determinants of HDI in Sub-Saharan Africa in the previous section presents results that somewhat correspond with the above argument. The negative relationship could be a distraction from more important matters and the freedom may enable the various factions to fight for self-interest at the expense of the majority. Therefore, the objective of policy makers may be to sideline the political freedom and target the variables that directly enhance well-being in the short term. According to Bauer (1993:222), this perception has led to the creation of policies that have obstructed economic advancement and human development: far from building nations in Sub-Saharan Africa, these policies have created conflict and generated deconstructive forces.

The capability approach suggests that an expansion of political freedom leads to transparent public discussions, dialogue and participation in political decisions. Political freedom has the kinetic energy to unlock the claims of the weak and test democracy in a manner that assists in helping poorer segments of the population to avoid exploitation. The capability approach recognises the coupling of the advantages of an expansion of freedom; increasing political freedom in an economy may also become more open and transparent yielding economic benefits to the poor (Sen, 1999b:127).

Furthermore, the capability perspective advocates an inclusive policy framework that will incorporate the people of Sub-Saharan Africa. Political liberties play a central role in this development strategy and require a decentralised decision making processes within which the people are actively involved. A successful incorporation of the populace hinges upon transparency and participation. Thus, democracy serves as a means to development and, through the capability perspective, as the end objective by expanding freedom directly.

The capability approach reasons that public policy's contact point should be removal of poverty, misery and the enhancement of well-being. Accordingly, well-being is understood to be a function of freedom. Hence forth, arguments that there is little use for political freedoms conflict with the essence of the capability approach. The capability approach disagrees with the premise of viewing the economic and political needs as two independent entities; the real issue requires policy makers to recognise the extensive interconnectedness between political freedoms and the fulfillment of economic needs. Therefore, the capability approach to development naturally flows into a different conclusion that supports the role of democracy in development (Sen, 1999b:147).

According to the capability perspective, as the severity of economic needs increase, the sense of urgency of political freedoms increase. Centering the development process on the expansion of freedoms, there is a natural positive relationship between economic and political liberties. This relationship provides the foundation for the capabilities approach's pre-eminent view for basic political and liberal rights (Sen, 1999b:147).

There are three underlying foundations for this positive relationship. Firstly, a development perspective that embraces the capability approach interprets an enhancement of political freedoms as directly improving well-being through increasing social participation that directly contributes to the well-being of individuals in a society. Secondly, political freedoms have an instrumental role in enhancing the platform that individuals have to express and justify their respective claims, which frequently include economic needs. Thirdly, political freedoms have a constructive role in empowering the people to conceptualise their own needs and, in particular, economic needs (Sen, 1999b:147). The following section shall analyse these arguments in more details.

5.5.1. Arguments against the Importance of Political Freedom

Prior to an investigation of the three roles of political freedom in development: the direct, instrumental and constructive roles respectively, the section shall address the arguments that posit an inherent conflict between political freedom and economic needs. Opposition to the capability approach's conclusion that political freedoms provide the foundation for the realisation of economic needs commonly takes three different shapes.

First, there is a widespread claim that in developing countries, political and civil rights hamper economic growth and development. Second, an abstract variant of the Lee Thesis argues that poorer segments of the population, when given a choice between political freedoms and economic needs, will invariably choose the latter. Therefore, political freedoms inherently ought to take a back seat in development debate as they are deemed less important than economic freedoms. Third, it is frequently argued that to place emphasis and priority on political freedoms and democracy is a western ideal that conflicts with the values of developing countries from other regions with other cultural norms. These developing regions are more concerned with order and discipline and are less interested in democracy or political freedoms (Sen, 1997b:10).

These challenges contradict the perception of the relationship between economic and political needs as embraced by the capability approach. The challenges to the importance of political freedoms shall be taken up in the following sections. Once each argument has been taken up, the chapter shall divert its attention to arguments that support the belief that political freedoms advance economic performance and human development.

5.5.1.1. Democracies and economic growth

There is a widespread claim that in developing countries, political rights hamper economic growth. The root of the argument is sourced to the former Prime Minister of Singapore Lee Kuan Yew and is commonly referred to as the Lee Thesis. It suggests that the denial of civil and political freedoms assist in stimulating economic growth and rapid economic development. In fact, some development economists have used the Lee Thesis to champion harsher political systems that deny political rights for their alleged advantage in promoting economic development (Sen, 1999b:147).

There is a second abstract variant of the Lee Thesis, which concerns the choices made by the population itself. Accordingly, it is argued that poorer sections of the population when given a choice between political freedoms and economic needs will invariably choose the latter. Since people have motivation to eliminate, first and foremost, economic obstacles, it is suggested that there is no reason to insist on political freedom, on their

behalf. The insistence on political ideals may impinge upon the realisation of their primary objective of economic freedom.

Each of these challenges contradicts the perception of the relationship between economic and political needs as embraced by the capability approach. However, it is worth recognising that both of the arguments suggest that there is an inherent deep-seated conflict between political and economic freedoms. Hence, both arguments are confronted in this section.

Some countries, like South Korea, Singapore and China, which are relatively authoritarian, have had reasonable success in terms of producing rapid economic growth. In contrast, more liberal countries, such as India, Costa Rica and South Africa have performed relatively poorly in economic performance over the last three decades. However, this does not provide concrete empirical evidence in support of restricting political freedom like many advocates of Lee's Thesis would suggest as much depends on the particular circumstances within each country.

Systematic empirical studies have been unable to support the conclusion that there is an uniformed natural conflict between political freedoms and economic performance; a study by Packenham (1964:111-112) found that there may be an important positive statistical correlation between the level of economic development and political development. However, numerous exceptions to this general rule were evident in his case study. In his paper he draws attention to studies by Hagen (1962) and Coleman (1960), which support his general positive correlation. However, there are countries in each of the three studies that are exceptions to the rule and experience robust economic growth and high levels of authoritarianism (Packenham, 1964:111-112). In more contemporary literature, Sen (1999b:118) continues to distrust the direct relationship between the two types of freedoms and suggests that the directional linkage may depend on numerous underlying circumstances within each country.

The most common argument leveled against authoritarian political regimes is that "rulers have no interest in maximising total output," (Limongi & Przeworski, 1993:51). However, some empirical studies have produced conclusions that note a weak negative relationship between low productivity and high levels of authoritarianism. In contrast, similar studies have established a robust positive relationship between economic and political freedom. Levine & Renelt (1992:959) found that large assortments of economic and political indicators were not robustly correlated with economic growth. In contrast, Lange & Garrett (1985:793-795) found that there is a significantly positive correlation between the political and economic environment. In addition, using cross-sectional and pooled data for up to 125 countries over the period from 1960 to 1985, Helliwell (1994:225) evaluates the two-way linkages between democracy and economic growth and established that the effects of income on democracy are robust and positive. Hence,

empirical studies have failed to produce absolute conclusions regarding the relationship between political and economic variables.

