


DEPARTMENT OF ECONOMICS

UNIVERSITY OF NATAL

DURBAN.



THE MIGRANT LABOUR SYSTEM AND SOUTH  
AFRICAN ECONOMIC DEVELOPMENT 1936-1970

by

JILL NATTRASS

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TABLE OF CONTENTS

	<u>Page</u>
Table of Contents	i.
List of Tables in the Main Text	v.
List of Tables in the Appendices	viii.
Chapter 1 - Introduction	1
Chapter 2 - The Theoretical Approaches to Labour Migration	14
2.1 Introduction	14
2.2 Aggregate Economic Models of Labour Migration	17
2.2.1 The Role of Labour in a Neoclassical World	18
2.2.2 The Role of Labour in a Surplus Situation	20
2.2.3 Labour Migration in a Surplus Situation - An Alternative View	23
2.3 The Shortcomings of the Aggregate Economic Models as Explanations of the Nature and Effects of Labour Migration	26
2.3.1 The Causes of Migration	27
2.3.2 The Duration of Migration	34
2.3.3 Migration and Resource Allocation	38
2.3.4 The Effects of Migration on the Supplying Regions	41
2.3.5 The Effects of Migration on the Host Region	46
Chapter 3 - A More General Theoretical Framework	52
3.1 Introduction	52
3.2 The Evolution of the Push and Pull Forces with Economic Development	59
3.3 The Migration Process and the Evolution of the Forces Affecting the Migrants	62

	<u>Page</u>
3.3.1 The Migration Process and Income Levels in the Supplying Economy	62
3.3.2 The Migration Process and the Growth of Income in the Supplying Regions	65
3.4 The Relationship Between the Development Path and Labour Migration	69
3.5 Conclusions: Migrant Labour and Economic Develop- ment in South Africa	81
Chapter 4 - The Migrant Labour System and the Development of the Modern Sector of the South African Economy	83
4.1 Introduction	83
4.2 The Basis of the Estimate	86
4.3 The Migrant Labour System and the Labour Supply	90
4.3.1 The Magnitude of the System	90
4.3.2 Education Selection Among South African Domestic Migrants	94
4.3.3 South African Domestic Temporary Migra- tion as an Age Selective Process	98
4.4 Regional Migration Patterns	105
4.5 The Impact of the Migrant Labour System on Capital Accumulation in the Modern Sector -	112
4.5.1 The Migratory Labour System and Capital Accumulation - The Neoclassical View	112
4.5.2 The Migrant Labour System and Capital Accumulation - The Neo-Marxist View	113
4.5.3 The Magnitude of the 'Trade Off' Between the Two Paradigms	116
4.6 Summary of the Main Findings in this Chapter	123
4.7 Conclusions	126
Chapter 5 - The Impact of the System of Oscillating Migration on the Supplying Region - A Case Study of KwaZulu	132
5.1 Introduction	132

	<u>Page</u>
5.2 The Size and Nature of the Stream of Oscillating Migrants Over the Period 1936-1970	133
5.3 The Demographic Effects on the Supplying Economy	138
5.4 Temporary Migration and the Standards of Living in the KwaZulu Rural Areas	142
5.4.1 The Migrant Labour System and the Labour Supply	142
5.4.2 Remittances from Migrants and Domestic Standards of Living	147
5.5 The Consumption Effect of the Migratory Labour System	157
5.6 The Migrant Labour System and Production in KwaZulu.	167
5.6.1 The Migrant Labour System and Capital Accumulation in KwaZulu	168
5.6.2 Migrant Labour and Income Generating Leakages in the System	174
5.7 The Impact of the Migrant Labour System on the Development of KwaZulu - A Summary of the Main Findings.	178
Chapter 6 - The Migrant Labour System and South Africa's Future Development	184
6.1 Introduction	184
6.2 The Evolution of the Forces Affecting Domestic Migration in South Africa	189
6.2.1 The Evolution of the Rural Push Forces	190
6.2.2 The Evolution of the Rural Pull Forces	191
6.2.3 The Evolution of the Urban Pull Forces	194
6.2.4 The Evolution of the Urban Push Forces	198
6.3 The Future of Domestic Oscillating Migration in South Africa	200

	<u>Page</u>
6.3.1 Policy Measures Designed to Reduce the Social and Economic Costs of the Migrant Labour System	202
6.3.2 Measures Designed to Reduce the Overall Dependency of the Homeland Areas on the Modern Sector of South Africa	205
6.4 The Future Outlook	208
Appendix A	218 - 246
Appendix B	247 - 265
Appendix C	266 - 278
Appendix D	279 - 283
Appendix E	284 - 308
Bibliography	309 - 340

LIST OF TABLES IN THE MAIN TEXT

<u>Table Number</u>	<u>Table Heading</u>	<u>Page</u>
4.1	An Estimate of the Total Number of Migrants in the Modern Sector of the South African Economy on the Census Date in 1970.	88
4.2	A Comparison of the Estimations of the Number of Migrants in the South African Economy.	89
4.3	The Economic Significance of Migrant Labour in the South African Economy in 1970.	91
4.4	An Estimate of the Number of African Temporary Migrants Absent from South Africa's Rural Areas on the Census Dates in 1936, 1946, 1960 and 1970.	93
4.5	A Comparison of the Educational Profiles of African Males in Homeland and White Regions of South Africa and the School-Going Populations in the Areas in 1970.	96
4.6	Time Trends in Age Specific Migration Rates for African Males from South Africa's Rural Areas for the period 1936-1970.	99
4.7	The Comparative Age Distribution of African Male Migrants: Permanently Settled African Workers and the Total African Labour Force.	102
4.8	Age Specific Male Migration Rates from the Homeland Rural Areas for the Xhosa, the Zulu, the Pedi and the Tswana People of South Africa in 1970.	107
4.9	Estimated Distribution of Migrants by Industry Outside Homeland Areas in South Africa in 1970.	109

<u>Table Number</u>	<u>Table Heading</u>	<u>Page</u>
4.10	An Estimate of the Contribution to Gross Domestic Product that has Resulted from Perpetuation of the Migrant Labour System.	119
5.1	An Estimate of the Number of Male African Migrants from the Rural Areas that now form KwaZulu's Rural Areas for the Census Dates in 1936, 1946, 1960 and 1970.	134
5.2	An Estimate of the Migration Patterns of Migrant Men from the Areas now Rural KwaZulu for 1936, 1946, 1960 and 1970.	135
5.3	Estimates of the Numbers of Female Migrants from the Rural Areas of Natal that now form the Rural Areas of KwaZulu on the Census Dates in 1936, 1946, 1960 and 1970.	137
5.4	Comparative Age Distributions of South African Populations in 1970.	139
5.5	Distribution by Age Group of Adult Male Workers in KwaZulu in 1970.	141
5.6	The Economic Significance of Migrants' Earnings and Remittances to KwaZulu in Current Prices.	148
5.7	A Comparison of the Two Estimates of KwaZulu Migrants' Earnings and Remittances to KwaZulu in 1970.	150
5.8	Remittances Including Those in Kind in 1970. Estimated from the Bureau of Market Research Studies.	153
5.9	A Comparison of the Expenditure Patterns of Multiple and Single African Households in the Durban-Pinetown Area in 1970.	158

<u>Table Number</u>	<u>Table Heading</u>	<u>Page</u>
5.10	A Comparison of the Spending Patterns of Permanently Settled African Urban Male Workers and Those of Migrant Labourers.	161
5.11	Estimate of Average Rural Family Incomes in KwaZulu in 1970 and a Comparison with those of An Urbanised African Family.	165
5.12	Some Indicators of Investment in the KwaZulu Rural Areas for the Period 1936-1970 - Selected Indicators Only.	169
6.1	Indicators of the Evolution of the Urban Forces That Act upon Migration Streams.	196

LIST OF TABLES IN THE APPENDICES

<u>Table Number</u>	<u>Table Heading</u>	<u>Page</u>
<u>Appendix A</u>		
A.1	Estimation of the Number of Migrants from South Africa's Rural Areas in 1970.	221
A.2	Ratio of Adult Female Age Cohorts to Children 0-14 years for Selected South African Populations.	222
A.3	Masculinity Ratios in Certain Selected South African Populations.	224
A.4	Foreign African In-Migrants to South Africa 1936-1970.	225
A.5.1	Estimate of African Male Migrants from the Rural Areas of South Africa in 1970.	228
A.5.2	Estimate of the Numbers and Age Characteristics of African Female Migrants from the Rural Areas of South Africa in 1970.	229
A.6.1	Estimate of the Numbers and Age Characteristics of African Male Migrants from the Rural Areas of South Africa in 1960.	230
A.6.2	Estimate of the Numbers and Age Characteristics of African Female Migrants from the Rural Areas of South Africa in 1960.	231
A.7.1	Estimate of the Number and Age Characteristics of the African Male Migrants from the Rural Areas of South Africa in 1946.	232

<u>Table Number</u>	<u>Table Heading</u>	<u>Page</u>
Appendix A contd:		
A.7.2	Estimate of the Number and Age Characteristics of the African Female Migrants from the Rural Areas of South Africa in 1946.	233
A.8.1	Estimate of the Numbers and Age Characteristics of African Male Migrants from the Rural Areas of South Africa in 1936.	234
A.8.2	Estimate of the Numbers and Age Characteristics of African Female Migrants from the Rural Areas of South Africa in 1936.	235
A.9	Estimate of African Migrants from Non Homeland Rural Areas of South Africa in 1970.	236
A.10	Estimate of the Geographical Distribution of Homeland Citizens by Educational Level in 1970.	237
A.11	Estimate of the Stabilised Work Force in White Areas.	238
A.12	Estimates and Characteristics of the Male Xhosa Migrants from Homeland Rural Areas in 1970.	239
A.13	Estimates and Characteristics of the Male Zulu Migrants from Homeland Rural Areas in 1970.	240
A.14	Estimates and Characteristics of the Male Pedi Migrants from Homeland Rural Areas in 1970.	241
A.15	Estimates and Characteristics of the Male Tswana Migrant from Homeland Rural Areas in 1970.	242
A.16	$X^2$ Test on Table 8.	243

<u>Table Number</u>	<u>Table Heading</u>	<u>Page</u>
Appendix A contd:		
A.17	An Estimate of the Saving in Social Investment in Housing that has Resulted from the Perpetuation of the Migrant Labour System.	244
A.18	Estimate of the Loss of Productivity in the Migrant Labour System that could be Offset by the Increased Output Resulting from Investment Switched from Social Capital to Productive Capital.	246
<u>Appendix B</u>		
B.1.1	An Estimate of the Number of Zulu Male Migrants from Homeland Rural Areas in 1970.	251
B.1.2	An Estimate of the Number of Zulu Female Migrants from Homeland Rural Areas in 1970.	252
B.2.1	Estimate of the Number of Male Migrants from the Homeland Rural Areas in 1960.	253
B.2.2	Estimate of the Number of Female Migrants from the Rural Areas of KwaZulu in 1960.	255
B.3.1	Estimate of Male Migrants from the Areas Now Rural KwaZulu in 1946.	257
B.3.2	Estimate of Female Migrants from the Areas Now Rural KwaZulu in 1946.	259
B.4.1	Estimate of the Number of Male Migrants from the Rural Areas of Natal that are now KwaZulu in 1936.	260
B.4.2	Estimate of the Number of Female Migrants from the Rural Areas of Natal that are now KwaZulu in 1936.	262

<u>Table Number</u>	<u>Table Heading</u>	<u>Page</u>
Appendix B contd.		
B.5	Estimate of the Number of Zulu Migrants from All Rural Areas in South Africa in 1970.	263
B.6	Estimate of the Number of Zulu Migrants From Rural Areas that are not from Homeland Rural Areas in 1970.	265
<u>Appendix C</u>		
C.1	A Comparison of the Various Estimates of Remittance Rates of Migrant Workers.	274
C.2	A Summary of the Magnitudes Assigned to the Variables in Income and Remittance Estimates.	275
C.3	Estimates of Earnings and Remittances of Male Migrants from KwaZulu Rural Areas in 1936, 1946 and 1960-1970.	276
<u>Appendix D</u>		
D.1	Indicators of Investment in the Rural Areas of KwaZulu 1936, 1946, 1960 and 1970.	280
D.2	Output of Maize in African Reserve Areas Over the Period 1936-1970.	282
D.3	Estimate of the Opportunity Cost of the Migrant Labour System to KwaZulu in Terms of Lost Employment Opportunities over the Period 1936-1970.	283

## CHAPTER 1

### INTRODUCTION.

*"One reason why modern life is so uncomfortable is that we have grown self-conscious about things that used to be taken for granted. Formerly people believed what they believed because they thought it was true, or because it was what all right-thinking people thought. But since Freud exposed to us our propensity to rationalisation and Marx showed how our ideas spring from ideologies we have begun to ask: Why do I believe what I believe? The fact that we ask such questions implies that we think that there is an answer to be found but, even if we could answer them at one layer, another remains behind: Why do I believe what I believe about what it is that makes me believe it? So we remain in an impenetrable fog. Truth is no longer true. Evil is no longer wicked. 'It all depends on what you mean.' But this makes life impossible - we must find a way through.*  
Robinson [169] p. 7.

Historically economic development has inevitably implied that substantial structural changes take place in the economic organisation of the society in which it has occurred.

*"...In the idealised life cycle of historical development a successfully evolving economic system is likely to proceed from agrarianism, through dualism to economic maturity"*  
Fei and Ranis [54] p.37.

Although there is no strict demarcation between the three phases of the economic life cycle, each has its own distinct characteristics. In the agrarian or traditional society the main

economic activity is subsistence agriculture, standards of living in the economy are low and little or no capital accumulation takes place.

On the other hand the dual economy is a far more dynamic and stimulating society. Here a modern industrial sector, making use of advanced technology and capital, exists side by side with the traditional agrarian society, which largely still practices subsistence agriculture. As the dual economy continues to evolve, however, the agrarian sector becomes less and less significant, both in terms of its contribution to the total output of the economy and in terms of its contribution to total employment. As the agrarian sector diminishes in relative importance, so the modern capital intensive sector becomes increasingly significant, until finally this sector dominates the economic scene. In the final phase of this life cycle, both sectors of this stylised economy use capital and modern techniques of production but, as economic growth proceeds further, the relative importance of the agricultural sector continues to diminish, though clearly the output of the sector is likely to continue to grow in absolute terms.

The evolution of a dual economy is essentially a process of economic transformation and, with this transformation, there will be a flow of productive resources from the agrarian sector to the modern sector. Labour will be drawn by the prospect of more productive jobs in the modern sector, at more attractive rates

of pay and capital by the more profitable openings for investment in the industrial sector.

The pattern and rate of economic evolution in a dual economy is in fact governed by the relationship that exists between the growth of the labour supply, originating mainly in the agrarian sector and supplied to the modern sector by migration and the rate at which the modern sector is able to absorb these migrants productively. Labour migration is therefore an integral part of economic transformation. As early as 1889 Lord Ravenstein concluded his study on labour migration with the comment:

*"Migration means life and progress: a  
sedentary population stagnation".*  
[158] p.288.

Labour migration is a widespread phenomenon found in all parts of the world in varying degrees. Sjaastad [185] estimated that, in the twelve months preceding the 1950 U.S.A. population census, 5.6 per cent of the population had moved to a different county and 2.6 per cent to a different state. Estimates by anthropologists of the extent of migration amongst African Tribes in the countries other than South Africa, indicate that in the areas that they studied, as many as 50 per cent of all able bodied males were absent from the tribal areas at any one time and that nearly all males migrated at some period in their economically active life Richards [165] Watson [224] Mayer [128]. In certain districts of KwaZulu, the rate of out-migration by adult males exceeded 70 per cent in 1970.

In most areas of the world labour migration is a reasonably stable process. Individuals migrate with their families from one area to another, where they resettle and the wage earners seek new occupations. Migrations of this type normally lead to a lengthy stay in the host area and, in many instances, to the permanent resettlement of the in-migrants.

In many countries, however, particularly those in Africa, a different labour migration phenomenon exists. Migration streams, both internal and international, are composed of two different classes of individuals: those seeking permanent residence in the area that they are entering and those who merely seek work for a limited period of time, at the expiration of which they return to their homes in the country or region from whence they came. Indeed, the major proportion of domestic migration by Africans in South Africa is made up of such individuals. These men spend their working life as oscillating migrants or 'men of two worlds' as Hobart Houghton [75] named them.

As far as the individual migrant is concerned permanent and temporary migration decisions are similar in some respects, such decisions normally arise from the same motives and are often differentiated from one another by only the quantitative differences in the strengths of the motives underlying the migration decision; Bell [14]. A period of temporary migration may even result in eventual permanent migration as the migrant grows to like his new environment. Clyde Mitchell [133].

On the other hand in many African countries patterns of temporary migration have become entrenched as a way of life among certain sectors of society. Clyde Mitchell [133], commenting on migration in Africa, stated that any theory of labour migration that is to be adequate in an African context, must set out:

*"to explain not only why men leave their tribal homes ... but also why they should consistently circulate between their tribal homes and the labour centres."* [133] p.24.

The social and economic aggregative effects of temporary and permanent migration on both the area supplying the migrants and the receiving area are, however, likely to be substantially different. Miracle and Berry [132] argue that any economic analysis of migration should distinguish clearly between these two types of migrants, simply on the grounds that permanent migration alone implies:

- (a) The transfer of economically inactive persons as well as the economically active work seeker.
- (b) That the transfer of capital, both physical and human will be substantially greater than will be so in the case of temporary migration.

This study is concerned with the economic effects of the temporary migration system that exists amongst the South African Bantu language speaking people in South Africa. Consequently, whilst there is no doubt whatsoever that the permanent migration of both Blacks and Whites has contributed substantially to the growth of South

Africa, the role of these permanent migrants will not be discussed at an empirical level. However, since the theoretical approaches to migration have largely failed to distinguish adequately between temporary and permanent migrants<sup>(1)</sup> the theoretical survey of the literature will include references to both types of migrants.

The first major problem encountered in attempting a study of the economic impact of African oscillating migration on the South African economy's development path, was the almost total lack of any statistical data on domestic migration streams in South Africa. Consequently, it was found necessary, as a first step to this study, to estimate time series data on the extent of domestic temporary migration before any attempt could be made to analyse the impact that such migration may have had upon South Africa's economic development.

The data on the size of the domestic migration streams at particular points in time, namely the census dates in the years 1936, 1946, 1960 and 1970, was estimated by means of the process of establishing 'shadow populations' for the areas supplying the migrants, in terms of the number of children present in those areas on the census dates. The method of estimation used and the likely bias involved are discussed fully in Appendix A of this thesis.

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(1) The contribution of J. Clyde Mitchell [133], Trevor Bell [14] and Frances Wilson [233] are the exceptions to this generalisation.

This appendix, together with Appendix B, also contains the first consistent sets of estimations that have been made of the nature and extent of temporary African domestic migration from South Africa's rural areas for these census years, and of the magnitude and nature of the migration stream from the rural areas of Kwa-Zulu for the same periods. Estimating the size of the stream of oscillating African migrants by these means proved to be a lengthy process, however, in view of the analysis that it was possible to undertake, once these magnitudes had been obtained, in retrospect, the time seems to the writer to have been well spent.

The study is in five separate parts. Chapter 2 contains a critical review of the 'received' theory on labour migration and its role in development theory, together with a review of the empirical studies undertaken by economists, sociologists and anthropologists which provide evidence which serves to highlight the major shortcomings of the aggregative approaches to migration.

Chapter 3 reviews the theories of Clyde Mitchell [133] and Wilson [233] which, in the author's opinion, offer far more scope as a tool for analysing the intricacies of the labour migration phenomenon. These theories are then critically evaluated. In the light of the criticisms the author has made an attempt to generalise this type of approach in order to obtain a theory that is less limited in terms of the implicit assumptions that underly it, particularly those concerned with the nature of the growth path that is implied by the operation of the model.

Chapter 4 contains an empirical study which tries to evaluate the impact that the migrant labour system has had on the development of the modern sector of the South African economy.<sup>(2)</sup> The general conclusion that emerges from this section of the overall study is that the modern sector has successfully adapted to development with migrant labour, since the number of migrants in the sector have increased at an increasing rate throughout the period studied. In addition it appears that the sector's growth prospects were enhanced rather than retarded by its continued reliance upon oscillating migrant labour.

Chapter 5, on the other hand contains a preliminary analysis of the impact that the migrant labour system has had on the areas supplying the migrants. KwaZulu is taken as being representative of such areas and a case study of the effect of the migrant labour system upon the development of KwaZulu is undertaken in this section. The general conclusion that emerges from this section of the study is that the maintenance of the migrant labour system can be seen in part as both the cause and the result of the increasing levels of underdevelopment that are apparent in the KwaZulu domestic economy over the period studied.

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(2) A shortened version of chapter 4 was presented to the 1975 Conference of the South African Economic Society. It was entitled The Migrant Labour System and South Africa's Economic Development and is to be published in the March 1976 issue of the South African Economic Journal.

The final chapter reviews the future prospects for development in the homeland areas in the light of the predicted future behaviour of the domestic migrant labour supply. The predictions as to the behaviour of domestic migration streams are made in terms of the generalised theory that was developed in Chapter 3. These predictions are then used to generate a set of policy objectives which, if implemented would offer the South African government some hope of achieving some of its stated development aims, namely those of creating independent, economically viable African Homelands and of phasing out the migrant labour system.

The major conclusion that stems from this study is that the migrant labour system has become thoroughly entrenched as a way of life in South Africa. This entrenchment, it is argued, is not solely as a result of the implementation of government measures to control immigration into the cities and to limit Black job advancement but, more seriously, is the result of both the nature of the development path followed by the South African economy and of the workings of the market mechanism within that growth path. This being so, the situation cannot simply be remedied by removing the institutional barriers to in-migration, but any solution will require substantial positive government intervention in order to change the nature of the growth path itself.

Any discourse on the nature of a development path has underlying it an implicit view of the nature of the social, economic and political structure of the economy being studied and, in addition,

the policy conclusions drawn from the analysis are largely, if not totally, the result of the analyst's personal convictions as to how these variables interact with one another. Believers in unfettered individual freedom will, for example, opt for policies designed to allow the market mechanisms to operate as freely as possible, in the belief that the market is objective in its implicit decision making. Hardline Marxists, on the other hand, advocate a more limited role for individual freedom, in the belief that the nature of the workings of a capitalist economy with a free market, are such that 'the few' will always be in a position to exploit 'the many'. These theorists hold out little hope of policy makers succeeding in successfully "fettering" capitalistic development in order to match the high degree of individual freedom that such a system offers with a more egalitarian distribution of the fruits of economic progress. Consequently, policy suggestions from writers in this school tend to favour radical social, political and economic change in the belief that any alternative policies in reality represent no change.

The view of the world that is held by the writer, lies between these two extremes. Whilst accepting that capitalist development and the operation of a "free" market usually implies a period of time in which growth is highly uneven and the distribution of wealth far from equal, the writer does not accept the view that it is impossible to force development within the

capitalist mode of production onto a growth path which offers a more even pattern of development and a more egalitarian distribution of wealth. The ideal view that is in fact being advocated here is development with the capitalist system operating within the confines of what has come to be accepted as a modern 'welfare state'.

As a result, the implicit view of the world that underlies the analysis undertaken in this study is one that retains the capitalist mode of production, but that requires that the economic system be 'managed' by government in order to ensure, firstly, that development occurs in all sectors of the economy and secondly, that the development process itself results in a more egalitarian distribution of wealth within the economy than would have been the case had capitalism been left to follow its own development route.

In the South African context the White South African government is at present fully committed to following a policy of separate development. If this policy is successfully implemented, it will result in the eventual co-existence of what is now the modern sector of the economy with politically independent and economically viable African Homelands.

A development strategy that is designed to correct the uneven growth of the economy will, therefore, perforce have to be the product of the joint efforts of the White government and the

governments of the emerging Homelands. Consultation and consensus will be essential both from the point of view of establishing a common set of development objectives and from the viewpoint of mapping an acceptable strategy aimed at achieving those goals.

The heterogeneity of the government entity in this situation implies that any development strategy that is implemented must have emerged from what is essentially a bargaining situation. This being so, it would seem at first glance that since, *prima facie* the bargaining position of the Homeland governments is weak, the chances of any strategy emerging that offers 'reformist change' as opposed to co-optive change, Macpherson [125], appear to be very slight.

It is, however, the contention of the writer that, as will be seen later in this study, the extent of the modern or White dominated sector's reliance upon migrant labour, supplied in the main by the Homelands, is now so great that it may well serve to improve substantially the relative bargaining position of the Homeland governments. These governments it appears could be approaching a situation in which they may be able to use the control of this source of labour as a lever to force the modern sector to divert increasing proportions of its investible surplus to investment projects within the Black Homelands. These governments may also be in a position to bargain for the introduction of measures that will indeed produce meaningful social and political change throughout South Africa.

Largely as a result of the writer's personal 'credo' this study has some unusual aspects to it. Analysis has been done in some instances in the conventional economic manner and in others, using the tools of Neo Marxist analysis. However, the policy conclusions that have been drawn from this analysis necessarily reflect the writer's personal views of the way in which society should operate. Consequently, where the conclusions drawn from the evidence presented in this study, support the arguments advanced by the Neo Marxist analysis, the policy recommendations made here do not call for measures designed to ensure that there is radical social change instituted from outside the present government system. Instead the author argues for substantial government intervention into both the capitalist system itself and into the workings of the market mechanism.

The set of policy objectives that do follow from the overall conclusions of this study reflect the belief that 'reformist' change can take place within the framework of a basically capitalistic society and that when such changes do occur they are achieved at a lower cost to society than those changes that may be generated outside the present economic social and political systems.

CHAPTER 2

THE THEORETICAL APPROACHES  
TO LABOUR MIGRATION

2.1 Introduction

If a theory of labour migration is to have any claim to being 'eclectic' in nature it should be able both to explain adequately the nature of the forces determining labour migration and to offer the means to predict the likely level of migration that will result from specified values of those forces. In addition, since the economic effects of temporary migration decisions differ substantially from those of decisions to migrate permanently, a theory of labour migration should also be able to discriminate between the causes and effects of both types of migration decisions.

Although a great deal of work has been done on both the empirical and the theoretical aspects of labour migration, no eclectic migration theory has yet been produced. Indeed it is only very recently that an adequate explanation at the micro level has appeared as to why some men migrate temporarily, whereas others migrate to settle permanently, or do not migrate at all. Bell [14]

Attempts to analyse migration have been made in fields of economics, politics, sociology and social anthropology. Economists have concentrated, as one would intuitively expect, upon the predictive aspects of migration and have built a large variety of both macro and micro economic models that have this aim in view. These models are predictively powerful but low on explanatory value

due to their high degree of over simplification and aggregation. On the other hand researchers from the other disciplines have concentrated their efforts largely on explaining the migration process.

Cost benefit analysis has also recently been used by economists studying labour migration. Sjaarstad [185], Johnson [94], Sahota [177]. This has encouraged them to venture forth into the territories that were previously the preserves of the sociologist and social anthropologist. It would seem that it should be a small step to combine these two approaches and to obtain from the combination a sound general theory. However, the diversity of the explanations, together with the high level of 'abstraction' found in the economic models has made the "marriage" of these two approaches practically impossible .

Economists have long been aware of the vital contribution made by labour migration to the process of economic growth. Adam Smith argued that, in the absence of artificial constraints upon the movement of labour, such as those imposed by the poor laws, wage differentials would be determined entirely by differences in the nature of employments themselves and that;

*"The very unequal price of labour which we frequently find in England in places at no great distance from one another is probably owing to the obstruction which the law of settlements gives to a poor man who would carry his industry from one parish to another". [186] P. 28*

Economic theorists still believe, in common with Adam Smith, that labour migration is basically a reaction to regional wage differentials that result from spatial imbalances in the supply of and demand for labour, which are themselves a product of geographically unequal development. The process of labour migration is seen as an ongoing one, which will only cease when regional wage differentials reflect the job differences in the eyes of the prospective migrants.

The majority of modern economic models analysing labour migration are based on the concept of a dual economy. In this type of economy there are two major economic sectors, the one being predominantly occupied with subsistence agricultural pursuits and the other comprising a modern manufacturing sector. Labour is supplied by the agricultural sector to the modern sector as the latter grows through capital accumulation.

Within this overall consensus, however, there are substantial differences in outlook. One major school of thought, the modern neoclassical school, sees migration as a more or less instant means of obtaining an equilibrium between the supply of and demand for labour and of equalizing interregional wage levels. The other

main school, the labour surplus, Marxian, or 'classical' school, sees migration as a long term phenomenon that occurs when one region has a substantial over supply of labour, vis à vis the availability of the other productive resources, such that it is able to supply a stream of migrants over a long period of time to another region without substantially affecting the interregional wage differential. The basic differences between these two approaches lie in the way each sees the development process working through in the initial phases of economic development. In the labour limited, neoclassical situation the benefits from development spill over to the wage earner at an earlier stage than they do in the labour surplus case.

## 2.2. Aggregate Economic Models of Labour Migration

Before discussing the two main classes of aggregate economic models in more detail it must be pointed out that the original, and indeed the major aim of these models was not to explain fully the nature and causes of labour migration but instead those of the process of economic growth. Consequently the models are highly stylized to illustrate clearly the salient features of the growth process in the situation where the supply of labour is limited and where it is relatively abundant.

2.2.1. The Role of Labour Migration in a Neoclassical World

Neoclassical aggregative economic growth models assume that all available labour at any one moment of time is fully employed. <sup>(1)</sup>

Development in this type of world, therefore, requires the emerging modern sector of a dual economy to compete with the traditional sector for the available labour supply. The wage rate is determined by the productivity of labour and, with the assumption of suitably "well behaved" production functions in both sectors, the intersectoral allocation of labour is then determined by the relative sectoral labour productivities and labour migration is seen as providing the mechanism for any reallocation of labour that may be required.

As the dual economy evolves over time the size of the labour force in the traditional sector decreases in relative terms. Development involves capital deepening rather than capital widening, as the relative shortage of labour encourages increased specialisation in both sectors from an early stage in the development process.

Jorgenson's model [99] demonstrates that, with the assumptions of a standard time dependant, technical progress function, once the rate of population growth becomes stabilised at the level desired by

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(1) The best known neoclassical development model is that of Dale Jorgenson. [99]

members of the society, a surplus of output over bare subsistence needs will be generated. Providing this surplus is maintained and used to establish a modern industrial sector and providing also that labour migrates to the newly established sector as it is released by the technological improvements in the agricultural sector, then this surplus, no matter how small it is initially, will be sufficient to generate self sustained economic development.

Throughout the development phase labour is becoming increasingly more productive and, since wages are determined by the marginal product of labour in a neoclassical world, wage rates are also rising. Conversely as capital accumulates the marginal product of capital declines, profit rates, therefore, also decline, except in so far as these falls are successfully offset by technological advances. In this type of situation the benefits gained from economic development do not accrue solely to the capitalists but are shared quite rapidly with labour.

If this situation is to continue to operate it is essential that labour migrates from the traditional sector to the modern sector, at a rate dictated by the emergence of the agricultural surplus. If the labour simply chooses to remain idle in the agricultural sector or is occupied in the sector in non-productive activities <sup>(2)</sup> the surplus output will gradually disappear, the development process will

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(2) Such as members of the armed forces or as personal retainers.

come to a halt and a situation of surplus labour will emerge. Jorgensen [99] . Once this happens the growth path of both areas alters to the one followed by a labour surplus economy which is discussed in the following section.

### 2.2.2. The Role of Labour Migration in a Surplus Situation

The first economist to use the phrase "surplus labour" was Joan Robinson [168] who used it to describe the under-employment that occurred in the 'Great Depression', as a result of the failure of effective demand i.e. in the 'Keynesian' sense. The term was first applied to developing countries by Rosenstein Rodan. [171] He used it to describe a situation where the total product of an economy could be increased by a reallocation of labour between the rural and industrial sectors. It is in this structural sense that the term is most commonly used in reference to developing countries. Some economists, however, notably Liebenstein [118] Wonnocott [241] and Cho [35] discuss a Malthusian version of surplus labour. Here the removal of some of the rural population enables the remainder to work harder as they now have more to eat, are physically stronger and so are more productive.

The eclectic labour surplus development model put forward by Arthur Lewis [115] uses all three concepts of surplus labour. The more specific model developed by Fei and Ranis [52] concentrates on

surplus labour in the structural sense. Whatever the cause of the labour surplus, these models are all built on the assumption that there is a significant difference between the low marginal productivity of labour in the traditional sector and the average wage in that sector. In the early stages of development, the wage differential that exists between the low and the high productivity sectors is sufficient to cause labour to migrate from the former to the latter. Such is the supply of surplus labour in the low productivity sector that this migration takes place without affecting wage rates in either sector. The modern sector faces a perfectly elastic supply curve for labour in the tradition of the early classical writers such as Smith, Ricardo and Marx. (3)

Since increased employment in the modern sector does not affect the wage rate paid, in the early stages of development all the benefits accrue to the capitalists and are available for reinvestment. Only when the institutional wage rate is forced up exogenously will the benefits start to spill over to the wage earners.

In the Lewis model [115] the wage in the industrial sector is determined largely by the average standard of living in the rural sector. In this situation three factors operate to drive the modern sector wage rate upwards:

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(3) The wage rate is exogenously determined by institutional rather than economic forces.

- (1) The intersectoral allocation of labour. Once the level of labour absorption by the modern sector is such that the population levels in the traditional sector starts to fall, average incomes in this sector will start to rise, *ceteris paribus*, and this increase will push up the modern sector institutional wage rate.
- (2) The benefits accruing from technical progress in agriculture will also increase agricultural incomes, providing they are not offset by unfavourable movements in the sector's terms of trade, or by increases in the population growth rate.
- (3) The terms of trade between the two sectors may move in favour of the traditional sector increasing the level of real income in that sector, and the supply price of labour to the modern sector.

Since it is assumed that the level of investment is determined by the amount of profits earned by the capitalists, together with the relative attractiveness of the alternative opportunities for investment elsewhere, once the level of wages in the modern sector starts to rise it is possible that the rate of growth of the modern sector may start to decline. Lewis [115] believed that capitalists would simply export their surplus funds rather than reinvesting them; thereby maintaining a domestic rate of growth low enough to prevent substantial wage rate increases accruing to labour.

In such a situation migrating wage earners only benefit to the extent

of the wage differential that exists between the low and high productivity sector. Labour migration may never take place on a scale sufficient to increase rural incomes substantially where rural population growth rates are high.

On the other hand, if the rate of labour migration and absorption into the modern sector is greater than the rate of growth of the labour supply in the traditional sector then continued migration will eventually result in the elimination of the inter sectoral wage differential. Once the differential has been eliminated, a situation that was labour surplus will evolve into one that is now labour limited and the growth path will, once again, be that described in the preceding section.

### 2.2. 3. Labour Migration in Surplus Labour Situation - An Alternative View

The models of economic development presented in the preceding sections could be classified as representing the "orthodox" view of development, which sees the process as an ongoing one in which both sectors of the economy benefit, or at least neither becomes worse off as a result of development. These views have been seriously challenged by writers in the Neo-Marxian Tradition such as Arrighi [7], Dos Santos [45], Amin [3] and Frank [55], who argue that the growth process will alter the values of the growth parameters themselves and that, as a result, the economy must deviate from the growth path on

which it was travelling. This deviation they believe results from the fact that where two regions or countries are linked economically, the development of one region, if it is achieved by the capitalist mode, requires and generates underdevelopment and poverty in the other region.

The underdevelopment of one region, they argue, is achieved by the expropriation of the surplus of the region and its appropriation by the capitalist owners of the means of production in the modern sector or the developing region. The expropriation of this surplus is accomplished by a combination of economic and political methods; the latter being used either to reinforce the former, or where the former prove to be inadequate.

As the surplus in the one region is expropriated and appropriated by the capitalists in the other region for investment there, the growth paths of the two economies alter; the rate of capital accumulation increases in the developing sector and declines in the sector whose surplus is expropriated. There is no tendency to stability and as the standards of living drop in the traditional sector, perhaps to as low as subsistence levels, the inhabitants of the region become totally dependant upon the sector that is growing.

Growth with this type of evolution results in very rapid growth of the modern sector with increasing poverty in the dependant

sector.<sup>(4)</sup> Modern sector wage rates will not rise and may even fall and the gains from development accrue almost exclusively to capital in the initial stages.

If the economy continues to grow, unhindered by its uneven development, the modern sector must eventually run against a labour bottleneck and the economy will revert to the development path described by the conventional labour surplus development model; wages will start to increase, despite the underdevelopment of the traditional sector and capitalists will be forced to share the fruits of economic growth, if they wish to ensure that further economic development takes place.

Writers in this school believe however, that the problems of the process of capitalist accumulation such as; the growing concentration of ownership of the means of production, the lack of mobility of capital and the growing inflexibility of the price system will affect the growth rate of the economy and push it towards economic stagnation rather than to the development path of growth with a more egalitarian income distribution. Arrighi [7] Frank [55].

Labour migration from the sector that is suffering from increasing underdevelopment to the growing sector is again critical if the

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(4) Subject to some subsistence floor to wage levels in the sector.

growth process is to continue, but in opposition to the Lewis situation, labour migration does not improve living standards in the supplying region but instead contributes to their further impoverishment through the effect that the migratory process has upon both the generation and allocation of that sector's investible surplus. (5)

2.3. The Shortcomings of the Aggregate Economic Models as Explanations of the Nature and Effects of Labour Migration

It is a feature of these general classes of models that, although they depend entirely upon labour migration for their operation, none make any attempt to explain why people migrate, or indeed to predict which people migrate. Labour is treated as being composed of a group of homogeneous people, all of whom have the same propensity to migrate and who react solely to changes in relative wage rates.