On balance, the hypothesis that there is no coherent statistically reliable relationship between the two freedoms is difficult to reject. However, since the expansion of political freedoms is a significant end objective for development, the case in support of their importance remains largely unaffected. Moreover, even though statistical connections are important, it is imperative to examine the causal processes that are involved in economic growth and development (Sen, 1999b:150).

The economic consensus that has emerged through recent discussions indicates that there are certain helpful policies that reinforced the potential success between economic and political achievement. These policies include openness to competition and international markets, a high level of literacy and school enrolment, successful land reforms and state provisions of incentives for investment, exporting and industrialisation. However, these helpful policies are not restricted to democratic countries and there is no empirical evidence that suggests that they are unsustainable by authoritarian structures (Sen, 1999b:150).

5.5.1.2. Do people care about political rights?

A common argument against the importance of democracy as a tool for economic performance is based on the cultural heritage of democratic ideals. The suggestion is that to place special emphasis and priority on political freedoms and democracy is a western ideal that conflicts with the values of certain developing regions and countries that are more concerned with order and discipline. For example, Sen (1997b:10) quotes the spokesman for the Chinese Foreign Minister as putting on record at the Vienna Conference on Human Rights in 1993: "Individuals must put the state's rights before their own."

The challenge against the important role of democracy is based on the assumption that there is a trade-off between economic needs and political rights. It proposes that the populations of developing countries, when faced with the choice between economic and political freedom, will invariably choose the realisation of their economic needs. However, similar to the aforementioned challenge, this assumption is based on thin empirical evidence that there is indeed an inherent trade-off between the two types of freedoms.

There is a large obstacle in attempting an empirical study of the accuracy of such a claim; the only true manner in which to measure the above is to get the electorate to choose between expression and oppression. However, in authoritarian states elections are not possible as the people's freedom of expression is usually suppressed. In other words, it is difficult to test this hypothesis when ordinary citizens are given little political opportunity

to articulate their views to the authorities in office whose viewpoints may go virtually unchallenged (Sen, 1999b:151).

For example, the 3 June 1993 was a landmark for South African history as, on that day, after months of negotiations, “the multi-party forum voted to set a date for the country’s first national, non-racial, one-person-one-vote election: 27 April 1994” (Mandela, 1994:602). Even though this provides evidence of the desire of the people for political freedom, it also manages to illustrate the difficulties of testing the above hypothesis: had the multi-party forum (white South Africans who took part in the referendum) voted against accepting a non-racial vote, political freedom would have been prohibited for the vast majority of the population. However, had the entire population voted for or against a multi-racial election, the answer would have been a foregone conclusion as proven by a landslide African National Congress (ANC) victory in 1994.

Furthermore, the argument that poor people, in general, are unconcerned with political freedom is in stark contrast to the bloodshed that has been spilt in many uprisings against totalitarian forms of government that have unraveled in developing countries like South Africa, South Korea, Thailand, Malaysia and Burma. Similarly, while civil and political rights have been widely denied in Africa, there have been numerous protests and uprising when the circumstances have permitted it (Sen, 1999b:151).

5.5.2. Arguments in favour of political freedom

The direct importance of political freedom from a capability perspective of development has been articulated in previous sections. In summary, people have reason to value freedom and, as a result of our social nature, to appreciate uncurbed participation in political and social activities. Furthermore, an informed formation of our social values requires open channels of communication and rhetoric. Therefore, political freedoms and civil liberties play a central role, which stems from the observation that greater access to information permits actions and choices that are better suited to the circumstances. Therefore, the following section looks at two arguments in favour of the capability approach’s perspective.

Moving from the direct importance to the instrumental role of political freedom, an economist is required to consider the “political incentives that operate on governments, on the persons and groups that are in office” (Sen, 1999b:152). In the presence of democracy, the rulers and decision makers have an incentive to listen to the grievances of its electorate as they require the majorities support for re-election.

For example, according to Sen (1981b:40-41), no extensive famine has transpired in a country governed by democratic values and a somewhat free press. The calamity of famines has been widespread in developing regions, like Sub-Saharan Africa, with

significant harmful repercussions. However, they have exclusively materialised in countries or regions that can be characterised as authoritarian states: they do not have free and fair elections comprised of alternative opposition parties that voice criticism through the freedom of press. Similarly, Sen (1983:757) states the “political system in India; makes it almost impossible for famine to take place. The presence of newspapers and diverse political parties make it imperative for the government in power to organise swift relief.”

Political freedom has an instrumental role in expanding economic freedoms that can only be understood by interpreting development through a broad perspective such as the capability approach. Placing freedom at the center of well-being, the capability approach reinterprets the connection between political and economic freedoms. Enhancing political rights increases the likelihood that a policy response to economic needs will be forthcoming, as highlighted above with the example of famines. Simultaneously political freedoms have a profound influence on the conceptualisation and comprehension of the nature of economic needs (Sen, 1999b:153).

According to Haug (1967:294), pluralism is a term “used to describe an open society in which individuals and groups have political freedoms and the safety to express disparate views. Political and civil rights move society towards a more pluralist conception of its reality in that it assists in harnessing the energies of the people into open discussion and debate. Disagreement and criticism contribute fundamentally to the provision of an adequate framework for the generation of informed choices. These processes are essential ingredients in the formation of society’s values and priorities as discussion can notably contribute to discovering accurate preferences.

The reach and effectiveness of an unfettered and open dialogue has an irreplaceable role in engendering an informed society and provides the populace with the access to knowledge that can assist in the decision making process. Society’s conception of its own reality and, therefore its own needs, relates to the social understanding of what can be done to positively combat common deprivations. Political and social discussions make an invaluable contribution to this understanding. Thus, ideals like the freedom of expression are cornerstones in the social response to economic needs are a precursor to the conceptualisation of the economic needs themselves (Sen, 1999b:155).

5.6. Conclusion

The initiative supported by the regression analysis is that social indicators, negative freedoms and social achievements require reflection and appreciation beyond their influence on aggregate utility. They are measures of the extent to which certain real interests of persons are being served, protected and promoted. Sub-Saharan African countries have developed slowly since independence. By and large, on the input side of

the process of development, Sub-Saharan countries and, in particular their governments have been unable to allocate resources affectively or provide the environment to support development.