The major specific shortcomings of the aggregative economic model approach to labour migration may be summarised as follows:

- (1) The models fail to offer an adequate treatment of the causes of migration but simply assume that migration is a 'once off' phenomenon that occurs as a result of changes in relative wage rates.

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(5) These effects are dealt with more full later in Chapter 5 Sections 5.5. and 5.6.

- (2) They fail to distinguish between temporary, <sup>(6)</sup> and permanent migrants. This is a significant omission since it is argued later <sup>(7)</sup> that the resource allocation effects of the two classes of migrants are substantially different.
- (3) As resource allocation models they are inadequate due to their high level of aggregation, which makes them unable to describe satisfactorily the impact of migration on either the supplying or the receiving area.

These shortcomings and their implications are discussed more fully in the following sections.

#### 2.3.1. The Causes of Migration

A substantial number of empirical investigations into the causes of migration have been undertaken by social anthropologists, sociologists and economists and of this a great deal has been done in Africa itself. In reviewing this literature, if one divides the findings into economic and non economic causes of migration it becomes evident that, in the past, economic motives have been

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(6) Temporary or oscillating migrants in this respect are those men who leave their families behind, seek work in a new area, but do not settle permanently in the new region but continue to regard the area of origin as their home.

(7) See section 2.4.2. below.

the dominant determinants of the migration decision.

As early as 1935 the Lacey Commission [269] stated that the reasons for the migration of labour from the area that is now Malawi were overwhelmingly economic. They agreed that it was certainly possible for young men to migrate once purely from a sense of adventure, but argued that this did not provide sufficient explanation for the second, third or subsequent journeys. Similarly Hobart Houghton and Walton [78] when discussing migration from the Keiskammahoeek area said;

*"Poverty and economic necessity drive people out of the district to sell their labour in the urban centres where the remuneration is higher and the opportunities of employment greater than in the Reserve. There may be subsidiary reasons such as the desires of young men to prove their manhood or of the lure of city life for young people of both sexes, but the principle reason is to be found in the failure of the Reserve to provide an adequate living for its population."* [78] (p. 112)

Investigations by Gulliver [63] Hanna [70] Hobart Houghton and Walton [78] Jerome [91] Powesland [152] Prothero [153] Read [156] Richards [165] Sahota [177] Schapera [178] Paul Schutze [180] and Southall [189] all support the hypothesis that economic motives are the major cause of an individual's desire to migrate either permanently or temporarily.

It should, however, be noted that, whilst concurring with the acceptance of this hypothesis, Prothero [154] pointed out that since the men in his investigation preferred to migrate to seek work rather than adopt more productive agricultural methods at home and grow cash crops, traditional reasons for the migration could not be entirely ruled out. Along the same lines Gulliver [63] argued that social forces may in fact act as the "last straw" in precipitating the actual migration of an individual.

Margaret Read [156] brought out clearly in her work conducted in the area now Malawi, that a man contemplating migration must not only have a lack of means available to him to generate a cash income, but, in addition, must also have the expanded horizons that lead to a desire for the goods that the income can bring, before he will actually migrate. She found that villages in remote areas that had been affected very little by contact with Western culture, had a very small percentage of adult males absent as migrant labourers despite a lack of adequate cash crops and she attributed this to their limited horizons vis à vis additional goods.

On the other hand studies by Mayer [128] and Winter [239] attribute the major role to social and institutional forces rather than to mere economic motives. Winter states:

*"among the Amba... who left the country to seek employment elsewhere very few had monetary gain uppermost in their minds. Most of them left home because of trouble at home or because they wanted to see places beyond the bounds of their restricted world". [239] (P.38)*

Moreover, as Clyde Mitchell [133] points out, commenting on Winter's findings, when one compares the going wage rate in Kampala at the time of 527/- with Winter's estimate of family cash incomes in the area he studied of 512/- it is difficult to conclude other than that non economic forces were the predominant ones in the migration decision.

Powesland [152] quotes from an interview with the Vice Governor-General of Ruanda Urundi in which the Governor gave as one of the reasons for the continual migration of the Ruanda to Uganda; the desire to escape the forced labour imposed by Tutsi Chiefs. Similarly Richards [165] found that 10 per cent, of one of the samples she interviewed from the Ruanda, had left home to avoid labour obligations.

Clyde Mitchell [133] sums up the evidence by suggesting that the motivations behind migration operate at three different levels:

- (1) Through the normative systems of the society. Schapera [178] and Gulliver [63] both state that migration had become a way of life in the societies that they had studied. Similarly

Mayer [128] Southall [189] and Schapera [178] all found that a period of migratory labour had become part of the process of initiation into manhood <sup>(8)</sup> Mayer argues that it is now as much the traditional role of the 'abafana' <sup>(9)</sup> in the Transkei area to earn cash as it is of the old men to provide wisdom and ritual.

- (2) Through the interaction of personalities i.e. migration to escape arduous duties. Powesland [152] Richards 1954 [164] <sup>(10)</sup>
- (3) Through the economic system by means of wage differentials, target incomes, Paul Schultz [180] Sahota [177] or to meet specific cash requirements for 'bride price' or for taxation obligations Southall [189] Richards [164] .

Mitchell goes on to say that whilst economic motives are a necessary condition for migration they may not be sufficient and that the social or personal motives may tip the scale. Mitchell's classification omits all the non normative social forces that it is argued are often very substantial elements.

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- (8) Senior boys approaching manhood and those in the transitional phase afterwards go to town to show their manliness and earn money. This is known as 'ukushintsha' or 'changing clothes'. It usually involves a period of migration of 6 - 12 months and does not normally contribute cash to the traditional household.
  - (9) Men between the years of initiation and approximately 40 years.
  - (10) For example to escape forced labour obligations as quoted earlier.

in the migration decision, such as the attractions of the town: the 'bright lights', the increased social mobility, and better education facilities Schapera [178] Sahota [177] . These forces could be included by the addition of a fourth level namely:

- (4) Through individual preference patterns in so far as they diverge from the range of goods and services available in the home region. Whilst this category will overlap with the third category as far as economic goods and services are concerned it is sufficiently general to include the non normative social forces and non monetary benefits otherwise excluded from Mitchell's list.

Migration, apart from the benefits discussed above, also involves the would-be migrant in certain costs. To the extent that migrants anticipate incurring costs, migration will be reduced. Sjaarstad [185] lists the following as forming the private costs of migration;

- (1) Costs incurred through migration, such as increased living costs, training costs and transport costs. <sup>(11)</sup> Sahota [177] and Ziph [245] both found the intensity of a migration stream between two centres

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(11) Audrey Richards [164] estimated that in Uganda in 1951 the bus fare of a migrant was the equivalent of two weeks wages and in Northern Rhodesia in the period 1930 - 1936 bus fares to the copper mines were equal to one and a half months wages on the mines. She pointed out that, as a result, most migration in Northern Rhodesia took place on foot or by bicycle.

varied inversely with the distance between those centres. However, as Gulliver [63] pointed out the duration of the period of absence is also positively correlated with transport costs.

- (2) Income foregone during the migratory period. Schultz [180] found in his study of migration in Columbia, that an increase in local wage rates reduced the level of out-migration. Similarly studies by Read [155] Southall [190] Gulliver [63] and Barber [10] show an inverse relationship between money income per head from agriculture in the source region and the rate of absenteeism amongst adult males. (12)

A rational individual who is migrating due to economic motives will migrate if the discounted returns he expects from the migration are greater than the discounted anticipated costs. Berg [16] Harris and Todaro [69] and Bell [14] have gone on from this type of analysis of the behaviour of the individual migrant to derive an aggregate supply curve of labour for all migrants. However, the process of aggregation has underlying it the assumption of the existence of a 'representative individual' whose behaviour

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(12) Here one faces the problem of separating cause and effect as one cannot say decisively that low agricultural incomes are not the result rather than the cause of out migration by adult males.

represents that of the community. This technique was developed to a high level of competency by neoclassical economists but it has been argued by Kuznets [106] and Sjaarstad [185] that this technique is not suitable for use in the analysis of the aggregate effects of migration in general as the migratory process is one that selects particular individuals, rather than one that has a random chance of affecting each individual in a particular group. The more selective the migratory process then the greater the degree of disaggregation required to obtain meaningful results.

However, since disaggregation poses additional problems of identification and specification and even of measurement it is not something one embarks upon unless, one is in fact certain, that the aggregative approaches of Todaro and Harris [69] and Bell [14] will not in fact yield adequate results.

### 2.3.2 The Duration of the Migration

The second major objection to the aggregative models of labour migration is that they fail to distinguish adequately between permanent and temporary migrants and that these two classes in fact have substantially different economic effects both on the overall allocation of resources and on the growth path of the economy.

In economies where the modern sector wage is related to the

average standard of living in the rural sector, the greater the proportion of permanent migrants with families in the total number of in-migrants, the greater the upward pressure on the modern sector wage rate. A single man moving from the rural to the urban sector will move providing he receives as wages the value of his share of the rural sector output together with a premium to cover the disutility and costs of moving. A man with a family will require a higher wage - the equivalent of the family's share of subsistence output plus premium - if he is to move permanently to the modern sector.

Since temporary migrants leave their families behind in the traditional sector, the level of modern sector wages required initially to attract such men will be lower than that required by permanent migrants with families. *Ceteris paribus*, the greater the proportion of single in-migrants, temporary or permanent, the lower will be the modern sector wage rate. If profit rates are the major determinant of investment then the greater the proportion of temporary migrants in the total in-migration the higher will be the rate of investment and economic growth that can be sustained in the modern sector. (13)

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(13) This effect is reinforced when one considers that the diversion of investment funds from productive outlets to social overhead capital formation is smaller per worker when the migrant is single than it is if he brings his family with him.

There are, however, factors that seriously complicate this link between temporary migration, urban wage rates and the rate of economic growth; if they do not in fact totally invalidate it. This type of argument does depend heavily upon the *ceteris paribus* assumption. It is however argued that the productivity of temporary migrants is below that of permanent settlers. Hutt [88] If this is so then the decreases in productivity, due to the predominance of the temporary migrants, may be more than sufficient to offset the gains from the decreased wage levels.

In cases where the extended family system pervades the urban, as well as the rural sector, the relationship between the rate of migration and urban wage rates may be further complicated. If the rate of in-migration exceeds the rate of growth of urban sector employment and the wage rate is institutionally determined, as it is in the labour surplus case, the increased pool of unemployment may have the unexpected effect of increasing rather than decreasing wage levels, as workers increase their wage demands as they strive to maintain their standards of living in the face of an ever increasing number of dependants. Here again however, if the majority of in-migrants are single individuals this effect will be smaller than is the case if the job seeker enters the new area with his dependants.

Wellisz [226] points out that, where the modern sector worker

does not break all ties with the rural sector, the links between the rural per capita incomes, the institutional wage rate and migration may not be simple. Rural families, aiming to maximise total family income, may subsidise a worker moving to the urban area up to some amount, less than his consumption in the rural area minus any costs of transferring the subsidy, and the lost marginal product. Conversely, an urban worker may remit part of his earnings to the rural area increasing per capita incomes in that sector.

Arrighi [7] and Trapido [205] both argue that a system of temporary migratory labour has adverse effects upon the position of the rural peasant. Arrighi [7] believes that a system of temporary wage migration leads to an overvaluation of the importance of education in the rural sector and consequently to a misallocation of resources in the traditional sector, as resources are switched from increasing agricultural productivity to acquiring education suitable only for use in the modern sector. This misallocation reduces the rural standards of living in the long run, thus allowing a slower rate of wage increase in the modern sector.

Trapido [205] approaches the problem from the viewpoint of the modern sector and argues that a system of temporary migration makes it practically impossible for any type of worker organisation to be formed. This lack of organised labour, he argues, has allowed development in South Africa to proceed beyond the point where one

would normally expect labour to force an increase in its share in the total output of the economy.

### 2.3.3 Migration and Resource Allocation

Labour migration is the means whereby a spatially differentiated economy achieves a reallocation of labour resources. Whether or not this reallocation will be optimal in any sense will depend upon how closely allied the objectives of the individual migrant, and those of society are, and on the efficiency of the mechanism creating the signals to which the prospective migrant responds.

If the migrant is dominated by economic considerations then it is reasonable to presume that he will act upon information that he receives from the labour market. Even in a strict neoclassical world, where one finds perfect foresight and competition together with homogeneous factors of production, one will run up against allocation problems since, as is well known, such a situation will only produce an optimal allocation of resources if the original income distribution is itself optimal. In a world of imperfect markets and heterogeneous factors of production matters become more complicated as individual and social costs and benefits are likely to diverge still further.

Migration decisions are typically made in terms of private costs

and benefits. These may diverge widely from the social costs and benefits. In fact it is frequently argued that this is so in the case of temporary migration, Hobart Houghton [75] and Arrighi [7]. Similarly Harris and Todaro [69] have shown that if the market is imperfect then rational behaviour on the part of the individual migrant will lead to an oversupply of labour to the urban areas. Resource allocation in this context is suboptimal in the neoclassical sense, in that a reallocation of the urban unemployed back to agriculture would lead to an increase in output in all situations other than the case in which the marginal revenue product of labour in agriculture is zero or negative.

If private costs and benefits differ from social costs and benefits then, in order to obtain an allocation of resources that is optimal from society's view point, a system of taxes and subsidies may be required to force private and social calculations into equivalence. Such a system would not be an easy matter to assess or to implement.

The problem of resource allocation is further compounded by the selective aspects of migration. The aggregative models, as has been said earlier, assume that migrants are homogeneous and that migration is a random process in that each individual has the same chance of deciding to migrate as every other individual.

Kuznets [106], on the other hand, as has been said earlier, sees migration differently and bases his interpretation of the phenomenon upon the assumption that individuals are inherently different from one another and that it is these differences that explain why some people migrate whilst others remain; apparently content with less favourable economic and social circumstances. Kuznets argues that the process of migrations is highly selective, involving those individuals who are outward looking, venturesome and by definition not averse to change. Migration, as a result, has a substantially greater impact upon the economic growth process in both the supplying and receiving economies than the mere weight of numbers would imply.

Empirical studies of migration certainly lend weight to Kuznet's view of migration as a process of differentiation rather than to the aggregate view of the inherent homogeneity of mankind. Studies by Thomas [198], Bogue and Hagood [23], Bogue and Hagood [24], Wen L. Li [117], Eldridge [48], Schultz [180] and Caldwell [32] all found that the propensity to migrate was highest amongst adolescents and young males. Similarly studies by Sahota [177], Comay [39] Miller [131] and Caldwell [31] showed that education levels were positively correlated with migration propensities.

In addition to the costs and benefits to the migrant himself discussed in section 2.3.3, migration implies costs and benefits to the society in which he intends to settle. These costs and

benefits are closely linked to the characteristics of the two societies and to the duration of the migration.

#### 2.3.4 The Effects of Migration on the Supplying Regions

As was said earlier the economic impact of migration on the supplying economy is, as Miracle and Berry [132] point out, a function of the economic characteristics of the economy and of those of the economies to which it is linked, such as the relative supplies of the factors of production, available techniques etc. One can, however, point out some of the major costs and benefits that are likely to arise as a result of migration.

##### Benefits

- (1) The remittances by migrants can be very substantial both in absolute amounts and relative to the gross domestic product of the supplying region. Hancock [68] estimated that Mexican migrants to the U.S.A. remitted up to 55 per cent of their earnings. Caldwell [33] argues that remittances by Ghanaian migrants formed 3 per cent of the National Income in 1963. Similarly Leistner [113] gives figures for remittances of mine workers to the former high commissioned territories in 1964 showing that they ranged between 21 - 33 per cent of their earnings. John Williams [229] in a study of Lesotho estimated that migrant remittances typically formed 19 - 20 per cent of

Lesotho's estimated national income. Similarly Lombard [121] calculated migrant earnings to be three fifths of the National Income of the de facto population of the Transkei in 1966-67 and 25 per cent of the National Income earned by the de jure population. He believed that approximately 20 per cent of these earnings were remitted to the Transkei.

- (2) If the migrant's marginal product in the home economy was less than his wage then his absence will cause per capita incomes to rise. This impact will be greater if the increase in income is channelled towards investment. If this increase is consumed it will still increase social welfare and in a Neo Malthusian situation such as those propounded by Liebenstein [118] and Wonnocott [241] will also increase labour productivity and so output.
- (3) Even if migration does not result in an increase in the per capita consumption of food it will increase the availability for consumption of durable consumer goods such as shelter, clothing, etc.
- (4) Knowledge transmitted by the migrants may also serve to increase productivity. In this respect Miracle and Berry [132] argue that migration is more likely to result in the adoption of new techniques if conditions in the supplying economy are similar to those in the host economy, than would be the case if they are substantially different. The extent

of the transfer of knowledge between sectors will largely be a function of the nature of the job obtained by the migrant and of its applicability to the conditions of the home environment.

- (5) Caldwell [32] advances the view that migrants' remittances exert a modernising influence on the supplying area as they increase the stock of money in the region and the consequent flow, making it easier to send children to school and to purchase modern sector products.
- (6) Hume [87] argues that out-migration may be viewed as the equivalent of a substantial injection of foreign assistance to the extent that it offers employment to those individuals who would otherwise be unemployed or underemployed. This is a somewhat 'far fetched' analogy since no matter how hard the migrant saves to remit his earnings to his old country the multiplier and acceleration effects of these remittances will be considerably smaller than those of the investment that would be required to provide him with an equivalent job without migrating. Nonetheless to the extent that out-migration reduces unemployment and underemployment in the supplying region it will be beneficial as was argued above.

#### Costs

- (1) Output and income per head in the supplying area will fall on the migrant's departure if his marginal product was

greater than his wage or if his labour generated substantial externalities in the economy. Quoting Miracle and Berry

[132] once again:

*"....the effect of the migrant's absence on production in his home economy depends on how closely the length of his absence is adjusted to the time pattern of the home economy's demand for his labour". P. 1.*

As a result, a stay of a fixed duration will have a larger adverse effect on the home economy's output the greater the number of production possibilities foregone as a result of the migration.

- (2) Migration may result in substantial social costs. Many areas have a very low level of masculinity as a result of continued out-migration e.g. Ireland and many rural areas in Africa. Watson [224] suggested that, amongst the Mambwe, the critical ratio was 1 male : 2 females. Any ratio less than this, he argued, upset both the social and economic relationships in the village he studied. Lombard [121] quotes figures that show that in 1960 only 11 per cent of the able bodied male Bantu still worked in the reserve areas in South Africa.