The social indicators that reflect these achievements, such as, physicians per 100 000 people in society and access to sanitation and water resources are absolutely and relatively poor in the context of other developing regions. Therefore, the populations of this area are not free to pursue those goods that they value.

Negative rights protect the environment in which each person pursues his or her own conception of well-being. Negative freedoms, such as the freedom of press and the level of democracy, lay the foundation for the realisation of individual well-being. Once again, individuals in Sub-Saharan Africa are significantly disadvantaged as reflected in the low rankings the region receives in political freedom measurements.

The combination of poor social infrastructures and negative freedoms in Sub-Saharan societies has manifested over the last five decades into poor social achievements and high levels of deprivation. The evidence suggests that the region's relative and absolute performance has been dismal. The variables such as adult literacy rate, infant mortality rate and life expectancy over the last 30 years reflect this conclusion. In short, these inputs are able to provide a measure of the achievement a society is enjoying in servicing the people's real and vital interests. In contrast to other developing regions, having started from a similar vantage point at independence, Sub-Saharan Africa has fallen behind each region in all areas of human and economic development.

The regression model above neatly fits with the framework developed in the previous sections and supports the following claim that individual freedom is contingent upon access to resources and those basic goods that individuals require to live long and healthy lives. As a result, the appropriate variables stand out as having an aggregate and significant relationship with human development in the context of Sub-Saharan Africa.

The capability approach to development emphasises variables that specifically target the ends of the process, the expansion of human development. These inputs assist the members of society to attain certain goals and realise the fruits of their own free choices. This dissertation provides a framework with which policy makers may interpret development and one around which policy makers may build appropriate development policies.

The environment in which the development process unfolds seems to be less than adequate. In Sub-Saharan Africa, civil liberties have a positive and significant relationship with human development. However, democracy seems to harm human development in

the short term or at least for the time being in Sub-Saharan Africa. Therefore, the dissertation suggests further study into the nature of democracy in Sub-Saharan Africa.

6. IMPLICATIONS OF THE CAPABILITY APPROACH

6.1. Summary

The dissertation embraces a normative perspective of economists, such as Dasgupta (1990), Nussbaum (2000) and Sen (1998), which favour an ethical conception of well-being more pluralistic in reach than the ones on offer in much of the literature on welfare and development economics.

Aggregate income is a weak informational base for measuring well-being and is unable to provide an adequate picture of human development. If poverty is interpreted in the spirit of the capability approach as the deprivation of basic capabilities, a more illuminating picture is provided. Therefore, a better understanding of underdevelopment and development in Sub-Saharan Africa is provided for policy makers.

Development economics is about people and its primary field of interest is the manner in which people live and conduct themselves. In assessing individual advantage or disadvantage, economists must look at the individuals ability to do what they have reason to value.

Incomes and commodities are valued as means to other ends that are inherently valuable: the individual freedom to pursue their own conception of well-being. However, many contemporary development economists and policy makers continue to emphasise the growth of GDP as a primary measure of development.

The dissertation aligns itself with the capability approach to development in its primary premise that advocates the view that the primary target of development ought to go beyond a study of the level of per capita incomes as it has more significant moral implication of diminished lives, agonised existences and a large percentage of premature preventable deaths.

The dissertation advocates a fundamental shift in the measures that economists utilise in their measurement of underdevelopment. Accordingly, the dissertation suggests that the manner in which economists intellectualise the relationship between poverty and the lives that people lead requires alteration towards those items that are intrinsically valued.

The capability approach constitutes a paradigm shift based on an underlying confidence in the potential for a broader conception of development. The approach suggests that development ought to centre on the expansion of individual freedoms to facilitate each person's pursuit of their own conception of well-being. The approach focuses on the end objective of development – expanding freedoms, but it remains removed from any defined set of prescriptions as it is able to incorporate a far broader range of information into its evaluation. Therefore, it serves as broad conceptual framework for public policy and suggests an alternative to mainstream neoclassical theory, which may be particularly useful in the context of Sub-Saharan Africa where numerous developmental efforts have failed to create its desired results.

The dissertation provided a review of the formation and integration of the capability approach into mainstream development economics over time by tracing the historical progress of development theory and the conception of well-being. The evidence suggests that a gradual expansion in the informational basis has occurred while a superior conception of the relationship between poverty and human development has been formulated, refined and defended with an improved empirical tools and methods (Martinussen, 1995: 296).

The dissertation establishes an applicable notion of well-being, which may prove helpful in the context of Sub-Saharan Africa's development (or underdevelopment). To this end, the dissertation attempts to debunk certain types of rights and their relationship with one another. In turn, it explores how they are each related to welfare and preference satisfaction.

The capability approach offers development economics a meaningful and useful interpretation of the development process. By illustrating development as a production process, the dissertation attempts to steer public policy towards a broader interpretation of what it means to be underdeveloped and impoverished.

The capability approach's commences from the notion of needs. Appealing to the concept of needs enables development to be viewed as a complex production process with commodity consumption as an input, freedom as the background environment, and welfare and individual functionings as an output vector.

Viewing development as a production process in which basic goods serve as the inputs means that needs serve as a guide for public policy makers as the political and economic structure of a society will influence the distribution of well-being amongst the populace. This leads empirical investigations to a divergence from more common informational bases of ethical evaluations; namely, utilitarianism and libertarianism. The capability approach engenders a fuller conceptualization of deprivations and poverty than those offered by utilitarian and libertarian conceptions of well-being.

The capability approach leads to an alternative empirical focus that assigns weights to different explanatory variables and encourages the process of informational broadening. This dissertation reflects on the contribution of the capability approach and embraces the paradigm shift in favour of its broader informational basis. To this end, in light of the shift in emphasis, the empirical study undertaken recognises the insights that the paradigm shift may offer policymakers.

The dissertation utilises the broader informational basis introduced by the capability approach to interpret positive and negative rights (freedoms) by applying it to some crude Sub-Saharan African data in order to get a sense of the distribution of well being among each variable.

Independent and liberated Sub-Saharan Africa has theoretically created a free continent. Yet millions of Africans live in circumstances that are characterised using words like lawlessness and cohesion, which manifest in low life expectancy, high morbidity and mortality, low literacy and high levels of income poverty.