If Kuznet's view of migration as a selective process is the correct one then the social costs may be even greater as particular classes may have a higher propensity to migrate

than others. Migration propensities are likely to be particularly high among the well educated intelligent young males; the class of people one would expect to make the greatest contribution to future output in the home region had they stayed. (14)

- (3) Arrighi [7] believes that in Rhodesia the habit of migrancy altered the use of the agricultural surplus to the detriment of the development of the home region and that this also represents a substantial social cost to the supplying region. Migration he said led to a high value being placed on education and this in turn led to further migration for wage labour — exacerbating the situation.
- (4) Arrighi also argued that the advent of cash labour in Rhodesia led to an adverse change in the techniques of production in the peasant sector. The peasant farmer substituted maize for millet and adopted the plough shear, both of which Arrighi argues increased the degree of soil erosion in the area. The peasant farmer in a rational attempt to maximise his individual income generated substantial social costs for future generations.
- (5) Taxation revenues may fall if output falls as a result of migration, or if the taxable capacity of the economy is reduced. On the other hand there is no guarantee that the demand for government services will be likewise reduced.

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(14) This aspect is discussed further in Chapter 4, section 4.6.

- (6) There is no doubt that temporary migrations alter consumption patterns as the migrants are exposed to a different range of commodities in the region to which they migrate. If this change in consumption patterns results in a decrease in investment in the supplying region then again the migration is generating social costs that are external to the migrant himself.

#### 2.3.5 The Effects of Migration upon the Host Region

Once more the impact of the in-migration upon the host economy will largely be a function of the nature of the economy itself and of its level of economic development. However certain general conclusions can be drawn.

##### Benefits

- (1) Migration increases the supply of labour and helps to keep down wages in the classes of labour that are experiencing in-migration. As Miracle and Berry [132] point out this effect is only unambiguously beneficial providing the total supply of labour does not exceed the demand. In African countries, where the Harris and Todaro model [69] seems likely to apply, one cannot state definitely, therefore, that in-migration has increased either the rate of economic growth or the level of social welfare, since the increased number of people in the

sector may result in increased consumption at the cost of reduced investment and economic growth if any substantial portion of this influx is not employed and directly contributing to the output of goods and services in the area.

- (2) The host economy will benefit from any special skills and knowledge that the in-migrants may possess. Morgan [135] estimated that the contribution of in-migrants to the output of the United States over the period 1870 to 1914 was substantially larger than that made by inflows of foreign capital over the same period.
- (3) Migrants may encourage the adoption of new techniques by the indigenous workers. Polly Hill [72] found that migrant farmers in Southern Ghana played an active part in getting other farmers to take up cocoa farming.
- (4) Migrants may generate additional flows of migrants as they transmit information concerning conditions in the host economy back to the supplying region. Whether or not these increased flows of in-migrants will affect the host region beneficially will depend on the supply and demand conditions for labour at the time.
- (5) It is usually argued that a system of temporary migration generates a low productivity, rootless, labour force. Hutt [88] Horwitz [86]. The resulting drop in output potential reduces the investible surplus and also the incentive

to invest, as returns to capital are lower than they would otherwise be. Trapido [205], however, as was said earlier, has argued the reverse, namely that the rootlessness of the migratory labour force in South Africa has mitigated against the development of labour organisations and that, as a result, the returns to capital in South Africa and the share of output going to capitalists is higher than it would otherwise have been.

In general, when analysing the likely outcome from migration, Miracle and Berry [132] conclude that the host economy is most likely to benefit from in-migration. The major benefits stem from;

- (1) An increased supply of labour at low cost in relative terms
- (2) The development of unused resources
- (c) The spread of new technology
- (d) Increased saving from either the increased output and capital transferred in with the migrants
- (e) Increased investment from the increased output and perhaps from the capital brought in by the migrants.

#### Costs

Although it is generally believed that in-migration is on the whole beneficial it does carry with it certain costs that have to be borne by the receiving economy.

- (1) Substantial in-migration may involve a commitment to increasing social capital in the form of adequate housing, hospitals and schooling facilities to handle the new population.
- (2) In-migration involves the migrant in a substantial readjustment process. Frequently he comes from a different way of life and the presence of a large number of individuals in unfamiliar surroundings may result in considerable social and even political pressures being built up in the host economy. These will be greater when the volume of in-migration exceeds the supply of job opportunities or where the migrants compete with the established labour classes for a particular type of job. Joan Nelson [142] however, argued in her study that there was no evidence to suggest that in-migrants were any less politically stable than individuals who had been born into the community.

From the wealth of empirical research dealing with the motives and the causes and effects of labour migration discussed in the preceding sections it seems that, in most instances at least, one must reject any theory that attempts to explain the migration phenomenon in terms of the actions of a 'representative individual'. This means that the applicability of aggregate labour supply curves built up in this way such as those of Harris and Todaro [69] and Bell [14] are

severely limited. One is therefore forced to accept the view that the three aggregative economic models outlined earlier, at least in their present form, have little hope of offering an adequate explanation of the labour migration phenomenon, since these models are based on this approach. As a result the models are too simplistic and too aggregative in nature to handle the many different facets of labour migration.

A further problem of the aggregative economic models is that they are built on differing and at least in the case of the NeoMarxist models mutually exclusive views of the world and of the workings of the economic growth process. From the empirical data discussed above and the interrelationships postulated by the investigating researchers it becomes obvious that the growth process itself can generate forces, simply through the effects of labour migration, that can alter the values of the parameters assumed in the models.

If one accepts the possibility of parametric change then, firstly the economic aggregative models will need to be adapted to handle such changes in so far as such adaptations are feasible and secondly, the mutually exclusive nature of the growth paths depicted by the various classes of models becomes open to doubt. A more realistic description of the world would be one where the nature of the growth path changes as the growth process proceeds.

An approach that does seem to offer scope for generalisation, is the one concerned with analysing the 'interacting forces' that exert pressure on migrants. Models attempting to analyse these forces have been developed by Clyde Mitchell [133] Wilson [233] and Lee [108]. Whilst the models discussed by these authors do have an implicit "life cycle" view of the growth process, as they have been presented, the approach itself can be adapted in such a manner as to provide a more dynamic and versatile analysis of labour migration on any growth path and can handle the problems created by the 'non homogeneity' of labour. This approach is discussed more fully in the next chapter.

CHAPTER 3

A MORE GENERAL THEORETICAL FRAMEWORK

*"An analysis of labour migration, therefore, must set out to explain not only why the men leave their tribal homes and the causes for this may be more complicated than merely economic reasons - but also why they should consistently circulate between their tribal homes and the labour centres."* Clyde Mitchell [133] p.24.

3.1 Introduction

The Clyde Mitchell [133] and Wilson [233] models of labour migration are both attempts to offer a generalised method suitable for use in explaining the causes of labour migration. The method suggested is based upon a systematic consideration of the nature of the forces present in a particular area, both social and economic, that interact with one another to generate flows of migrants from one location to another.

The models attempt to distinguish between permanent and temporary migrants in terms of the relative strengths of the forces present at the time. Both authors see an economy that is essentially dualistic in nature, in which migrants are subjected to four interacting sets of forces, namely:

- a) Pull forces that operate from the modern sector. These forces are mainly economic in nature, such as the pull from

the increased job opportunities and rising wage rates that result from the industrial expansion that is taking place in the sector. Some role is, however, given to sociological factors such as the attractions of the urban way of life, which offers greater social mobility, lower kinship ties, better educational and entertainment facilities, etc.

- b) Push factors that arise in the rural sector. These may be due to the increasing 'immiserization' of the rural areas that results from the failure of agricultural techniques to adapt sufficiently to enable the region to accommodate population increases. Hobart Houghton [75] . Land reforms may create 'landless' peasants forced to look elsewhere for means of survival, as was the case after the enclosures in Britain prior to the Industrial Revolution. Alternatively, there may be pressures put on men to leave the area in order to fulfil some legal obligation such as the payment of a tax. Economic development in the rural sector itself, once it becomes well established, implies a reduction in the land man ratio, which will give rise to push influences in the sector, as resident farmers find it profitable to reduce the size of their labour force.
- c) The third force acting on migration streams is the force provided by the rural pull effects. This force is stronger in traditional subsistence farming than it is in a commercialised rural sector. The rural areas represent security to the would-be out-migrant, who knows the ways of his people

and, more important, is known by them. In many rural areas the migrants' kin will provide for him should he fall on hard times. In most developing countries social services and social security are almost totally lacking in the growing modern sector and these functions are linked to those provided by the subsistence sector.

- d) Finally, in some instances at particular development levels one finds modern sector push forces operating. These occur in cases where it is more profitable for employers to employ circulating migrants than to establish a stabilised work force, whose families must be housed, fed and educated. As long as this is the case, Wilson [233] argues that employers actively encourage workers to leave their families in the rural area and to return to visit them at regular intervals, even though this process implies a high labour turnover and a low level of skill acquisition amongst workers. These increased labour costs, he argues, are more than offset by the lower wages that employers are able to pay due to the fact that these workers and their families are not totally dependent upon the migrant's earnings.

Wilson [233] and Clyde Mitchell [133] see the level and direction of the migration stream as being dependent upon the outcome of the interaction of these four sets of forces.

*"So long as the demand pull and the supply push, reinforcing each other and moving people to the urban place of work are counter-balanced by the supply pull and the demand push pressurising workers in the opposite direction back to the rural area, so long will the economy - whose boundaries may or may not be the same as the political ones - have workers oscillating backwards and forwards."*  
Wilson [233] p.149.

Clyde Mitchell [133] draws a loose framework together in terms of the competing nexi of centripetal and centrifugal forces. Centrifugal forces are mainly economic in nature and are the forces that draw the migrant away from home to the urban area. The centripetal forces on the other hand are the forces that cause him to return home and are seen only in terms of rural pull forces, such as the familiar social system, the security of land holding in the rural area etc.

If the centrifugal forces are dominant, then the man will migrate from the rural area. Once he reaches the town, however, and starts to accumulate cash, the strength of the centrifugal forces will start to diminish; this process will continue until the centripetal forces become dominant and the migrant returns once again to his home.

Once the migrant is back in the rural area, the forces operating to drive him into the town, once again slowly assert their dominance; usually as a result of a growing need for a cash income. As the centrifugal forces become stronger than the centripetal

forces, the migrant once more returns to town. This oscillating process Mitchell sees as continuing until the chain of events is broken at some point.

The 'centrifugal forces' can be reduced by the substitution of another form of cash income for the wage income in the town. If the chain is broken into in this manner then the oscillating migration ceases and the migrant will settle permanently on the land. On the other hand, should the migrant continue to migrate to the town, he will gradually build up social relationships within the urban area. As this happens so the magnitude of the 'centripetal force' diminishes and may be reduced to the point where the migrant settles permanently in the town.

Wilson [233] has a more sophisticated view of the migration process as he believes that the relative strengths of the push and pull forces, from both the rural and the urban area are not constant, but are a function of the level of economic development.

*"As the economy develops so the relative strengths of the forces alter as well"*  
Wilson [233] p.149.

Wilson attributes the duration and magnitude of the changes in the forces to the following:

1. The differing income elasticities for food and other goods and services that lead to changing relative intersectoral output levels and demands for labour, and

2. The economies of scale that can be achieved in the manufacturing sector and the agricultural sector - and that give rise to increased specialisation and an increase in the demand for labour in the urban agglomerations.

*"Hence over time the process of economic growth serves to strengthen both the demand or urban pull as well as the supply or rural push. By the same process, however, the opposing two pressures become lighter and lighter; the supply pull back to the rural areas derives its strength primarily from the fact that social security is better than in town; but as an economy develops, the cities become richer, workers' wages rise and society is able to afford social security against sickness, accidents, unemployment and old age ... the push by employers exists only where the losses inherent in high (labour) turnover are outweighed by the gains of the labourers family being rurally based. But as an economy develops the cost of turnover becomes higher and higher until such time as it is no longer profitable for employers to have a labour force consisting of oscillating migrants .."*  
Wilson [233] p.151.

One can raise two major objections to this view of the nature of the evolution of the forces acting upon migrant workers with economic development; the first of these comes from Lee [108], who argues that the links between the migrants and the "push and pull" forces may not be simple ones. He points out that every stream of migrants creates a counter stream of return migrants and he believes that the size of this counter stream will itself be related to whether the migrants were responding predominantly to "the push" or "the pull" factors when they made their initial

migration decision. The greater the strength of the push forces vis-à-vis the pull forces in the emigration, the smaller will be the counter stream of immigrants.

Lee [108] introduces a further complication into this type of model when he argues that, although migration is a selective process, it is one that selects both positively and negatively and that the migrants will react differently to the push and pull forces depending upon whether they were positively or negatively selected initially. An increase in the strength of the push forces will tend to increase the number of migrants who were negatively selected, as the supplying area will seek to push out the less productive of its members first. On the other hand an improvement in the job opportunities in the destination area will have the effect of increasing the degree of positive selection among the out migrants, as the more productive will have a better chance of finding employment in the new area.

The second major difficulty with the Wilson [233] view of the push-pull model is that, when one recalls the differing predictions of the growth models that were discussed earlier, it becomes difficult to accept his view of the evolution of the power of the push and pull forces as being in any way a 'preordained' destiny of all the sets of forces affecting migration streams. Certainly, should the economy being investigated, be traversing a Lewis [115] or Fei and Ranis [54] type of labour surplus development path then, in terms of the argument developed in Section

2.3, one would expect the push and pull forces acting on the migrants to evolve in the manner outlined by Wilson [233] . However, if on the other hand the economy was growing along a Neoclassical full employment path or along a Frank [55] Arrighi [7] underdevelopment path, then there would be no *a priori* reason to expect that the labour migration streams would behave in the same manner over time as the predicted by Wilson [234] .

Migration streams may increase or decrease with development. They may commence where no stream existed previously, either as a result of the accelerated growth in one sector of the economy or simply because the development process has altered the size of one or more of the development parameters so that the rate of labour absorption is less than the rate of growth of the labour supply in that particular area at that time.

It will be argued below that the evolution of these forces is a function of the nature of the development path being followed by an economy and furthermore that it is possible for the migration process itself to affect the size and nature of the parameters of the growth path, causing the economy to deviate to another quite different development path.

### 3.2 The Evolution of the Push and Pull Forces with Economic Development.

Continued economic development along any growth path requires the generation or appropriation, or both, of output surplus to the

subsistence needs of the community. It is argued here that the size and the allocation of this surplus is a major determinant of the relative strengths of the push and pull forces that are exerted upon migrants.

Surplus output may be extracted for investment in either the modern sector or the rural sector of the economy. It may also be used to finance higher levels of consumption or, as is indeed more likely, used for some combination of all the above three possibilities. It is this pattern of the allocation of the surplus that is seen as determining the evolutionary pattern of the push pull forces acting upon the stream of migrants. It is possible to isolate certain relationships:

- 1) To the extent that the allocation of the surplus increases the probability of a migrant obtaining a job in the modern sector, Todaro [203], the investment of the surplus in the modern sector will act to increase the extent of the urban pull force. This effect will be even greater if the additional investment results in increased real wage rates in that sector. Investment in social capital such as the provision of housing, education or social security will also act to increase the power of the modern sector pull force and at the same time may reduce the strength of the rural pull.
- 2) Should all or part of the investible surplus be used to finance additional investment or consumption in the area

supplying the out-migrants, then to the extent that this allocation of surplus reduces the absolute level of poverty in these areas, it will reduce the rural push forces. However, if the investment in the rural areas is accompanied by more capital intensive techniques of production in these areas, then this investment may actually have the reverse effect and act to increase the size of the rural push forces.

- 3) If this surplus output is used, not to generate investment, but instead to finance additional consumption in the modern sector, it will, other things being equal, reduce the rate of investment in the sector and so decrease the size of the urban or modern sector pull forces. However, should the gains in productivity that result from the economies of scale possible in the consumption goods industry, be sufficient to offset this decline in investment, increased consumption may not act to reduce the urban pull on migrants. This type of relationship will be found in economies where the growth of the economy is limited by the size of the market. Eltis [50].

In the case where the economy is limited by the rate of capital accumulation, however, the use of surplus output to finance additional consumption is likely to lower the level of investment and so reduce the force of the modern sector pull effects by reducing the rate of growth of employment opportunities in that sector.

### 3.3 The Migration Process and the Evolution of the Forces Affecting the Migrants.

The migration process itself is likely to affect the evolution of the forces acting upon the migrants through the impact that the system has on the level of incomes in the supplying economy, on the rate of growth of incomes and upon the would-be migrants' expectations.

#### 3.3.1 The Migration Process and Income Levels in the Supplying Economy.

On the theoretical level the relationship between out-migration and the standards of living of those who remain in the supplying economy is not a simple one as there are a number of different influences at work and the end result will be the net outcome of the inter-action of some, or all, of these influences. One can, however, identify some of the more simple possibilities as a starting point:

1. In cases where the marginal product of the worker is below his consumption level and, on his departure, the remaining work load is not redistributed amongst his fellows, the total output of the area will fall but output per head will increase. In such instances, *ceteris paribus*, those who remain behind in the supplying economy gain from the mere absence of the migrant.
2. If one assumes that the migrant's contribution to output is

again below his consumption level, but on the migrant's departure the work load in the supplying area is reallocated so that the level of the total output of the area is maintained. The people who remain behind will benefit, in terms of an increase in their share of the output of the economy, in two ways. Once again they will benefit from the migrant's absence, but in addition they will also gain from the output that results from their increasing their individual contributions to the economy's total work input. In extreme cases of over-population, where the marginal product of labour in the supplying region is actually negative, out-migration could result in a work reallocation that increases the total output of the area and not merely output per head.

3. It is possible that the level of out-migration is negatively, rather than positively correlated with movements in labour productivity. If out-migration results in a shortage of labour of a particular type or at a particular time, then the migration may result in downward shifts in labour productivity in the area following from such things as capital consumption in the form of the neglect of drainage facilities, fencing etc., that are concomitant with a high male absentee rate, or from a drop in the availability of human capital in cases where the more dynamic and better educated members of the work force migrate. These effects are likely to take time to manifest themselves and so are particularly difficult to isolate.

4. Out-migrants usually send a portion of their earnings in their new area back to their relatives in the supplying economy. These remittances can be quite substantial. Leistner [113] found that foreign migrants to the South African mines typically remitted between 21 and 34 per cent of their cash earnings. Hancock [68] estimated that Mexican migrants to the United States remitted at least 55 per cent of their earnings to their families and Caldwell [33] states that in 1963 remittances by rural urban migrants in Ghana were as high in total as 3 per cent of the nation's national income for that year. Remittances can be used to finance either consumption or investment by the recipients, but in either case, although the long-run implications of the uses differ, the remittances add to the present income levels in the economy receiving them.

In terms of the effect on present income levels, the existence of a substantial stream of migrants will decrease the rural push forces to the extent that the out-migration itself relieves rural poverty levels. If, however, the process of migration lowers the level of income generated within the supplying economy through its effects on the available labour and by doing so makes those who remain behind increasingly dependent upon the remittances sent in by the migrants to maintain their standards of living, then the out-migration will generate increases rather than decreases in the rural push forces arising in the supplying economy.

3.3.2 The Migration Process and the Growth of Income in the Supplying Economy.

The migratory labour system will affect the future rates of growth income in the supplying economy through the impact that it has on capital accumulation, technical progress and the choice of techniques in domestic production.