The dissertation uses regression analysis to uncover the determinants of human development in Sub-Saharan Africa. Accordingly, the dissertation develops a regression model with HDI as the dependent variable and primary school enrollment rate, the number of physicians per 100 000 people, real government expenditure on health care, fertility rate, a civil rights index and democracy index as the explanatory variables.

By infusing the capability approaches broader conception of well-being and by incorporating negative and positive freedoms, one is able to scratch the surface of Southern African development and take the literature and policy makers' one step closer in understanding the dynamics of its development path.

The dissertation suggests that the capability approach to development serves as a credible and accurate manner through which to view development, not only in the context of Sub-Saharan Africa, but also for the entire globe. In creating a distinction between the means and ends of development, the approach emphasizes the need for a paradigm shift towards the fundamental premise of development: the expansion of individual freedoms.

6.2. Conclusion

During the last four decades there has been a thrust to abolish one-dimensional conceptions of development and replace them with multidimensional notions of development. The dissertation has embraced this momentum of incorporating non-economic aspects into the developmental debate. The capability approach uses the

provides a conception of development that reveals practical insights into the process for policy makers.

The capability approach acknowledged the important contribution of economic growth to development as the benefits of growth can assist other development objectives. Chapter one provided an introduction to traditional development economic theory. It illustrated that capital accumulation, the level of domestic savings and the state play a crucial role in encouraging economic growth. However, the limitation of development economics arises in the underlying assumption of neoclassical economics that economic growth is an end in its own right.

The dissertation provided a robust argument that development theory must supercede its tendency to use income-metric measures to measure development; analysts must look beyond income to more abstract variables. The essence of the capability approach is that it suggests that development debate and policy prescriptions should center on the end objective of development in contrast to its means. An increasing number of non-economic variables have been included into the realm of development from an almost exclusive concentration on income and its growth to an inclusion of income distribution, the elimination of dependency, institutions, capacity building, sustainability and welfare. According to the capability approach, human development is a process that centers on enlarging individual choice. The Individual choices around which the development theory is centered are as follows: the opportunity to lead long and healthy lives, the opportunity to acquire knowledge and the opportunity to have access to resources needed for a decent standard of living.

The language of rights has been divided into two distinct types: namely, positive and negative rights. Each has made a substantial impact in recent years and has an important role in development economics. Both require consideration in policy debates and the conceptualisation and implementation of adequate policy. In development economics the focus has remained restrictive in the sense that the analysts have focused on either, negative rights and freedoms or positive rights and positive freedoms. The dissertation developed a notion of rights that bridged the cleavage between people's freedoms (and rights) and welfare (and happiness). In addition, it questioned whether one can detect an inherent conflict between the acknowledgment of positive and negative rights, in Sub-Saharan Africa by studying the relationship between political and civil rights, on the one hand, and improvements in the indices that are at the heart of welfare and positive rights on the other. By asking such a question, the paper attempted to disentangle the relationship and challenge the assumption that in many underdeveloped countries the people cannot afford political and civil liberties.

In order to justify this necessary divergence from more traditional approaches, the dissertation examined the respective shortfalls of utilitarianism and libertarianism informational basis. The dissertation identified the informational basis of utilitarianism and

libertarian to reveal the various inadequacies of these more standard theories found within the economic literature; each of which has a special emphasis on narrow and exclusive information. Subsequently, the dissertation compared and contrasted the two viewpoints and offered the conclusion that the cleavage between the two perspectives may be a misrepresentation of reality and less clinical than assumed.

The dissertation offered a synthesis that may be applicable for practical application. The dissertation argued that the difference between the two perspectives was based on the manner in which the two methods of reasoning dealt with the past and the future. Rights are not absolute: when dealing with interests there are degrees to their frustration. If one allows trade-offs between rights and utility, provided the trade-off is within an appropriate context, one can see that the cleavage between libertarian and utilitarian theories does not hinge upon the libertarian's avoidance of aggregation, but rather in their stipulation of the class of objects that is to be aggregated. The capability approach responded to these shortfalls by offering a synthesis between utilitarianism and libertarianism.

The dissertation suggested that the divide between utilitarianism and libertarianism was representation of a more general divide between consequential and deontological theories. The dissertation found that the distinction between an act and its consequence is far more difficult than it to isolate in practice than in theory. As a result, both theories tend to use a more blurred perspective in passing ethical evaluations. Moreover, the issue of aggregation hinges on a difference in which variables each theory allows aggregation and to what degree. Therefore, the view that these perspectives are incompatible may be largely misinformed.

The dissertation illustrated that the capability approach offers fresh insights into the development debate and engenders a fuller conceptualisation of deprivations and poverty than those offered by utilitarian and libertarian conceptions of well-being. By illustrating development as a production process, the chapter attempts to steer public policy towards a broader interpretation of what it means to be underdeveloped and impoverished.

As a consequence the dissertation encourages a different view from which to form the basis of public action that embraces the utility considerations and the rights of people, which stems from the aggregation of individuals' well-being. For an individual's well-being is morally significant as it reflects an ethically noteworthy and legitimate interest. In addition, a public action that contradicts a person's well-being could be rejected by that same person. The capability approach is offered in dissertation, focusing on a certain set of human interests that manifest themselves in claims for goods in an attempt to establish a logical progression from a focus on well-being to a discussion of commodity needs.

The capability approach comprehensively overcomes the obstacles that its predecessors with a broad conception of well-being. Understanding development as a dual process of expanding functionings and capabilities promotes a better understanding of what it

means to be deprived. Thus, the idea of well-being surpasses the limitations of narrow conceptions. Furthermore, the pluralistic conception integrates important variables into its space of considerations and enables policy makers a better framework in which to outline wider reaching and more effective policies.

The dissertation used the theoretical framework of the capability approach and the literature review to investigate development in Sub-Saharan Africa and readdress the issue of poverty and well-being. The momentum of the capability approach enabled the dissertation to undertake an empirical investigation of the development achievements of Sub-Saharan Africa seems relevant. The extended discussion of the concept of welfare, utility and freedom provides a robust framework for an empirical investigation. It was argued that income is a weak informational basis for measuring well-being and is unable to provide an adequate picture of the development process in isolation. The narrow focus on liberty, utility or income is unable to create a sound picture of the development process. If poverty is interpreted in the spirit of the capability approach and as the deprivation of basic capabilities that facilitate a free life, a more articulate and illuminating picture and understanding is presented. In addition, by focusing on the ends of development, the capability approach offered a perspective that recognises the critical role those non-income variables in expanding individual freedoms.