As far as the relationship between out-migration and capital accumulation in the supplying economy is concerned, there are two different and quite distinct views, namely those of the Neo-classical economists and those of the Neo-Marxists.

The Neoclassical view of labour migration and its role in the process of capital accumulation is that migration is likely to increase income levels in the supplying economy as a result of firstly, the more efficient allocation of labour to available land and, secondly, the remittances sent in by migrants. Higher incomes will lead to higher levels of domestic savings and hence to higher levels of domestic investment. An example of this type of relationships is given by Waters [233] who argues that in West Africa migrant earnings provide a substantial proportion of the working capital requirements of peasant farmers. Similarly Miracle and Berry [132] quote studies by Hancock [68] Ardener et al [5] Gulliver [63] and Schapera [178] in support of the view that out-migrants, who intend to return, have a higher propensity to save than that of the population of a developing country as a whole. Miracle and Berry [132] also argue that returning migrants

represent accumulated human capital, in so far as they have acquired skills that will enable and encourage them to increase the stock of physical capital in their home economy.

The alternate view of labour migration and its relationship to capital accumulation is that of Arrighi [7] and Amin [4] who argue the following;

1. Since the out-migrants decisions to migrate are made within the system in which they live, one cannot say that because a man decides to migrate and then continues to do so he must be better off as a result of the migration. These writers see the individuals as being so much part of the total system that their decisions become so circumscribed that they may in fact have no alternative available to them.
2. The migration process alters the values of the society supplying the migrants to the point where migration becomes 'institutionalised' as a way of life. Once this happens it is argued that the investible surplus in the community, whether it be generated domestically or sent into the economy by the migrants in the form of remittances, is reallocated in such a way as to be detrimental to the long term development of the supplying economy. Investment is channelled into labour saving techniques and into education, both of which tend to reinforce the pattern of out-migration, thus reducing the range of viable alternatives open to the adult work force.

3. The migration process leads to a misallocation of labour in the supplying area and so contributes to the consumption of capital through neglect. This misallocation arises because the overall development patterns in both the economy supplying and that receiving the migrants are seen to generate distortions in relative prices and it is argued that these distortions favour the continued export of labour vis-à-vis the employment of labour in the supplying economy.
4. The export of labour power is seen as generating output that is surplus to the immediate needs of the population in the area employing the migrants rather than in the area supplying the migrants and it is argued by Amin [4] that this loss of the creation of surplus substantially hinders the accumulation of capital in the supplying area.

Turning now to the relationship between out-migration and the degree of technical progress in the supplying economy, one again finds two differing views. The first, described earlier, is the view that returning migrants bring with them investment in the form of enhanced human capital. Miracle and Berry [13] Hill [72] Kuznets [106]. Consequently these writers argue that the returning in-migrants tend to further the advance of technical progress in the supplying economy on their return. Similarly, as was said previously, it is also argued by Caldwell [31] that migrants' remittances in the form of cash have a modernising effect on the supplying region, which will also make the climate in the economy

more favourable for technical change.

On the other hand, although one might accept the view of Kuznets that it is the younger more venturesome men who migrate, this does not imply that these same men will necessarily foster technical progress in their home economies when they return. Indeed, Gulliver [63] Arrighi [7] Watson [224] and Gluckman [58] argue the reverse, namely that;

- (i) the absence of the male workers puts such pressure on the remaining work force that they lack the opportunity to adopt new ways of production;
- (ii) that the returning migrants' experiences in the receiving economy are such that they tend to strengthen the migrant's ties with their traditional beliefs which in turn mitigate against technical progress in the supplying economies.

It was argued in chapter 2 that one of the costs of the migrant labour system to the supplying economy was that the institutionalisation of the system was likely to lead to the 'incorrect' choice of techniques in production due to the fact that the migrant makes his decisions within a set of private costs and benefits and that this set may differ substantially from the set of social costs and benefits. Arrighi's [7] arguments in connection with the reallocation of investment in the rural African areas of Rhodesia away from uses that would improve agricultural productivity towards uses that increase the rate of out-migration were quoted in support of this view. A similar finding is reported by Gulliver [63] who stated that the Ngoni that he studied

changed their techniques of production to accommodate the out-migration by their men and by doing so maintained subsistence production in the area at the expense of cash crop production.

It would appear that the relationship between out-migration, technical progress and the choice of techniques in the supplying economy is no more clear cut than that between migration and capital accumulation. It is, however, perfectly clear that the migration process itself can affect the performance of these variables and through them the size and direction of the push and pull forces that affect the migration streams themselves; consequently it is unwise to postulate a particular pattern of evolution for these forces in a development situation as was done by Wilson [233].

A better and more feasible approach appears to be one that endeavours to identify the relationship between capital accumulation, technical progress and economic development on the one hand and then to look at the reverse of the coin and to attempt to identify the relationship between the growth path being followed and its effects on the evolution of the push and pull forces affecting the migration streams.

#### 3.4 The Relationship between the Development Path and Labour Migration.

It was argued earlier that the evolution of the forces acting upon the migration streams that was postulated by Wilson [234]

represents the type of evolution that would occur if the economy was developing along a Labour Surplus development path of the type described by Lewis and Fei and Ranis[115] [52]. This being so, then as development proceeds and the supply of labour gradually becomes absorbed, the migration stream will first cease to oscillate and then eventually almost disappear, only reappearing as a reflection of any imbalances that may occur in the growth of the different sectors of the economy as a result of continued development.

If the growth path of the economy experiencing the migration streams is similar to the Development-Underdevelopment path of Frank [55] Arrighi [8] Dos Santos [45] and Amin [3] the situation is substantially different from that described by Wilson [234]. It is also possible that in this situation, the process of migration itself makes the situation worse, particularly if the migration takes the form of oscillating rural urban migration.

In this context it is argued here that oscillating migration itself is a major contributor to the underdevelopment of the supplying region, as it is likely to have a substantial effect on the numerical values of such growth parameters as population growth rates, labour force growth rates and, probably most important of all, the rate of technical progress. In addition the system contributes to the misallocation of such surplus as is generated in the sector. Arrighi [7].

The causal links between oscillating migration and underdevelop-

ment in the supplying region are seen as operating in the following manner:

1. The impact, of a system of oscillating migration, on the supplying region is very different from that of permanent migration. A permanent migrant leaves the area with his immediate dependents. The home country loses the benefit of the migrant's contribution to output in the area but it gains by the increased availability of consumption goods and services previously taken up by the migrant and his dependents.

An oscillating migrant, on the other hand, migrates alone, leaving his family in the supplying region. In such instances the supplying economy is a double loser; output drops by the migrant's contribution, but consumption levels are hardly affected, as the family, apart from the migrant himself, remains dependent upon the resources of the region.

In cases where the migrant's contribution to output is greater than his consumption, on his departure per capita incomes generated in the region will actually drop, if it is not possible for the remaining residents to adapt the techniques of production sufficiently to compensate for his absence.

2. The initial contact between modern technology and capital, and a backward, traditional community normally results in the introduction, in the latter, of social health services

and educational facilities. These act to reduce mortality rates and increase population growth rates in the sector. Population pressures on land, other things being equal, are likely to generate innovation as people are driven to search for new techniques in an attempt to maintain or improve their previous living standards. Clark [36] Hirschman [73]. Technical progress in the traditional sector is, therefore critical at this stage, to counteract the effects of both the absence of the migrants and the increased number of dependents, if locally engendered income levels are to be maintained. However, it is argued here that it is precisely this link, namely the adoption of new techniques that falls victim to the process of oscillating migration.

3. Temporary migration impedes technical progress in the traditional sector in two ways. Innovation requires initiative and investment. Oscillating migration in a capitalist economy acts to reduce both and so makes the adoption of the badly needed new technology almost impossible.
  - a) Firstly, as had been said previously, migration as a process is education and age selective. Practically all the studies on migration have found that young males and those with above average educational levels have a higher than average propensity to migrate. Thomas [98] Bogue and Hagood [23] Li [17] Eldridge [48] Suval and Hamilton [66] Browning and Feindt [29] Herrick [71] Pascaul [151] Zachariah [244]. As youth is the initiator of most change, a high rate of absence amongst those aged

under forty years means that it becomes increasingly difficult to introduce new techniques. In an African context, where the man is traditionally the decision maker, this effect is reinforced and the decision making process becomes increasingly cumbersome as the proportion of males absent from the area rises.

- b) Migrant workers lacking permanent roots in the industrial region are particularly prone to exploitation. The temporary nature of their employment makes it difficult for them to organise themselves as a bargaining force in labour politics. Trapido [205]<sup>(1)</sup> Consequently migrants wage rates are likely to be lower than those of their permanently urbanised colleagues. In addition the lack of an established urban base is likely to increase their living costs. Low wage rates, coupled with high costs of living, lead to low remittance to their families. In opposition to the findings of Hancock [68] in Southern Africa at least, the typical rate of remittance by a migrant is twenty per cent of his earnings. Leistner [113] To a family already struggling to subsist this increase in income will not be sufficient to allow for much above bare essential spending. Innovation in agriculture requires investment, investment means saving and low incomes are not likely to permit the generation of sufficient saving to finance a substantial change in agriculture techniques.
4. The agricultural situation frequently worsens as oscillating migration may imply labour shortages at certain times of the

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(1) However it should be noted that Nattrass and Duncan [141] found that, in the eyes of the employers of that labour at least, there was no evidence that suggested that the migratory labour system in fact made it more difficult to organise labour.

year. The absence of a large number of adult men means that the ploughing is often late and, even worse that agricultural maintenance jobs are neglected, threatening the future productivity of the soil.

5. Oscillating migration slowly becomes accepted as a way of life in the traditional sector. Once this happens the value systems of individuals in the sector are altered. The changes in values cause a reallocation of whatever surplus output is still generated in the sector. Arrighi's [7] argument quoted in Section 2.4 is relevant here; namely that oscillating migration in Rhodesia led to the over-valuation of education by peasants or would-be migrants, and that this transfer of surplus from agricultural investment to investment in human capital increased the deprivation of the traditional region as the peasants sought education that fitted them to work in the modern sector rather than that which would have improved rural productivity.

The evolution of the push pull forces on migrants is different in this type of development. All four types of forces, urban pull, urban push, rural pull and rural push increase as a result of the interaction of the continuing lowering of standards of living in the rural region and the combination of the expansion of the capitalist sector and the capitalists' desire to keep labour costs down.

There is no tendency to stability in the system; oscillating

migration continues and indeed the rate of migration increases as the general impoverishment of the rural areas rises, intensifying the problem.

Investment in agriculture all but ceases, past capital accumulation is consumed by neglect and traditional agriculture stagnates. The inhabitants of the region become totally reliant upon the growing sector; even their very existence depends upon the remittances received from the oscillating migrant.

In the modern sector of the dual economy the degradation of the traditional economy results in the establishment of a large surplus army of workers. Far from being pushed up by rising rural standards of living, modern sector wage rates may even fall during some phases of development as more men are forced out of the traditional sector to look for work. (2)

Under such circumstances the migration process itself generates forces that lead to further migration, since the out-migration adds to the impoverishment of the rural areas and makes their inhabitants more dependent upon the remittances from the out-migrants.

The conventional Neo Marxist school Frank [55] Arrighi [7] argue that development within the capitalist mode of production implies that the problems of the process of capitalist accumulation will

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(2) Wage rates in mining and commercial agriculture in South Africa fell in the early 20th century. Wilson [232] in Wilson and Thompson [238].

affect the growth of the economy and push it towards economic stagnation rather than onwards towards further development.

It is however, possible that stagnation is not the inevitable concomitant of capitalist development. It was postulated in an earlier paper by the author, Nattrass [138],<sup>(3)</sup> that the behaviour patterns of the groups making the investment decisions in a capitalistic economy, that is developing in the early stages of industrialisation, are likely to be such that the capitalists will make use of all the means at their disposal to create a labour supply and indeed will endeavour to increase the supply of 'free labour' vis-à-vis the demand as development proceeds. In order to do this in the initial stages of development the capitalist decision makers will make use of both the political system and the market mechanism to further proletarianize agricultural workers, petty traders, 'feudal serfs' etc. Bundy [30] Davies [41] In addition in an attempt to reduce the rate of growth of the demand for 'free labour' capitalists will seek after increasingly capital intensive methods of production. Since the growth of the capitalist sector in the initial stages will be most rapid on the development through underdevelopment path it is most likely that the decision makers, so long as their goal is capital accumulation and growth, will choose policies that enable the economy to continue to grow in a highly uneven manner.

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(3) A copy of which is attached to this thesis as Appendix E for the convenience of the reader.

However, providing the rate of growth of employment is greater than the rate of growth of the labour supply, a situation must eventually be reached in which the surplus labour becomes finally absorbed. Once this happens the bargaining position of labour vis-à-vis the capitalist decision makers, becomes very much stronger, wage rates will start to increase and labour may be in a position to force a change in the development strategy to one that favours the underdeveloped areas, as their price for continuing to contribute to the further growth of the developing sector. At this stage the decision making body in the growing centre is faced with the alternatives of stagnation or of continued growth by means of their acceding to the demands made by labour. It is postulated here that providing these decision makers are not limited by the actions of other competing groups in the social economic and political hierarachy they will choose to behave in the traditional manner attributed to capitalists and will opt for continued economic expansion despite the increasing costs.<sup>(4)</sup>

This being so then as the supply of free labour begins to dry up the supplying area is in a position to improve its position in

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(4) See for example the words that Marx believed would be uttered by the "good Dr. Aiken" if he had been able to rise from his grave and revisit the Manchester of Marx's era, namely :

"Accumulate accumulate that is Moses and the prophets."

Marx [127]p.595.

two ways. Firstly, the relative shortage of labour will force wage rates up and, *ceteris paribus* with this increase the level of remittances to the supplying region should rise; increasing incomes in the area. Secondly, as labour becomes in short supply so the bargaining position of the region supplying the labour improves vis-a-vis that of the receiving economy. It may well be possible for the supplying area to use this increased power to force the receiving economy to transfer part of the surplus created in that economy by the in-migrants, to the supplying region for investment there.

In this view of the world the development process itself must, once it commences and providing it is continuous, guarantee that the final result of development is that of full employment of factors of production in the economy, irrespective of the level from which development starts. This view will however only be correct, as was stated earlier, if the rate of growth of labour absorption is greater than the rate of growth of the labour supply.

In terms of this argument, one needs to obtain answers to certain specific questions before one can be certain firstly, that the growth parameters themselves are sufficiently strong to enable the growth process to continue and secondly, that continued growth will indeed lead to the final elimination of large supplies of surplus labour. These questions are the following:

1. Is the economy approaching full employment?
2. What are the determinants of the level and rate of growth investment?
3. Is there any substantial movement towards the adoption of more capital intensive techniques of production?
4. Which groups of individuals who have a role to play in the economic scene have a vested interest in maintaining their existing status and do they feel threatened by any further economic progress and so will oppose policies designed to further growth?
5. How much influence do such groups in fact exert over the major policy making groups in the economy?
6. To what extent is it possible for the capitalist decision makers to create additional supplies of labour either by further use of the economic or political machines or by means of extending the area from which they draw their labour?
7. To what extent is the growth process itself generating the emergence of new decision making groups with power and the incentive to accelerate change in the development strategy?

Even if all the answers to the above questions indicate that the growth path will indeed evolve from a development with underdevelopment path to one that offers development in all sectors of the economy, it is still essential to consider the time scale that is involved. It is apparent that no peasant economy trapped in an underdevelopment situation by its fast growing neighbour can take any comfort from the fact that things should improve in a century or so. More relevant in such a situation is a search for policy measures designed to reduce the degree of

imbalance between the two sectors and to this end every attempt should be made to reduce the level of dependency of the satellite region supplying the migrants, on the fast developing centre. Since it has been argued that oscillating migration is both the cause and the result of the underdevelopment of the region supplying the out-migrants, it follows that, where oscillating migration is substantial, any strategy that is designed to reduce the undesirable effects of dependency in the satellite region must include measures to reduce such out-migration as far as is practically feasible.

However, where the rates of out-migration by oscillating migrants are substantial such as is the case in Kwa\_Zulu, where out-migration rates amongst adult males can be as high as 70 per cent in some rural districts, it will not be a simple or a short term project to reduce migration rates. Out-migrants have to be provided with some alternative viable means of employment within the supplying area before the rates of out-migration can be expected to decrease, since present consumption levels in the supplying region may be almost totally dependent upon the remittances received from the out-migrants in such cases.

One has here, once again, the classic conflict between private costs and benefits and social costs and benefits and also between the costs and benefits of present and future generations. Government intervention becomes imperative if one is to attempt to drive these conflicting sets of values into equivalence. In

cases where it becomes apparent that the growth process is such that development will either cease altogether or lead to further inequalities in the levels of development of the different sectors in the economy, the need for a successful government strategy aimed at driving the economy on to a more egalitarian development path becomes even greater.

### 3.5 Conclusions: Migrant Labour and Economic Development in South Africa.

In terms of the arguments presented in this section, it seems that one can draw the following general conclusions:

1. That the level, direction and rate of growth of the migration stream is a function of the interaction of four forces acting upon it: the urban or modern sector pull forces, of job opportunities, increased rewards, etc.; rural push forces arising from relative poverty or labour reallocation in the area; urban push forces in the form of the desires of employers to minimise their responsibilities to their labour force and the rural pull forces arising from the social, political and economic ties that are maintained by the migrant with his home region.
2. That these forces are themselves a function of the nature of the development path that the economy is following.
3. That the critical variables that determine the nature of the growth path and so the evolution of the forces acting upon

the migration stream and the behaviour of the stream of migrants itself, are the relative rates of growth of labour absorption and of growth of the supply of labour in both the area supplying and the one receiving the migrants.

In terms of these general conclusions any investigation into the economic impact of the migratory labour system in South Africa must look at the role played by the system in both the supplying areas, which are predominantly the rural areas of the Black homelands, and in the development of the modern sector of the South African economy. The study should aim at identifying the effects of the system on both areas in order to enable some assessment to be made concerning the nature of the overall development patterns in the economy, together with an estimate of the most likely future outcome since without such an assessment any policy recommendations could be totally incorrect.

The remainder of this thesis is devoted to an attempt to undertake such an exercise and the following chapter considers the economic effects that the migrant labour system has had on the development of the modern sector of the South African economy.

## CHAPTER FOUR

### THE MIGRANT LABOUR SYSTEM AND THE DEVELOPMENT OF THE MODERN SECTOR OF THE SOUTH AFRICAN ECONOMY.

*"Migrant Labour is nothing new in South Africa. One hundred years ago, a decade before the birth of the Witwatersrand gold mining industry, generations before the evolution of the policy of Apartheid, the system whereby men oscillated between their home in some rural area and their place of work, was already firmly established as part of the country's traditional way of life."*

Wilson [233] P.1.

#### 4.1 A Brief Introductory Background

The initial years of conflict between the European Settler population and the African tribes culminated in the resettlement of a major portion of the tribesmen on areas of land too small to enable them to support increasing numbers of people with their traditional agricultural methods. There seems no reason to doubt the views of scholars such as Wilson [232] and Van der Horst [216] who argue that the policy of settling Africans on land areas too small was a deliberate one, in that the general view of the policy makers in South Africa in the 19th century is adequately summarised in the following excerpt from a dispatch written by Earl Gray in 1849.