The dissertation was conceptual in nature and, as a result, remained general to the Sub-Saharan region. The intention was to investigate the relationship between a number of variables in Sub-Saharan Africa for the period of the 1990s and 2000s. The empirical evidence investigated the relationship between the variables on a cross-country basis. The investigation was an attempt to use the tools provided by regression analysis in conjunction with the conceptual framework outlined by the capability approach to form a sound interpretation of the current state of Sub-Saharan African development.

The initiative supported by the regression analysis was that social indicators, negative freedoms and social achievements require reflection and appreciation beyond their influence on aggregate utility or income. They are measures of the extent to which certain real interests of persons are being served, protected and promoted. Sub-Saharan African countries have developed slowly since independence. By and large, on the input side of the process of development, Sub-Saharan countries and, in particular their governments have been unable to allocate resources affectively or provide the environment to support development.

The capability approach to development emphasised variables that specifically target the ends of the process, the expansion of human development. The inputs assist the members of society to attain certain goals and realise the fruits of their own free choices. This dissertation provided a framework with which policy makers may interpret development and one around which policy makers may build appropriate development

policies. The environment in which the development process is less than adequate. In Sub-Saharan Africa, civil liberties have a significant and positive relationship with human development. However, democracy seems to harm human development, at least for the time being.

The statistically significant negative relationship between democracy and the HDI functionings (achievements) realised in Sub-Saharan Africa found in the regression model presented a difficulty for the capability approach. The capability approach vehemently suggested that political freedoms play a central constitutive and instrumental role in the expansion of freedom. Therefore, the dissertation reconciled the specific evidence presented in the regression analysis with the broader conception of development and well-being favoured in the dissertation.

6.3. Future Research

The dissertation offers various options for future research. By introducing a broader conception of well-being and interpreting development as a dynamic production process, the dissertation introduces scope for different explanatory variables to explain the end of objective of development, an expansion of individual freedom and choice. This new empirical contribution offers policy makers in developing countries a different focus upon which to base policy.

The dissertation offered a general model for human development in Sub-Saharan Africa. The objective was to illustrate how the capability approach offers a different empirical focus. In addition, it attempted to determine the general distribution of well-being across the explanatory variable. However, the empirical study remained general and focused on aggregate measures.

The data used in the dissertation is coarse, being merely aggregates for each country, and offer little information about the distribution of well-being within each country. The regression model assisted in establishing how and in what way; the explanatory variables - civil rights, democracy, total primary school enrolment, physicians per 100 000 people, health care expenditure by government and fertility rate - are associated with one another and the dependent variable, HDI. While development economics is certainly interested in the aggregate well-being of a particular society or region, it is equally fascinated by its distribution within that society or region.

The capability approach offers a useful framework to be more specific in its application. A comparison between the Sub-Saharan African region and other developing countries would provide a useful contribution to research. The intention would be to determine the relationship between democracy and human development in other regions. The study would be able to determine whether the negative relationship is specific to Sub-Saharan

Africa of all developing countries. It would be worth investigating whether it is the nature of democracy or the general low level across the Sub-Saharan Africa region that provided the foundation for the relationship.

Future research would be encouraged to look at specific countries and use time-series regression analysis to determine the explanatory variables specific to development in different countries. A comparison may provide more insight into the relationship between the explanatory variables and human development.

One of the most fundamental problems in development economics and welfare debates concerns the Pareto optimal combination of government, market, community and household action. However, this raises a separate issue: what are the specific institutional arrangements for meeting these duties?

The question makes a specific reference to the status of the country in question. In particular, the successful clarification of this matter depends vitally upon the appropriate range and depth of the governments involvement in the production process and, therefore, requires that one is aware of the country's wealth and its distribution, the reliability of its administrative capabilities, its specific motivations, the performance of its markets, its existing pattern of community security amongst numerous other case-specific questions. A well-rounded contribution to the role of the market requires consideration of the issues of the distribution that result from market activities. The dissertation discussed pareto optimality, but ignored the distribution of utility or freedoms that result from unfettered markets. However, the case in which no member of society may have their freedom enhanced without reducing the freedom of others can exist in conjunction with inequalities

The problem of inequalities becomes magnified in the capability perspective as attention shifts away from incomes or utilities towards the freedoms that people themselves value. The equity problems require urgent attention in many developing countries and social interventions that include government support have a critical role to play in rectifying the matter. However, the negative repercussion of meddling with the invisible hand of the market may have a harmful effect on efficiency. Therefore, policy makers ought to be cautious of the relationship between efficiency and equality. Hence, both variables need to be considered simultaneously in discourse and policy.

On a more technical note, the dissertation raises the appropriateness of the political democracy indexes that are commonly used to measure political rights and liberties. It provides impetus to motivate more research to be directed towards the manner in which rights, liberties and democracy is scaled. Better measurements and the need for better data collection methodology would provide a more robust framework upon which future studies may contribute to development.

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8. APPENDIX

Appendix 1: GNI per capita, Secondary Sector as a % of GDP, Gross Domestic Savings and Government Expenditure as a % of GDP (2000 – 2004)

	GNI per capita		Industry	Gross Domestic Savings	Government Expenditure
	Value (\$)	Growth	(% of GDP)	(% of GDP)	(% of GDP)
Country	2004	2000 - 2004	2000 - 2004	2000 - 2004	2000 - 2004
Burundi	90	-0.8	18.1	12.1	28.1
Ethiopia	110	1.8	14.3	-21.4	27.1
Congo (DRC)	120	-1.3	21.4	55.2	10.8
Guinea Bissau	160	-1.9	15.9	-26.3	40.8
Malawi	170	-0.9	16.7	-3	33.2
Eritrea	180	-3.9	23.9	-1.5	79.6
Rwanda	220	1.9	21.2	13.5	21.2
Niger	230	-0.7	12.1	17.4	18.6
Mozambique	250	5.5	25.6	22.3	28.9
Chad	260	9.6	20.9	11.9	20.1
Uganda	270	2	20.7	20.9	22.9
Gambia	290	1	13.3	3.1	25.4
Madagascar	300	-0.2	14.9	2.8	16.7
Cent. Afr. Rep.	310	-2.4	21.7	-1.1	14.2
Tanzania	330	4.4	16.2	22.5	18.4
Burkina Faso	360	1.9	18.6	-16.7	21.8
Mali	360	1.5	24	16	22.5
São T. & Príncipe	370	1.5	15.8	24.1	72
Ghana	380	2.5	25.2	9.2	28.8
Togo	380	-0.5	19.7	17.5	15.4
Nigeria	390	3	49.2	58.5	40.6
Mauritania	420	2.1	27.9	19.2	34.5
Zambia	450	2.6	26.5	22.5	31
Guinea	460	0.6	31.7	-36.1	18.2
Kenya	460	0.3	17.4	22.6	21.1
Benin	530	1.3	14.1	15.7	19.6
Comoros	530	-0.5	11.9	-9.3	21.6
Zimbabwe	640	-6.7	14.5	2.1	29.1
Senegal	670	2.5	21.8	21.5	21.3
Lesotho	740	2.6	41.9	-1.4	44.7
Congo	770	1.1	65	-9.1	30.4
Côte d'Ivoire	770	-2.5	23.3	16.1	18.8
Cameroon	800	2.3	32.3	29.2	15.9
Angola	1030	4.1	64.8	53.7	51
Swaziland	1660	1.8	46.3	32.1	30.3
Cape Verde	1770	2.6	14.9	7.3	35.4
Namibia	2370	2.7	30.2	44.4	36
Equat. Guinea	2700	23.3	88.6	38.5	16.1
South Africa	3630	2.6	31.9	37.2	26.1
Gabon	3940	-1	53.2	47.7	25.8
Botswana	4340	5.7	51.1	54.4	41.9

Mauritius	4640	3.5	30.5	20.8	23.8
Seychelles	8090	-1.8	29.8	38	51.4
Africa	811	1.9	35.9	36.8	28.3

Source: African Development Bank, 2006: 24-35

Appendix 2. GDP Per Capita and Selected Social Indicators

		GDP per capita	Life expectancy at Birth	Life expectancy at Birth	Life expectancy at Birth	Infant Mortality	Infant Mortality	Gini index	Adult illiteracy rate	Adult illiteracy rate
		(PPP US\$)	(years)	(years)	(% Change)	(per 1,000 live births)	(per 1,000 live births)		(% Adults)	(% Adults)
		2003	1970-1975	2000-2005		1970	2003		2003	2003
Medium Human Development	Brazil	7,790	59.5	70.3	18.15	95	33	59.3	11.6	88.6
	Sri Lanka	3,778	63.1	73.9	17.12	65	13	33.2	9.6	88.6
	South Africa	10,346	53.7	49	-8.75	..	53	57.8	17.6	80.9
	India	2,892	50.3	63.1	25.45	127	63	32.5	39	47.8
Low Human Development	Mozambique	1,117	40.7	41.9	2.95	163	109	39.6	53.5	31.4
	Mali	994	38	47.8	25.79	225	122	50.5	81	11.9

United Nations, 2005c

Appendix 3: Political and Civil Liberties for a Selection of Sub-Saharan African Countries

	Governance Indices			Government Expenditures			Access to Information	
	Level of		Corruption				Digital	Press
	Democracy	Political	Perceptions	(as a percent of			Access	Freedom
	(-10 - 10, 10 = most democratic)	Competition (0 - 5, 5 = most competitive)	Index (0 - 10, 10= least corrupt)	Gross Domestic Product)			Index (1 - 100, 100= most access)	Index (0 - 100, 0= most free)
2002	2002	2003	Public 2000	Public Education {b} 2000	Military 2000	2002	2004	
Sub-Saharan Africa	..	..	..	2.7	..	1.9	..	..
Angola	-3	3	1.8	1.9	2.7	4.9	11	66
Botswana	9	4	5.7	3.7	..	3.7	43	30
Burkina Faso	0	4	..	1.8	..	1.7	8	39
Burundi	0	3	..	2	3.4	6	10	75
Cameroon	-4	3	1.8	1.1	3.2	1.4	16	67
Ethiopia	1	3	2.5	1.1	4.8	9.8	10	66
Ghana	6	4	3.3	2.4	..	1	16	28
Guinea	-1	3	..	1.8	1.9	1.5	10	71
Kenya	8	4	1.9	2.1	6.3	1.6	19	60
Lesotho	8	3	..	4.9	10	3.1	19	40
Madagascar	7	4	2.6	1.6	3.2	1.2	15	41
Malawi	5	4	2.8	3	..	0.9	15	52
Mozambique	6	4	2.7	3.8	..	2.4	12	45
Namibia	6	4	4.7	4.8	..	3.4	39	34
Niger	4	0	..	1.5	2.8	1.1	4	56
Nigeria	4	0	1.4	0.4	..	0.8	15	53
Rwanda	-4	2	..	3	2.8	3.8	15	82
Senegal	8	4	3.2	2.6	3.2	1.4	14	37
Sierra Leone	5	3	2.2	2.6	..	3.6	10	58
South Africa	9	4	4.4	3.6	..	1.5	45	24
Tanzania, United Rep	2	3	2.5	2.1	..	..	15	50
Uganda	-4	2	2.2	3.1	..	2.2	17	44
Zambia	1	3	2.5	2.9	..	0.6	17	63
Zimbabwe	-7	2	2.3	3.8	..	4.9	29	89