*"...it would be difficult or impossible to assign to the natives such locations of an extent sufficient for their support as a pastoral people depending mainly for support on their flocks and herds. I regard it on the contrary as desirable that these people should be placed in circumstances in which they should find regular industry necessary for their subsistence." p.48(1)*

and to quote Sheila van der Horst [216] "...this attitude was maintained", and subsequently reinforced by the imposition of taxes on Africans and the further resettlement of tribesmen following the Zulu Wars.

Bundy [30] argues that the African peasantry that did succeed in establishing themselves in competition with the White farmers in the late 19th and early 20th Century were actively discouraged and finally "proletarianised" by measures which culminated in the 1913 Native Land Act.

The adverse land man ratio in the Reserves, coupled with the poor quality of a good deal of the land and the ever increasing tax burden, drove increasing numbers of Africans to seek work in the developing South African mining and industrial areas, but whereas in most other countries labour migration implies a reduction of the numbers of people remaining on the land, this was not the

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(1) Quoted from Parl. Papers 1850XXXV111 [1292] Cape, Natal Correspondence 1849-50 p.198 in S.T. van der Horst [216] p.48.

case in South Africa. Here we developed a system of oscillating migration<sup>(2)</sup> where the migrant left his family, sought work in a distant region, worked for a period of time, returned to his family for as long as he felt was economically feasible and then once again migrated to seek work. The system of oscillating migration was actively encouraged by the early entrepreneurs, particularly those in the mining industry presumably because it was profitable for them to do so, and it was supported by South African legislators. As far back as 1929, Smuts, whilst presenting the Rhodes Memorial Lectures at Oxford, summed up the currently prevailing viewpoint:

*"the natives of Africa have been subject to a stern, even ruthless discipline and their social system has rested upon the despotic authority of their chiefs. If this system breaks down, the native society will be resolved into its human atoms with possibilities of universal Bolshevism and chaos."*

Smuts p.56<sup>(3)</sup>

Smuts felt that the loss of tribal ties was due not to the employment of males in white areas, but rather to "the abandonment of the native tribal home by the women and children" which he felt should be prevented by law; which should also only allow the

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(2) For the purpose of this study an oscillating migrant is defined as a man who leaves his family in the rural area whether or not he sets up a second 'family' in the modern sector.

(3) Quoted from J.C. Smuts 'African Settlement' in Africa and some World Problems. Clarendon Press, 1930, p.56 by Brett [26] p.46.

residence of adult native males in white areas for limited periods and for the purpose of employment among whites. Brett [26]

Oscillating migration was finally entrenched as a way of life in South Africa by the laws encouraging the separate development of the different race groups.

One of the anomalies of the South African scene is that - despite the fact that the migratory labour system has persisted for over a century, no systematic attempt to assess the size and characteristics of the stream of migrants has yet been made, although some 'once off' estimates have been made by Wilson [233] and Lombard and van der Merwe [122] . In the following sections attempts are made to estimate the size and the nature of various black domestic migration streams in South Africa and by so doing to try and fill one of the gaps in our knowledge of the variables operating in the South African economic system.

#### 4.2 The Basis of the Estimate

An estimate of the behaviour of migration streams from various regions in South Africa over a period of time in the past, is by nature somewhat unreliable, due to the lack of adequate statistical data. In this study the migration estimates have been made by using the characteristics of the global South African Bantu language-speaking populations to create a standard population, exhibiting the same characteristics, for the area from which out-migration is to be estimated and then deducting the actual adult population from the estimated standard to obtain the number of

migrants. Table 4.1 gives an estimate of the number of migrants, both male and female, from the Homeland rural areas, to which has been added the net out-migration from the other rural areas in South Africa and the foreign Black migrants. The estimates have been based upon 1970 population census data and detailed explanations of the basis of the estimates together with the detailed calculations are presented in Appendix A.

As the basis for the estimates of migrants includes only net out-migration, the total number of migrants in Table 4.1 of 1 490 000 men and 260 000 women understates the total size of the migration stream, since some migrants choose to work in agriculture and rural industries. Despite this immigration, however, all the rural areas remain net suppliers of out-migrants.

In order to assess the estimate made in Table 4.1 in terms of its relative magnitude, Table 4.2 compares this estimate with some others that have been made.

Estimates 2, 4 and 5 in Table 4.2 include only legal migrants as is explained in Appendix A. In the light of this, an estimate of total temporary migration of 1 750 000 people seems reasonable. Such an estimate implies that of the total number of migrants from the Homelands, 80 per cent migrate and seek work through the normal institutional channels set up by the government and 20 per cent are probably illegal migrants.

**TABLE 4.1** AN ESTIMATE OF THE TOTAL NUMBER OF MIGRANTS IN THE MODERN SECTOR OF THE SOUTH AFRICAN ECONOMY AT THE CENSUS DATE IN 1970. (4) (5)

Age Group	Homeland Rural Areas		Other Rural Areas		Foreign Migrants	Total Migrants	
	Males	Females	Males	Females		Males	Females
	A	A	A	A	B		
15-19	117 000	36 000	11 000	11 000	22 000	150 000	47 000
20-24	192 000	36 000	19 000	19 000	98 000	309 000	55 000
25-29	192 000	36 000	20 000	35 000	78 000	290 000	71 000
30-34	168 000	35 000	17 000	28 000	59 000	244 000	63 000
35-39	112 000	4 000		15 000	45 000	157 000	19 000
40-44	87 000			5 000	33 000	120 000	5 000
45-49	62 000				26 000	88 000	
50-54	50 000				18 000	68 000	
55-64	50 000				14 000	64 000	
	1030 000	147 000	67 000	113 000	393 000	1490 000	260 000

A : Detailed calculations for these estimates are presented in Appendix A Table A9 and its supporting tables.

B : Foreign migrants have been estimated on the basis of adult males - adult females = oscillating migrants for age groups 15-64 years; from Report 02-02-02 above note 4.

(4) Based on data contained in Report 02-02-02. Population Census 1970 Bantu Age, Occupation, Industry, School Standard, Birthplace. Department of Statistics. Pretoria 1973.

(5) For a detailed explanation of the basis of the estimate see Appendix A.

TABLE 4.2 A COMPARISON OF THE ESTIMATIONS OF THE NUMBER  
OF MIGRANTS IN THE SOUTH AFRICAN ECONOMY.

Source of Estimate	Year	Number of Migrants
1) Jill Nattrass, Estimate in Table 4.1	1970	1 750 000
2) Jill Nattrass, Low Estimate based on actual masculinity rates, not Sadie's ideal masculinity rates.	1970	1 465 000
3) Jill Nattrass, High Estimate Table 4.1 Estimate adjusted for an estimated 20% under-enumeration of children 0-5 years in 1970 census.	1970	2 021 000
4) Francis Wilson, Estimated from data in Race Relations Survey 1971. 57% of registered labour assumed to be migrant.	1969	1 305 000
5) The Department of Statistics Male Migrants from Homelands only. Excludes females and migrants who leave rural areas for Homeland urban areas (6)	1970	631 200

(6) If one adjusts estimates 2 and 5 so that they are made on the same basis they differ by only 5 per cent from one another.

#### 4.3 The Migrant Labour System and the Labour Supply

##### 4.3.1 The Magnitude of the System

An estimate of one and three quarter million oscillating migrants in the modern sector of the South African economy, implies that the economic significance of these migrants to both the modern sector and the supplying Homeland regions will be substantial. Exactly how substantial the impact is on the modern sector of the economy can be seen from the magnitudes in Table 4.3, which shows the economic significance of migrant labour in terms of the South African Economy's labour supply.

The modern sector's reliance on labour supplies from outside is, in fact, greater than these statistics imply, since to these figures must be added the Homeland commuter work force, which, although it is part of the modern sector labour supply, consists of men who live permanently in the Homeland areas and so were enumerated there in the 1970 census count. If an estimate of the number of such commuters is made, based upon the ratio of the estimates of commuter to migrant income in 1967, made by Lombard and Van der Merwe [122] and added to the total number of male migrants, it seems as though of every ten Bantu modern sector workers as many as eight may be normally resident outside the sector. (7)

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(7) As the policy of separate development gains momentum, the political control of a large number of these workers will presumably pass to the Homeland government authorities in fact and not simply in theory. If this is indeed the case, control over a large percentage of the modern sectors' Bantu labour supply will greatly enhance the bargaining position of these governments vis à vis that of the White government.

TABLE 4.3 THE ECONOMIC SIGNIFICANCE OF MIGRANT LABOUR IN THE SOUTH AFRICAN ECONOMY IN 1970. (8)

	Domestic	Foreign	All Migrants
Male migrants as a percentage of all economically active males in South Africa	20	8	28
Male migrants as a percentage of economically active Bantu males in South Africa	32	11	43
All migrants as a percentage of the economically active Bantu population	27	8	35
Male migrants as a percentage of the economically active Bantu males in White Areas	43	16	59
Male migrants as a percentage of economically active Bantu males in White areas outside agriculture (9)	63	22	85
Male migrants from Homeland rural areas as a percentage of the economically active males still in the Homeland areas	120	-	-
Unemployment of Bantu males in White areas as a percentage of migration (10)	7	19	5

(8) Estimated from data in Table 4.1 and from Report 02-02-02. Population Census 1970. Bantu Age, Occupation, Industry, School Standard and Birthplace. Department of Statistics, Pretoria, March 1973.

(9) Workers in the modern sector consist of economically active African males in White areas apart from those employed in agriculture from Report 02-02-02.

(10) Unemployment of Bantu Males estimated at 49% of unemployed and unspecified Bantu Males in White areas. 49% is the percentage "unemployed" to "unemployed and unspecified" for all Bantu Males in South Africa in 1970. Report 02-02-02. Table 6.

From the Homeland viewpoint, on average, for every five economically active men in the Bantu Rural Homeland areas, there are six more absent from home, working as migrant labourers. In some districts, such as Nkandla and Msinga in KwaZulu, the ratio of migrants to economically active males in the district is as high as seven to three. The existence of such a large stream of out-migrants is obviously of substantial economic significance to these areas and will be discussed in a later chapter.

Since economic development implies structural change and such change results from the existence of imbalances in the economic forces, in a development situation one might accept an imbalance in the labour supply, even one of the size suggested by the statistics given above, if it was felt that it would be only of a temporary nature. Unfortunately in South Africa this is not the case. The data in Table 4.4, which gives estimates of the number of migrants from the rural areas of South Africa on the census dates in 1936, 1948, 1960 and 1970, shows clearly that the situation has grown steadily worse as South Africa has developed. Far from a general reallocation of the population, in response to changing geographical demand patterns for labour, continuing development in South Africa has meant a continued growth in the size of the stream of temporary migrants.

Over the thirty four year period covered by the estimates in Table 4.4 the number of migrants from South Africa's rural areas grew at an average compound rate of 3,0 per cent per annum. In

TABLE 4.4 AN ESTIMATE OF THE NUMBER OF AFRICAN TEMPORARY MIGRANTS ABSENT FROM SOUTH AFRICA'S RURAL AREAS ON THE CENSUS DATES IN 1936, 1946, 1960 AND 1970.

Year	Number of Migrants	Male Migration Rate	Growth Rate per Annum of		
			Migration from the Rural Areas	Economically Active Bantu in South Africa	Bantu Rural Population
1936	476 000 (A)	25 (A)			
1946	537 000 (B)	22 (B)	1,2		1,2
			2,6		1,6
			3,00		2,2
1960	867 000 (C)	29 (C)	3,6	2,1	3,0
			3,7	2,8	
1970	1 295 000 (D)	34 (D)	3,9	3,7	

A : From Tables A8.1 and A8.2 in Appendix A which show the estimations of 409 000 male migrants and 67 000 female migrants in 1936. The Tomlinson Commission [263] estimated this figure to be 447 000 persons.

B : From Tables A7.1 and A7.2 in Appendix A which show the estimation of 415 000 male migrants and 122 000 female migrants in 1946.

C : From Table A6.1 and A6.2 in Appendix A which show the estimates of 671 000 male migrants and 216 000 female migrants in 1960.

D : From Table A5.1 and A5.2 in Appendix A which shows the estimates of 1 035 000 male and 260 000 female migrants in 1970.

E : Estimated from data contained in the 1960 and 1970 Population Census Reports reported in the Monthly Bulletin of Statistics, Dec. 1973. Department of Statistics, Pretoria. Note - as there was a change in the basis for estimating the economically active Bantu Population during this period, this growth rate may be biased slightly upwards.

F : Growth rate of population in the rural areas on the census dates + migrants from the area in column 2. Population from South African Statistics 1974. Department of Statistics, Pretoria, 1974. [249]

addition, the male migration rate rose by 36 per cent; from 25 per cent of the males aged 15-64 years to 34 per cent of this age group. Over the period 1946-1970 the number of migrant workers grew faster than did the number of economically active Bantu; 3,7 per cent : 2,8 per cent. In the ten years 1960-70 the rate of increase in migration was 1 per cent greater than that of the economically active Bantu.

It is also interesting to note that the rate of out migration by temporary migrants has exceeded the rate of growth of the Bantu population in the rural areas in all periods apart from the ten year period 1936-1946, when they were identical. Over the 34 year period 1936-1970 the rate of out migration by temporary migrants was 1 per cent higher than the rate of growth of the rural population.

Apart from providing a substantial portion of South Africa's modern sector labour force, the large number of migrants materially alters the structure of that work force. It is a well known and frequently observed fact that migration, as a process, is age, sex and educational level selective, in that the propensity to migrate is higher amongst young adult males with above average levels of education. Browning & Feindt [29] Eldridge[48] Herrick [71] Schultz [180].

#### 4.3.2 Education Selection among South African Domestic Migrants

Unfortunately there is a lack of direct evidence which would permit a comparison of the educational profile, of those

individuals who migrate to the modern sector, with those remaining in the rural districts. However, if one compares the educational profiles of the populations of the two areas with the school-going populations, one can obtain some data which supports the hypothesis, that migrants are drawn from those individuals, who enjoy above average educational levels in the supplying region Speare [191]. Table 4.5 shows a comparison of the educational profiles of Africans in the White Areas of South Africa and those resident in the Homeland regions, and compares them with the African school-going populations in the two regions.

The data in Table 4.5 implies that the rate of migration, amongst the higher educated, is greater than it is amongst individuals with less schooling. The number of African children enrolled in primary schools in White areas is almost the same as the number in the Homeland Regions. It appears, therefore, that out of every twelve African children who receive full primary school education, six are educated in schools in the White areas and six in Homeland schools. Of these twelve children two continue their education, one in each area, and ten seek work; three in the Homelands and six in the White areas of South Africa. As the level of education increases, so the rate of out-migration from the Homeland areas among the education cohort rises. Out of every fourteen children completing primary school plus two additional years, seven are educated in Homeland schools, one of these continues his education further, three seek work in the Homeland and three migrate to the White areas. At the educational level of primary school plus four years, the rate of out-migration from the Home-

TABLE 4.5 A COMPARISON OF THE EDUCATIONAL PROFILES OF  
AFRICAN MALES IN HOMELAND AND WHITE REGIONS  
OF SOUTH AFRICA AND THE SCHOOL GOING  
POPULATIONS IN THE AREAS IN 1970. (11)

Standard attained	Ratio of individuals out of school with the standard to those in school in that standard in 1970		Ratio of school enrolments at the standard in white areas to that in Homelands
	Bantu Homelands	White Areas	
	A	B	C
3 full years of primary education	,62	,9	1,1
More than 3 years but not complete primary education	,95	1,8	1,2
Full primary education	2,6	6,3	1,0
Primary school plus 2 years	3,2	8,8	,9
Primary school plus 4-5 years	1,2	20,0	,2

A : From column D in Table A.10 in Appendix A.

B : From column H in Table A.10 in Appendix A.

C : Estimated from data given in the Department of Bantu Education Annual Report 1971 RP31/1973. [268]

(11) Estimated from the number of individuals in the two regions that had attained the level of education at the census date 1970, from Population Census Report 02-02-02 Department of Statistics, [260] School enrolments in the regions from the Department of Bantu Education Annual Report 1971. [268]. Pretoria. Details of these calculations are contained in Table A.10 in Appendix A.

land, by members of the cohort reaches ninety per cent.

If the provision of schooling facilities in the Homeland areas in recent years has grown more rapidly than the provision of schools for African children in White areas, which indeed seems to be the case, this type of analysis overstates the extent of out-migration from the echelons of the better educated. Nonetheless, it is unlikely to affect the general conclusion that will remain valid, namely that, although sixty per cent of all African children in school are in schools in the Homelands; seventy five per cent of the African men with primary school education and two further years are resident in the White areas. The proportion of this educational cohort that is working outside the Homelands will be still greater. Out-migration of such levels must drastically reduce the social rate of return on investment in education in the Homelands. If the system of migratory labour is to be maintained and with the present magnitudes, there is clearly no alternative: education in the Homelands should be financed directly by the central government as the social rate of return on investment in education to the Homelands themselves is likely to be so low that any cost benefit analysis undertaken to rank projects will prefer almost any other project to investment in education. This would however not be the case either if consumption was valued highly per se or if the contribution of the educated, who remain, was sufficiently high to compensate for the loss of the men who migrate.

#### 4.3.3 South African Domestic Temporary Migration as an Age Selective Process

It has been found in nearly all studies of the phenomenon of labour migration that the process is highly age selective and that the propensity to migrate is highest amongst young adult males, for example Schultze [180] Lee [108]. Table 4.6 gives the age specific migration rates and the cumulative age distributions of the streams of temporary migrants from South Africa's rural areas in 1936, 1946, 1960 and 1970. The data in Table 4.6 again confirms the overall conclusions that young adults have a high propensity to migrate but it is interesting to note that this propensity does not in fact decline very rapidly. In 1970 for example in the age cohort 20-24 years, 44 out of every 100 men in the age cohort were away on the census date, however, amongst the men aged 35-39 - fifteen years older on average - there were still 38 out of every 100 absent from home. This is an indication of the fact that migration in South Africa has become institutionalised as a way of life among the men in the black rural communities, and is no longer viewed as an "adventure" or even a challenge.

The other interesting feature of the data presented in Table 4.6 is the way that the age specific migration rates have altered as the system has become institutionalised. In 1936 the age specific migration rate reached a peak of 42 per cent in the age cohort 20-24. By 1970 the maximum age specific rate had increased to 50 per cent, and this rate was reached in the age cohort 25-29, and was still as high as 49 per cent in the age cohort 30-34 years. In addition if one compares the ratios for

**TABLE 4.6** TIME TRENDS IN AGE SPECIFIC MIGRATION RATES FOR AFRICAN MALES FROM SOUTH AFRICA'S RURAL AREAS FOR THE PERIOD 1936-1970<sup>(12)</sup>

Age Cohort	Age Specific Migration Rate %				Cumulative Age Distribution %			
	1936	1946	1960	1970	1936	1946	1960	1970
	A	B	C	D	A	B	C	D
15-19	10	13	24	20	7	11	16	12
20-24	42	39	44	44	35	39	41	32
25-29	33	32	39	50	52	59	59	53
30-34	38	32	40	49	72	77	75	71
35-39	24	18	34	38	82	85	87	81
40-44	25	17	28	31	91	92	96	88
45-49		7		21		94		92
50-54	1	14	7	27	100	98	100	97
55-65		8		12		100		100
Average	25	22	29	34				

A from Table A8.1 columns 7 and 9 respectively.