Source: Freedom House, 2003

Appendix 4: Selected Variables for Sub-Saharan Countries

Country	HDI	EDUPRIENR	PHYSICIANS	HEACARGOV	FERTILITY	CIVILRIGHTS	DEMOC
Angola	0.38	53.28	7.7	44.17	7.2	-28.57	-3
Benin	0.42	44	5.76	18.29	5.68	-66	6
Botswana	0.59	82.25	28.76	300	3.94	-26	9
Burkina Faso	0.3	27.5	4	12.23	6.8	-20	0
Burundi	0.34	34.32	5.15	11.21	6.8	-16.67	0
Cameroon	0.5	30	7.4	15.58	4.7	-25	-4
Central African Rep	0.36	43.13	3.5	29.7	4.92	0	5
Chad	0.38	41.81	2.53	12.92	6.65	-16.67	-2
Congo	0.49	50	25.1	14.04	6.29	-33.33	-4
Congo, Dem Rep	0.37	31.22	6.9	5.33	6.7	16	-7
Côte d'Ivoire	0.4	50.82	9	20.32	4.64	33.33	4
Equatorial Guinea	0.7	72.93	24.6	74.02	5.89	-14.29	-5
Eritrea	0.44	31.43	3	23.44	5.28	0	-7
Ethiopia	0.36	29.81	2.86	5.67	6.75	-28.57	-1
Gabon	0.65	68	28.94	78	5.4	-33	-4
Gambia	0.45	57.19	3.5	38.53	4.79	100	-5
Ghana	0.57	56	9	35.76	4.21	-75	6
Guinea	0.43	37.04	9.41	33	5.83	-28.57	-1
Guinea-Bissau	0.35	37	16.6	19.91	5.99	-20	5
Kenya	0.49	66	13.2	24.4	4.15	-50	8
Lesotho	0.49	64.25	5.4	79.69	4.45	-40	8
Liberia	NA	35.14	2.3	96.39	6.8	-14.29	0
Madagascar	0.47	63.48	8.69	13.18	5.68	-25	7
Malawi	0.39	35	4.95	13.65	6.34	-33.33	5
Mali	0.33	34.46	4.44	11.58	7	-60	6
Mauritania	0.47	58.45	13.8	32.58	6	-16.67	-6
Mozambique	0.35	36.82	2.44	31.68	5.86	-33.33	6
Namibia	0.61	89.63	29.5	350	4.87	0	6
Niger	0.29	20.39	3.34	15.6	8.8	-20	4
Nigeria	0.47	58	26.92	7.19	5.42	-20	4
Rwanda	0.43	91.81	1.87	24.42	5.77	-16.67	-4
Senegal	0.44	53.61	7.5	37.04	5.11	-25	8
Sierra Leone	0.27	40	7.3	10.86	6.5	-40	5
South Africa	0.67	92	69.21	269.93	2.85	-50	9
Tanzania	0.41	48.86	2.27	12.14	5.03	-40	2
Togo	0.5	78.3	5.66	31.87	5.36	-16.67	-2
Uganda	0.49	60	4.7	32.78	7.1	-20	-4
Zambia	0.39	72.27	6.9	27.61	5.66	10	1
Zimbabwe	0.49	81	5.73	64.33	4.5	150	-7

Key:

HDI= Human Development Index, (United Nations, 2006)

EDUPRIENR= Total Primary School Enrolment Rate, (United Nations, 2006)

PHYSICIANS= Physicians per 100 000 of the population, (United Nations, 2006)

HEACARGOV= Real Government Health Care Expenditure per Capita, (United Nations, 2006)

FERTILITY= Fertility Rate, (United Nations, 2006)

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Dissertation – November 2006

CIVILRIGHTS= Civil Rights Ranking change from 1980 to 2003, (Freedom House. 2006)
POLRIGHTS= Level of Democracy and the functioning of its apparatus, (United Nations, 2006 & Freedom House, 2006)

Appendix 5: Regression Model without the logarithmic of Health Care

Dependent Variable: HDI				
Method: Least Squares				
Date: 05/14/05 Time: 15:17				
Sample: 1 39				
Included observations: 38				
Excluded observations: 1				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.509777	0.080483	6.333986	0.0000
EDUPRIENR	0.001770	0.000643	2.752953	0.0098
PHYSICIANS	0.002069	0.001019	2.030838	0.0509
HEACARGOV	0.000244	0.000177	1.378977	0.1778
FERTILITY	-0.034540	0.010510	-3.286401	0.0025
CIVILRIGHTS	-0.000743	0.000273	-2.727186	0.0104
DEMOC	-0.008503	0.002173	-3.913435	0.0005
R-squared	0.788044	Mean dependent var	0.445526	
Adjusted R-squared	0.747021	S.D. dependent var	0.103524	
S.E. of regression	0.052070	Akaike info criterion	-2.907646	
Sum squared resid	0.084049	Schwarz criterion	-2.605986	
Log likelihood	62.24528	F-statistic	19.20951	
Durbin-Watson stat	1.941499	Prob(F-statistic)	0.000000	

Source: Eviews Results

Appendix 6: Regression Model Run with GDP per Capita as the dependent variable.

Dependent Variable: GDPCAP				
Method: Least Squares				
Date: 05/14/06 Time: 16:13				
Sample: 1 39				
Included observations: 39				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EDUPRIENR	-7.844041	10.78530	-0.727290	0.4723
PHYSICIANS	89.81981	14.48827	6.199484	0.0000
LOG(HEACARGOV)	1134.453	199.9831	5.672744	0.0000
FERTILITY	-145.8874	170.6988	-0.854648	0.3991
CIVILRIGHTS	-3.375273	4.372046	-0.772012	0.4458
DEMOC	-21.84594	33.76390	-0.647021	0.5222
C	-1622.624	1371.530	-1.183076	0.2455
R-squared	0.864878	Mean dependent var	1923.704	
Adjusted R-squared	0.839542	S.D. dependent var	2115.822	
S.E. of regression	847.5390	Akaike info criterion	16.48370	
Sum squared resid	22986313	Schwarz criterion	16.78229	
Log likelihood	-314.4321	F-statistic	34.13703	
Durbin-Watson stat	1.823910	Prob(F-statistic)	0.000000	