B from Table A7.1 columns 7 and 9.

C from Table A6.1 columns 7 and 9.

D from Table A5.1 columns 7 and 9.

(12) Estimated on the basis outlined in Appendix A using the detailed tables in the Appendix A8.1, A7.1, A6.1 and A5.1 which are based on data obtained from Report 02-02-02, Population Census, [260]

the 1936 and 1970 census estimates, the two censuses that are quoted as being the most accurate, one can see that in all age cohorts the migration rate has increased, but the greatest differences lie in the youngest cohort where the propensity to migrate has doubled, and the age groups over 40 where in 1936 almost no-one migrated whereas in 1970 26 out of every 100 men in the age group 40-65 were absent as migrants.

Over time it seems that the migration stream has grown partly because populations have grown, partly because more young men migrate and partly because the period of migration has increased substantially. In 1936 the average time spent away from home by a migrant was 13 years; by 1970 this period had increased to 19 years.

The migration stream has grown by 3 per cent per annum but the length of absence has grown by a further 50 per cent over the period 1936 - 1956. This means that the average potential supply of man years by the migrant labourers has increased from 6 188 000 in 1936 to 24 605 000 in 1970<sup>(13)</sup> which is an annual compound growth rate of four per cent against three per cent for the growth in the number of migrants alone. Of the total increase in the supply of labour from the migrant labour system, therefore, 3 per cent can be attributed to an increase in the number of individuals entering the system and a further one per cent is due

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(13) The average potential labour supply is estimated by multiplying the number of migrants in 1936 from Table 4 by the average length of stay estimated in 1936 i.e.  $476000 \times 13 = 6\,188\,000$ .

to the fact that the migrants remain in the modern sector for substantially longer periods on average than was the case in 1936.

The effect that the migrant labour force has on the modern sector will be tempered by the characteristics of the proportion of the sector's labour force that are not migrants. Table 4.7 compares the age structures of several different component parts of the labour force in the modern sector.

The high proportion of young men among the migrants, coupled with the large absolute size of the stream of migrants vis à vis the size of the African work force, means that the migrants have a substantial impact on the overall age distribution of South Africa's labour supply. This can be seen in the data contained in Table 4.7.

The statistics in Table 4.7 are not wholly consistent as the basis on which the estimates of the stabilised labour force have been made includes the unemployed and unemployable African males who are not migrants, in the labour force. However, so long as unemployment is not age selective, i.e. the unemployed are equally distributed percentage wise throughout the age distribution, some useful inferences can be drawn from this data. It is evident that the percentage age distribution of the domestic migrants differs significantly from that of the permanently settled worker.<sup>(14)</sup> Eighty one per cent of the domestic migrant

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(14) A  $\chi^2$  test on the data in the first two columns of Table 4.7 gives the following result :

$\chi^2 = 25,75$  (8 d.f.) significant at all levels.

TABLE 4.7      THE COMPARATIVE AGE DISTRIBUTION OF AFRICAN MALE  
MIGRANTS: PERMANENTLY SETTLED AFRICAN WORKERS AND  
THE TOTAL AFRICAN LABOUR FORCE IN 1970<sup>(15)</sup>

Age Group	Percentage of Group in Each Age Category				
	Permanently Settled Workers	Domestic Migrants	Foreign Migrants	Zulu Homeland Rural Migrants	Total African Male Work Force
	A	B	C	D	E
14-19	13	12	6	13	12
20-24	15	20	25	18	17
25-29	12	21	20	18	16
30-34	10	18	15	16	13
35-39	12	10	11	10	12
40-44	11	7	8	11	10
45-49	10	4	7	5	8
50-54	7	5	5	5	6
55-64	10	3	3	4	6
Total	100	100	100	100	100

A from column 8 in Table A.11 in Appendix A.

B the age distribution calculated from the population estimated in column 3 Table A.11 in Appendix A.

C Age distribution of the population estimated in column 4 of Table A.11.

D From Table A.13 column 4 in Appendix A.

E From column 7 in Table A.11 in Appendix A.

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(15) Estimated from data contained in Report 02-02-02-[260], and The Department of Bantu Education Annual Report 1971, [268]. Details of the estimations of the data on which the age distributions in Table 7 are based are contained in Table A.11 and Table A.13 in Appendix A.

labour population is under forty years of age, whereas only 62 per cent of the stabilised work force is under forty. The weighted average age of the domestic migrant labour force is 25 years, whereas that of stabilised labour is 35 years.

It is also apparent from Table 4.7 that migrants on average retire from work in the modern sector earlier than do the stabilised workers. Of the migrants entering the labour force at 20 years of age, half will retire before they reach 40 years of age and three quarters by the age of 50 years. The average length of the working life in the modern sector of a migrant labourer is 19 years, whereas that of his stabilised colleague is 23 years, a difference of 20 per cent.

The fact that the migrant retires to his homeland at an earlier age than an urbanised worker means that this practice will result in a wastage of potential output in all instances where the marginal product of labour in the modern sector exceeds that in the homelands. In addition, the increased labour turnover rate, that is implied by the shorter working life of the migrant, is likely to result in additional resources being allocated to the training and recruitment of labour. It is this aspect of the migratory labour system in South Africa coupled with the heavy investment of time and physical resources in transport that the system implies, that has lead to it being labelled "wasteful" by economists such as Hobart Houghton [77] p.87-91 and Hutt [88] who goes as far as to say;

*"Had the Africans been allowed - let alone encouraged - to develop as a normal town community there can be little doubt that their contribution to the value of the work performed would have been incomparably larger. The number of days worked would have increased and output per head have been improved". [88] P. 93.*

This type of static allocation of resources analysis will seldom yield the correct answer to a problem in a dynamic setting because it assumes perfect knowledge, foresight and mobility, all of which are lacking in the real world. Whether or not the abandonment of the migratory labour system would increase output or not will depend upon the effect that this change has on investment levels, labour productivity and changes in techniques and cannot be answered simply. A general investigation into this particular aspect of South Africa's development is both highly fascinating and long overdue, but it is unfortunately beyond the scope of this present research project and although a later section of this chapter will be addressed to this question it will be limited to a few general observations.<sup>(16)</sup>

However, it should be noted that as long as the Homelands are unable to support their adult male population on a standard that compares with the wage rates paid in South Africa's modern sector this difference between the work habits of the migrant and non-migrant labourer serves as a means of distributing the total wage

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(16) See Section 4.5.

payments to migrant workers amongst a larger number of Homeland recipients. Thus the migratory labour system as it is at present ensures a more egalitarian income distribution in the Homeland areas than would be the case had a smaller number of men migrated for a longer average period.

#### 4.4 Regional Migration Patterns

As individual decisions to migrate are made in terms of the relative strengths of the variables in the migration equation and the strengths of the variables are likely to be common to particular age cohorts and to particular regions, it is quite likely that migration patterns will show substantial variations, both of a quantitative and a qualitative nature, between regions.

Occupations taken up by migrants may also show a regional bias. Men from a specific area may show a preference for work in a particular industry or for a specific destination. This is indeed likely to be the case, since it is argued by Lee [108] and others, that migration streams set up counter streams of information and so tend to reinforce the size and direction of the initial stream of migrants. Similarly, differences in the location of population groups and of industries imply that there will be inter-regional variations in the behaviour patterns of the migrants.

Differences of this nature imply that the impact of migrants from any one area will vary between supplying regions from both the

demand and the supply viewpoint. A detailed analysis of this type of impact would require fieldwork amongst the migrants themselves but some initial groundwork working towards isolating such differences can be done from the aggregated data. Table 4.8 shows the age specific migration rates for the four major African groups as a first step towards isolating any regional differences.

One striking feature of the data in the table is the remarkable degree of consistency in the behaviour patterns of the age cohorts of migrants from the four major supplying language groups.<sup>(17)</sup> The probability that a young man from KwaZulu in the 20-24 year age cohort, will migrate from his home regions is much the same as that of a similar young man from Bophutswana.

Similarly the average migration rates of adult males from the rural districts do not differ significantly from the mean rate of 52 per cent, (standard deviation 2,87) neither does the average time spent, throughout the adult working life span, in the modern sector by each group differ from the mean of 19,98 years (standard deviation ,21). However, it should be noted that the

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(17)  $\chi^2$  tests were performed on the propensities to migrate among the different age groups and they did not yield significant results. The greatest deviation in behaviour patterns occurs between the Xhosa and the Pedi. The value of  $\chi^2$  in this case is 13,02 (9 degrees of freedom) which is not significant at the ten per cent level.

TABLE 4B AGE SPECIFIC MALE MIGRATION RATES FROM THE HOMELAND RURAL AREAS FOR THE XHOSA, THE ZULU, THE PEDI AND THE TSWANA PEOPLE OF SOUTH AFRICA IN 1970.

Age Group	Age Specific Migration Rates				Percentage of Migrants in the Age Category or Younger			
	Xhosa (Ciskei and Transkei)	Zulu (Kwa Zulu)	Pedi (Leb-owa)	Tswana (Bophuthatswana)	Xhosa	Zulu	Pedi	Tswana
	A	B	C	D	A	B	C	D
	%	%	%	%	%	%	%	%
14-19	26	34	23	26	10	13	8	11
20-24	60	60	69	65	29	31	28	31
25-29	67	67	78	71	47	49	48	49
30-34	63	67	72	68	62	65	62	63
35-39	61	59	72	69	75	75	76	75
40-44	58	61	61	59	86	86	85	84
45-49	42	42	58	48	93	91	93	90
50-54	33	47	35	56	97	96	96	97
55-64	19	29	25	23	100	100	100	100
For all Migrants	49	52	56	52				

A : Estimated from migration estimates made on the basis outlined in Appendix A from data in Report 02-02-02. Population Census 1970. Bantu Age, Occupation, Industry, School Standard and Birth Place. Department of Statistics, [260] Details of the estimate are contained in Table A1.2 in Appendix A. 98 per cent of Xhosa in homeland rural areas in 1970 were resident in the Transkei or Ciskei rural areas.

B : From Table A13 in Appendix A. 96 per cent of Zulu resident in homeland rural areas in 1970 were in KwaZulu rural areas.

C : From Table A14 in Appendix A. Pedi in Homeland Rural Areas. 90 per cent were resident in Lebowa rural areas in 1970.

D : From Table A15 in Appendix A. Tswana in rural Homeland areas. 98 per cent were resident in Bophuthatswana rural areas in 1970.

migrants from the Homeland areas appear to spend on average at least one year longer in the modern sector than do the migrants from the other rural areas. The average length of stay for the population migrants from South Africa's rural area is 19 years against the average of 20 years for the migrants from the Homeland rural areas of the four main Bantu language groups shown in Table 4.8.

An analysis of the distribution of migrants by industry, however, does reveal that some regional or ethnic group preferences exist. Table 4.9 gives an estimate of the industrial distribution of migrants in the modern sector of the economy.

Subject to the reliabilities of the surrogates used in Table 4.9, some interesting facts emerge. Apart from the Zulu and the Pedi, who have been assumed to behave in the same manner due to a lack of alternative data, there is a significant difference in the industrial distribution patterns of all the populations shown in Table 4.9.<sup>(19)</sup> The migrants from each of the groups not only differed in their industrial distribution from that of migrants from other groups, but also from the distribution of all Republican Africans, indicating firstly that men from particular groups have their specialised work destinations in the modern sector and secondly that the migrants as a group find different industrial job locations from the urbanised African workers.

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(19) The relevant  $\chi^2$  values for Table 4.9 are given in Appendix A Table A.16

TABLE 4.9 ESTIMATED DISTRIBUTION OF MIGRANTS BY INDUSTRY OUTSIDE  
HOMELAND AREAS IN SOUTH AFRICA IN 1970. (18)

Industry	Percentage of Group Employed in the Industry						
	Xhosa		Zulu	Tswana	Pedi	Foreign Africans	All Repub- lican Africans
	Trans- kei	Cis- kei					
	A	B	C	D	E	F	G
Agriculture	26	29	27	4	27	8	13
Mining	44	13	1	11	1	80	9
Manufacturing	11	25	15	11	15	3	20
Construction	8	15	17	21	17	2	10
Trade & ) Finance )		3	2	8	2	1	8
Transport ) Services )	4	1	1	2	1	-	1
Public Sector		7	24	35	24	3	26
	8	7	13	8	13	3	13
	100	100	100	100	100	100	100
Low wage sector H	70	49	52	50	52	91	48
High wage sector I	30	51	48	50	48	9	52

A : Estimated from data in the Transkei Government Department of Interior. Statistical Labour Report, 1971. Umtata 1972. [271]

B : Estimated from data in the Annual Report of the Department of Bantu Administration and Development 1971. Xhosa from the Ciskei placed in employment outside the homeland by the district labour bureaux in 1971. P.68. RP.41/73. [267]

(Notes on Table 4.8 contd. overleaf...

(18) Migrants here include male and female migrants but since the percentage of females who migrate is approximately 10 per cent of the males their inclusion is not likely to distort the patterns significantly.

- C : The occupational distribution of the Pedi migrants has been used as a surrogate for that of the Zulu. The Pedi distribution was chosen as there was not a significant difference between the occupational distribution of all Pedi males and that of all Zulu males. ( $\chi^2$  6,81 8 degrees of freedom which is not significant at the 50 per cent level.) This similarity in work patterns was assumed to hold also for the migrants from each group, as no other data for the Zulu migrants could be located.
- D : Estimated from data in the Annual Report of the Department of Bantu Administration, RP.41/1973 [26] P. 31.
- E : Estimated from Report RP.41/1973, [267] P. 42.
- F : Taken from a reply by the Minister of Bantu Affairs to a question in the House of Assembly on 5th March, 1971. Hansard col. 5 384-386 quoted in Survey of Race Relations in South Africa 1971. Vol. 25. S.A.I.R.R. January 1972. [81]
- G : As A above.
- H : Agriculture, Mining and Service Sectors.
- I : Manufacturing, Commerce and the Public Sector.

If, however, one reduces the job opportunities in the modern sector to two categories, jobs in the high wage sector, manufacturing, commerce and the public sector and jobs in low wage sector, agriculture, mining and services, a somewhat different picture emerges. Migrants from the Transkei and foreign migrants are predominantly found in the low wage sector and these distributions both differ significantly from the overall distribution of all South African Africans. Migrants from the Ciskei, Bophuthatswana, Lebowa and KwaZulu (by assumption) are found to be spread almost equally between the two sectors and in no case do migrants from these populations show a significant deviation from

the job distribution of all domestic Africans.

Oscillating migrants from the Transkei and the areas outside the Republic make a substantial contribution to the labour supply of the mining industry, 44 and 80 per cent of the migrants from these groups being found in that industry, but otherwise migrant workers fit into South Africa's labour supply in much the same way as their settled counterparts, although the high level of aggregation in the data may conceal some inter-industry differences. Similarly migrants, apart from the foreign migrants and those from the Transkei area, <sup>(19)</sup> appear to have the same chance of obtaining a well-paid job as the urbanised settled worker. This indicates that, at least as far as the employers of labour are concerned, apart from the mining industry, there seems to be no marked preferences for or prejudices against migrant labour.

Further indirect evidence supporting the view that employers have adjusted almost totally to the migrant labour system is provided by the survey of Nattrass and Duncan [141] which found that the attitudes of employers towards Black Trade Unions and Works Committees did not differ depending upon whether they were employers of migrant labourers or not.

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(19) Transkeian migrants together with foreign migrants do appear to be concentrated in the lower paid jobs, to a significantly greater degree than the migrants from the other Homelands.

4.5.1 The Impact of the Migrant Labour System on Capital Accumulation in the Modern Sector.

Any impact that the migratory labour system has had upon the growth path followed by the South African economy will have operated through the influence exerted on both the size and distribution of the economy's investible surplus. There are two main schools of thought on this matter; the school comprising the "liberal" or free market views of economists such as Hobart Houghton [77] and Hutt [88] referred to earlier and the Neo-Marxist School whose opinions are represented by the writings of Legassick [109] [110] and Wolpe [240]. The views of these two schools will be outlined briefly below.

4.5.1 The Migratory Labour System and Capital Accumulation - the NeoClassical View.

Economists working within the Neo-Classical paradigm agree that, from an economic standpoint, the maintenance of the migratory labour system and indeed the wider controls on labour productivity in general in South Africa, are 'irrational' from an economic standpoint. The migratory labour system and its attendant legislation they see as the result of the interaction of both economic and social forces, such as the market forces resulting from economic growth; the cultural forces that act to tie sections of the African population to their tribal lands and racial distrust that has resulted in pressure on successive governments to keep certain areas and jobs as the preserve of the White.

Since the system is a reaction to forces apart from simple market forces, economists in this school see it as representing a major market imperfection and consequently they believe that the system has acted to retard the rate of growth of the modern sector.

Should it be eliminated they argue, this would result in an increase in the overall level of output. This increase would come from two major sources; firstly it would result from the transfer of resources currently tied up in running the system, such as the maintenance costs of the labour bureaux and the additional transport requirements, to more productive uses and secondly output would increase because the stabilisation of the labour supply would increase the productivity of labour. Stabilisation would facilitate the acquisition of skills by those who are at present inhibited by the 'footloose' nature of the migrant labour system.

As the migrant labour system is seen as a force that reduces output, it is also seen as a force reducing the rate of capital accumulation in the economy and so is viewed as acting to reduce not only the present level of output but also the future rate of growth.

#### 4.5.2 The Migrant Labour System and Capital Accumulation - The Neo-Marxist View.

The Neo-Marxist school argue, on the other hand, with some individual variations, that the successful development that has occurred in the modern sector, far from being hampered by the migratory labour system, is both the direct result of and the cause of its maintenance. In terms of this paradigm economic

development by the capitalist mode requires the generation of a labour supply. The lower the cost at which it is possible to generate this supply of 'free labour' the greater the surplus value that can be expropriated by the capitalist class, the greater the investible surplus in the economy and consequently the greater the rate of economic growth in the capitalist sector.

Wolpe[240] and Legassick[110] argue that the migratory labour system was established by the early capitalists after the discovery of diamonds and gold and was maintained by successive generations of capitalists, White agricultural interests and the 'state' by means of deliberate interference with the market forces operating on the supply of labour, as it represented the means by which it was possible to maximise the investible surplus in the modern sector. These writers go on to argue that the policy of 'separate development' emerged as a means to maintain the supply of 'cheap labour' beyond the point where under 'normal' economic development, labour's bargaining power would have grown sufficiently to force an increase in its share in output.