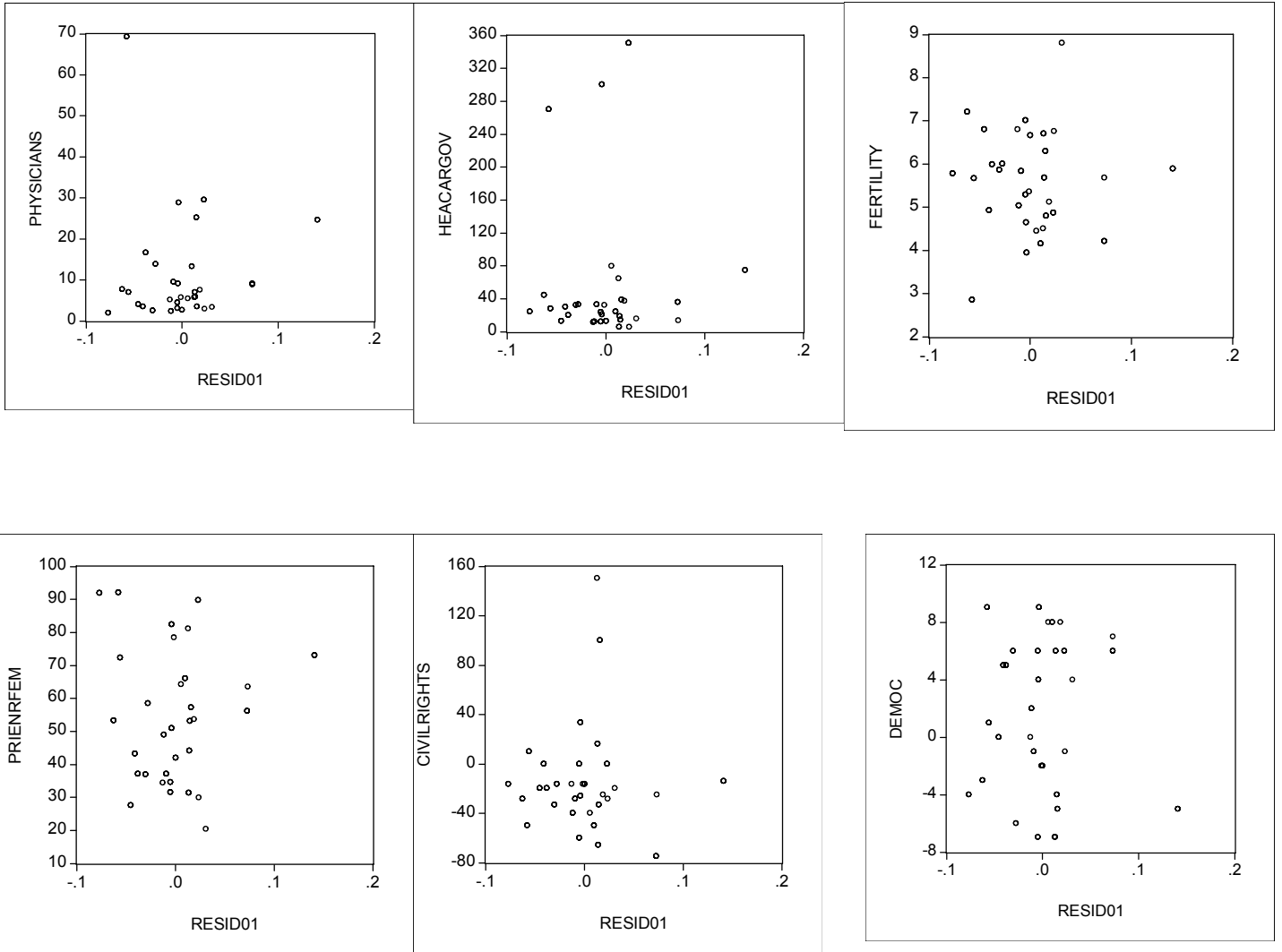
Source: Eviews Results

Appendix 7: Regression Model Run with an alternative measure of political rights sourced from the United Nations

Dependent Variable: HDI				
Method: Least Squares				
Date: 05/14/05 Time: 15:47				
Sample: 1 39				
Included observations: 38				
Excluded observations: 1				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.362676	0.086432	4.196077	0.0002
EDUPRIENR	0.001952	0.000713	2.736590	0.0102
PHYSICIANS	0.002270	0.001136	1.997948	0.0546
HEACARGOV	0.000243	0.000207	1.172462	0.2499
FERTILITY	-0.025217	0.011157	-2.260316	0.0310
CIVILRIGHTS	-0.000423	0.000275	-1.536095	0.1347
POLRIGHTS	0.017219	0.006888	2.499738	0.0179
R-squared	0.736455	Mean dependent var	0.445526	
Adjusted R-squared	0.685446	S.D. dependent var	0.103524	
S.E. of regression	0.058062	Akaike info criterion	-2.689798	
Sum squared resid	0.104506	Schwarz criterion	-2.388137	
Log likelihood	58.10616	F-statistic	14.43781	
Durbin-Watson stat	2.006590	Prob(F-statistic)	0.000000	

Source: Eviews Results

Appendix 8: Residual X-Y Scatter Plot against Explanatory Variables



Source: Eviews Results

Appendix 9: White Heteroskedacity Test

White Heteroskedasticity Test:				
F-statistic	0.820416	Probability	0.629472	
Obs*R-squared	10.88574	Probability	0.538735	
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Date: 11/24/06 Time: 00:06				
Sample: 1 39				
Included observations: 33				
Excluded observations: 6				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.026646	0.022144	-1.203295	0.2429
PRIENRFEM	1.24E-05	0.000329	0.037732	0.9703
PRIENRFEM^2	5.36E-07	2.75E-06	0.194862	0.8475
PHYSICIANS	0.000175	0.000205	0.855737	0.4023
PHYSICIANS^2	-1.01E-06	3.07E-06	-0.330616	0.7444
LOG(HEACARGOV)	0.006916	0.004942	1.399640	0.1769
(LOG(HEACARGOV))^2	-0.000941	0.000695	-1.353909	0.1909
FERTILITY	0.003334	0.006291	0.529965	0.6020
FERTILITY^2	-0.000187	0.000509	-0.366883	0.7176
CIVILRIGHTS	-1.33E-05	2.62E-05	-0.506444	0.6181
CIVILRIGHTS^2	-4.12E-08	2.43E-07	-0.169939	0.8668
DEMOC	-0.000117	0.000188	-0.619410	0.5426
DEMOC^2	5.18E-06	4.06E-05	0.127484	0.8998
R-squared	0.329871	Mean dependent var	0.001760	
Adjusted R-squared	-0.072207	S.D. dependent var	0.003658	
S.E. of regression	0.003788	Akaike info criterion	-8.026880	
Sum squared resid	0.000287	Schwarz criterion	-7.437346	
Log likelihood	145.4435	F-statistic	0.820416	
Durbin-Watson stat	2.331419	Prob(F-statistic)	0.629472	

Source: Eviews Results

Appendix 10: Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	0.117863	Probability	0.889329	
Obs*R-squared	0.320972	Probability	0.851730	
Test Equation:				
Dependent Variable: RESID				
Method: Least Squares				
Date: 11/24/06 Time: 00:03				
Presample and interior missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008773	0.090195	0.097268	0.9233
PRIENRFEM	-0.000109	0.000787	-0.138959	0.8906
PHYSICIANS	0.000108	0.000972	0.111370	0.9122
LOG(HEACARGOV)	-0.000861	0.017737	-0.048525	0.9617
FERTILITY	-0.000168	0.010919	-0.015377	0.9879
CIVILRIGHTS	3.06E-06	0.000275	0.011150	0.9912
DEMOC	-0.000165	0.002459	-0.067215	0.9470
RESID(-1)	-0.078798	0.259051	-0.304181	0.7636
RESID(-2)	-0.115712	0.253488	-0.456478	0.6522
R-squared	0.009726	Mean dependent var	-1.35E-16	
Adjusted R-squared	-0.320365	S.D. dependent var	0.042607	
S.E. of regression	0.048958	Akaike info criterion	-2.968693	
Sum squared resid	0.057526	Schwarz criterion	-2.560555	
Log likelihood	57.98344	F-statistic	0.029466	
Durbin-Watson stat	1.788688	Prob(F-statistic)	0.999989	

Source: Eviews Results