Far from being a market imperfection that hinders South Africa's economic growth the migrant labour system is seen as being one of major forces of growth. Wolpe [240] argues that the system facilitates the expropriation and appropriation by the modern sector of the traditional or pre-capitalist sector's investible surplus. The system, by maintaining the pre-capitalist mode of production, enables the modern sector to pay its labour at a rate below that required for the "reproduction of labour" and

this would not have been possible if the modern sector had had to pay wages at a level necessary to support their workers and their dependents. Legassick [110] argues that by maintaining the separation of the working class by 'artificial' means, separate development offers a way of keeping down labour costs. The maintenance of the Homeland social structure has a retarding influence on the rate at which labour's "horizon's" expand and so reduces the rate of growth of the cost of 'necessary labour' to the capitalist sector.

*"The perpetuation of separate black and white societies in South Africa, even under conditions where the precapitalist economic base of black society has eroded must, therefore, be seen as an attempt by capital to retain the lowness of the 'necessary wants' and therefore the 'value' of black labour power"*  
Legassick [110] p.19.

In addition, by separating out the functions of government the capitalist sector is able to transfer some of the 'proper cost' of labour such as portion of the costs of the provision of social security and education to the Homeland governments.

In addition, as this analysis is carried out within a Marxist framework, labour's share of output is seen as being determined by the relative strengths of the classes who share in the output. The migratory labour system it is argued, encourages a footloose labour force and so has mitigated against attempts to organize migrant labourers. Trapido [205]. This lack of organization has reduced black labour's bargaining power and consequently its

share of the local output of the economy. (20)

Writers in the Neo-Marxist tradition deny the arguments advanced by Hobart Houghton [77] and Hutt [88], namely that the migrant labour system is wasteful due to the fact that it reduces labour productivity, but argue instead that, whilst capital accumulation is normally accompanied by an increase in the capital labour ratio and so by a concomitant increase in labour productivity, this does not necessarily imply an automatic need for a more highly trained labour force. These writers point out that the adoption of more capital intensive techniques has a tendency to 'de-skill' workers, and so may in fact require a lower level of labour training and skill than the more labour intensive techniques of production that are likely to have a far higher 'craft' component.

#### 4.5.3 The Magnitude of the 'Trade Off' between the Two Paradigms.

There is no easy way of assessing the impact that the migratory labour system has had upon capital accumulation and growth in the modern sector of the economy in terms of these two opposing and mutually exclusive paradigms. In fact since the wages paid, the productivity levels currently prevailing and people's outlooks,

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(20) The migratory labour system is not the only factor nor even the major factor working against the emergence of a powerful Black Union Movement in South Africa. Black Trade Unions whilst not illegal, have been a continual focus of antagonistic action by the State.

opinions and decisions are in any case largely - if not wholly - determined by the set of economic, social and political forces within which they operate, one can perhaps question the validity of even attempting to undertake such a comparison.

It would appear however, that a valid course of action would be one that attempted an indirect assessment of the relative positions postulated by the two opposing paradigms by means of a comparison of the relative sizes of the 'tradeoffs' implied. One could, for example, attempt to measure the magnitude of the gains that accrue from certain aspects of the migrant labour system and then compare these gains with the costs implied by the alternative paradigm.

One of the more obvious benefits that the modern sector of South African economy has received from the continuance of the migrant labour system is that it was not forced to divert investment from directly productive activities to social overhead investment to provide for the additional cost of housing and educating the migrant worker's family in the modern sector. (21)

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(21) In cases where labour is paid a wage well above the subsistence level it may be possible for the firm to pass on the cost of housing its workforce to the worker himself in part. Where wages are very low, however, this possibility no longer exists and the firm has either (1) to provide the housing itself, or (2) to increase wage rates to allow the worker to provide housing, or (3) appeal to the State to take up the burden in which case the capitalist may be able to pass on some portion of his labour costs to other tax payers but will still bear a large part himself in the form of tax payments.

If one estimates the size of such savings, it is then possible in terms of a 'growth model to assess the contribution that savings of such magnitude would make to the growth of the output of the sector in which they are invested. This would then give one 'a yardstick' with which one would be able to answer a question of the following nature:

*By how much can the productivity of a migrant worker fall below that of a settled labourer without the economy being any the worse off than it would have been if it had developed with a settled work force?*

In other words it will enable some attempt to be made to establish the relative sizes of the 'trade offs' implied by the two paradigms.

Table 4.10 contains an estimate of the size of the contribution made to South Africa's Gross Domestic Product over the period 1934 - 1970 by transferring investment funds from housing to directly productive investment. Such an estimate is of necessity tentative and is highly sensitive to the assumptions that are made in its calculation and should consequently be treated with caution.

The data in Table 4.10 is drawn from the differences in costs of providing single and family housing in the relevant years. Details of the sources of the data and of the assumptions underlying the calculations are contained in Table A17 of Appendix A. Briefly these calculations are based on the following assumptions.

- (1) That the savings on housing resulting from the migrant labour system are invested and not consumed.

TABLE 4.10 AN ESTIMATE OF THE CONTRIBUTION TO GROSS DOMESTIC PRODUCT THAT HAS RESULTED FROM THE PERPETUATION OF THE MIGRATORY LABOUR SYSTEM<sup>(22)</sup>

Year	Saving on Migrant Labour System Assuming Migrants are Housed	Capital Output Ratio	Increase in Gross Domestic Output Per Annum + Re Investment		
			three per cent	five per cent	eight per cent
	A	B	C	D	E
1936	71 400 000	3,0	65 000 000	125 000 000	325 000 000
1946	43 920 000	2,03	30 000 000	50 000 000	137 000 000
1960	402 500 000	2,3	180 000 000	219 000 000	378 000 000
1970	612 000 000	2,22	276 000 000	276 000 000	276 000 000
	1 129 820 000		551 000 000	670 000 000	1 117 000 000
	per cent of Gross Domestic Product 1970 at 1963 prices		6%	7%	12%

A : From the end column in Table A.17 in Appendix A.

B : 1936 capital output ratio taken on 3 Capital Output Ratio for 1946, 1960 and 1970 were obtained from B.L. de Jager 'The Fixed Capital Stock and Capital Output ratio of South Africa 1946-1972'. South African Reserve Bank Quarterly Bulletin - June 1973.

C : Compounding at 3 per cent implies a rate of reinvestment of 9 per cent of output with a capital output ratio of 3.

D : Compounding at 5 per cent implies a rate of reinvestment of 15 per cent with a capital output ratio of 3.

E : Compounding at 8 per cent implies a rate of reinvestment of twenty four per cent with a capital-output ratio of 3.

(22) In every case the contribution to 1970 output made by failing to stabilise the migrant labour system has been estimated by the following method.

$$\frac{\text{Savings on Housing in Year } t}{\text{Capital output ratio}} \left(1 + \frac{i}{V}\right)^n = \Delta y_{1970}$$

where  $n = 1970 - t$

- (2) That every new migrant into the modern sector would have required family housing eventually in the modern sector.
- (3) That the housing would have been provided in 1936 for all migrants in the sector in that year, in 1946 to all new net migrants between 1936-1946; in 1960 for the increase between 1946 and 1960; and in 1970 for the increase between 1960 and 1970.

The basis of the calculations made in Table 4.10 implies an underlying growth model of the Harrod Domar type namely

$$\Delta y_{1970} = \frac{I_t}{V_t} \left( 1 + \frac{I}{V} \right)^n$$

- where
- 1)  $\Delta y_{1970}$  is the increment to Gross Domestic Product in 1970 that results from the savings on housing due to the migrant labour system in the year  $t$ .
  - 2)  $I_t$  is the amount transferred to Investment from housing in the year  $t$  subject to the assumptions made in Table A17.
  - 3)  $V_t$  is the capital output ratio in the South African economy in year  $t$  from de Jager [42].
  - 4)  $I$  is the assumed rate of reinvestment.
  - 5)  $V$  is the assumed capital output ratio for the reinvestment taken as 3 in all cases which when compared with de Jager's [42] estimates is conservative.
  - 6)  $n$  is the number of years between  $t$  and 1970 where  $t$  is taken as 1936, 1946, 1960 and 1970.

Subject to these assumptions, compounding the data in Table 4.10

at 3 per cent per annum is the equivalent of assuming a constant rate of reinvestment of nine per cent per annum. Compounding at 5 per cent implies a reinvestment rate of 15 per cent and at 8 per cent a rate of reinvestment of 24 per cent. Since gross capital formation in South Africa was the equivalent of 24 per cent of Gross Domestic Product in 1946, 20 per cent in 1960 and 29 per cent in 1970,<sup>(23)</sup> the most reasonable of the three estimates given in Table 4.10 appears to be the one in which the savings are compounded at 8 per cent per annum.

This implies that if one assumes a rate of reinvestment of 24 per cent per annum together with a capital output ratio of 3 over the period<sup>(24)</sup> then, providing that the only result of the migrant labour system was to effect this reduction in the amount of necessary social investment, South Africa's Gross Domestic Product in 1970 valued in 1963 prices was 12 per cent greater than it would have been had the economy developed with a settled labour force, assuming the levels and rates of growth of labour productivity were the same on both development paths.

Looking at the estimation from the other view point one could say that providing that, the migrant labour system has had no other

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(23) Estimated from data in Table 21.15 South African Statistics 1974 [250]

(24) de Jager's [42] estimates of the value of the average capital output ratio in South Africa were - 1946 2,03, 1960 2,3 1970 2,22.

reallocative effects on the economy the migrant labour work force could be as much as twenty eight per cent less efficient in output terms than the stabilised work force before the Gross Domestic Product was reduced to the level that it would have been without the transfer of investment from housing to productive investment.

In order to place the size of the savings from housing in a broader perspective, it is interesting to note that in 1970 these "savings" amounted to fifty per cent of the capital invested in the railways in South Africa, and twelve per cent of the total public sector capital apart from the capital of the public corporations.<sup>(25)</sup>

Although this type of evidence is incomplete it does seem from the relative sizes of the magnitudes discussed here that, even if the migrants are paid the same wages as the settled labour force and have been throughout the development phase in South Africa, the existence of the migrant labour system is likely to have encouraged economic growth rather than to have retarded it. Indeed, if Wolpe and Legassick are correct in asserting that the system has acted to keep Black wages down, then the evidence in favour of the migrant labour system as an engine of growth seems to be substantial, particularly when one remembers that South

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(25) Estimated from the capital stock figures given in de Jager [42].

Africa's Gross Domestic Product in current prices has grown at over eight per cent per annum compound throughout the period 1936 - 1970.

#### 4.6 Summary of the Main Findings in this Chapter

The main findings of this chapter can be summarised as follows:

- 1) On the basis of the estimates of domestic migration made for the years 1936, 1946, 1960 and 1970, which are included in Appendix A, it would seem that the size of the migration stream has grown continuously over the period. The number of men migrating from South Africa's rural areas grew by 3 per cent per annum compound over the thirty four year period, which was one per cent greater than the rate of growth of the rural African population over the period.
  
- 2) In 1970 Migrant African men, including foreign migrants, formed 59 per cent of all economically active African men resident in white areas on the census date. Over the period 1946-1970 the rate of growth of migration from South Africa's rural areas was approximately one per cent greater than the rate of growth of the economically active Africans in South Africa; signifying that the migrant labour system is growing in importance in the overall labour supply rather than declining as would have been the case had the migrants been allowed to settle.

- 3) Evidence suggests that the migrant labour system in South Africa is heavily selective of the better educated men, and further, that the rate of out-migration is highly positively correlated with increased educational levels; the rate of out-migration being as high as 90 per cent amongst men who have at least full primary school education plus four additional years of schooling.
- 4) Out-migration of such magnitudes amongst the better educated must lead to a drastic drop in the social rate of return on investment in education by the Homeland governments. This implies that since the White sector benefits from such investment, education in the Homelands should be financed by the central government, quite apart from any general development grants that are made to the Homelands.
- 5) The migration process is also age and sex selective concentrating, as has been found in many other studies, on the young adult male. However, the propensity to migrate in South Africa reaches its highest value in the age cohort 24-29 years which is slightly older than has been found in other studies and declines much less rapidly than is usually the case. In 1970 the average propensity to migrate amongst the age cohort 30-34 years was still as high as 49 per cent.
- 6) Throughout the thirty four year period studied here the propensity to migrate increased in all age cohorts but increased fastest in the youngest age group 14-19 years and in the age

group 40-65 years. This implies that the impact of the migrant labour system on South Africa's labour supply is in fact greater than the mere growth of numbers imply since the migrant labour supply has grown in two ways:

- 1) In terms of simple numbers; more men were absent in 1970 than in 1960 and in 1936.
- 2) In terms of the number of years spent in the modern sector; men migrated at a younger age in 1970 than they did on average in 1936. Similarly they returned to their rural homes at an older age than they did in 1934.
- 7) Migrant workers had a younger average age than the permanent urban African workforce on the census date in 1970 and in addition, appear to have a shorter average working life in the modern sector; 19 years as against 23 years. At present since the Homeland areas are unable to support their populations the shorter average working life of a migrant means of distributing the opportunity to work in the modern sector amongst a larger number of Homeland men seeking work.
- 8) The migration patterns amongst populations from different regions and ethnic groups are remarkably similar but men from the Homeland rural areas appear to spend slightly longer in total in the modern sector than do men from other South African rural areas.
- 9) Whilst there does appear to be evidence that migrants from particular regions favour, or are favoured by particular

industries, apart from the foreign migrants and those from the Transkei, there appears to be no evidence that migrants are concentrated more heavily in the low wage sectors of the economy. This indicates that the South African economy has 'institutionalised' the migrant labour system in its development and employers have now become almost totally adjusted to the system, to the point where they do not distinguish between migrants and urban settled workers.

- 10) If one compares the contribution made to the growth of the modern sector that has accrued as a result of the migrant labour system, simply in terms of the savings on the provision of housing for migrants, with the possible loss of labour productivity that it is argued results from the system, it seems that the migrant labour force could be as much as 28 per cent less productive than the settled labour force and the modern economy be no worse off.

#### 4.7 Conclusions

From the evidence presented here it becomes apparent that the modern sector has benefitted considerably from the transfer of labour that has resulted from the migrant labour system. Since as many as two out of every three modern sector workers may be migrants it is obvious that without this transfer of labour, output levels would be substantially lower in the modern sector. What are not certain, however, are the answers to the following questions :

- 1) Whether total output would have been greater had the migrants been encouraged to settle permanently in the modern sector? Here what evidence that is available, whilst not conclusive, does suggest that this output would probably not have been greater, as without the migrant labour system a larger proportion of investment would have had to be channelled to social overhead investment.
  
- 2) Whether the impact that the system has had on the supplying areas offsets any gains or losses experienced by the modern sector as result of the institutionalisation of the system in South Africa? This latter point will be taken up in the following chapter which is concerned with analysing the effects that the persistence of the migrant labour system has had upon the economies of the supplying areas which are now predominantly the rural areas of the African Homelands. In order to do this a case study of KwaZulu has been done and has been taken to be representative of conditions in all the Homeland areas.

- 128 -

- 129 -

- 130 -

- 131 -

CHAPTER 5

THE IMPACT OF THE SYSTEM OF OSCILLATING MIGRATION  
ON THE SUPPLYING REGION - A CASE STUDY OF KWAZULU

5.1 Introduction

Zulu men and women have been migrating to the modern sector of the South African economy on both a temporary and a permanent basis since the laying of the foundation stones of the present modern sector of the economy.<sup>(1)</sup>

As far as the individual migrant is concerned permanent and temporary migration decisions are similar in many respects. These decisions usually arise from the same set of motives and may be differentiated only by the qualitative differences in the strengths of the motives underlying these decisions.<sup>(2)</sup> However, from the macroeconomic viewpoint the social and economic effects of temporary and permanent migration in both the new host economy and the economy supplying the migrants are likely to differ considerably. In an economy, such as KwaZulu, where per capita incomes are low and it is likely to be the most productive member of the family who migrates to the modern sector on an oscillating basis, the costs to the economy of temporary migration are likely to be considerably greater

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(1) Sheila van der Horst [215] quotes figures of new employees on the Kimberley Diamond diggings in 1884 which includes 814 Zulu men.

(2) This viewpoint is well argued by Bell [14].

than that of permanent migration. These differences arise from the fact that whereas the permanent migrant takes his family with him, freeing additional resources for those remaining behind in the supplying economy, the temporary migrant leaves his dependants still reliant upon the supplying economy.

This chapter is concerned with the discussion of the effects that the system of oscillating migration has had on the areas that now form KwaZulu.

5.2. The Size and Nature of the Stream of Oscillating Migrants over the Period 1936-1970.

During the period 1936-1970 the number of men who migrated from these areas increased almost threefold, the annual compound growth rate over the period being 3.25 per cent, compared with an overall growth rate of the Bantu population of South Africa over this period of 2.45 per cent per annum. As Table 5.1 shows the rate of growth in the number of migrants absent from home on the census date accelerated most sharply over the period 1960 to 1970, although the degree of undercounting in the 1960 census will have undoubtedly inflated this estimate of the rate of acceleration.

In 1936, on the census date one out of every three males in the age cohort 15-64 was absent from home; by 1970 this proportion had increased to more than one out of every two and in certain regions

TABLE 5.1.      AN ESTIMATE OF THE NUMBER OF MALE AFRICAN  
MIGRANTS FROM THE RURAL AREAS THAT NOW FORM  
KWAZULU RURAL AREAS FOR THE CENSUS DATES IN  
1936, 1946, 1960 AND 1970.

Age Group	Number of Male Migrants from the Area in the Year				Rate of Growth %
	1936	1946	1960	1970	
	A	B	C	D	E
15-19	7 000	11 000	14 000	42 000	5,4
20-24	25 000	25 000	34 000	56 000	2,4
25-29	22 000	23 000	24 000	56 000	2,8
30-34	20 000	22 000	26 000	50 000	2,7
35-39	10 000	13 000	19 000	33 000	3,6
40-44	10 000	12 000	15 000	35 000	3,8
45-49	3 000	6 000	3 000	16 000	5,0
50-54	4 000	5 000	5 000	17 000	4,4
55-64	6 000	4 000	4 000	12 000	2,1
Total	107 000	121 000	144 000	317 000	3,3
Growth Rate %		1,2	1,3	8,2	
		4,1			

- A. From Table B4.1. Column 6.  
 B. From Table B3.1. Column 9.  
 C. From Table B2.1. Column 6.  
 D. From Table B1. Column 6.  
 E. Annual compound rate of growth for the period 1936-1970.

was as high as eight out of every ten. Another interesting feature of the migration stream through time is the way in which the age structure of the stream has changed as the system has become 'institutionalised'. Table 5.2. gives details of the changing age structure.

TABLE 5.2.      AN ESTIMATE OF THE MIGRATION PATTERNS OF MIGRANT  
MEN FROM THE AREAS NOW RURAL KWAZULU FOR  
1936, 1946, 1960 AND 1970. (A)

Age Group	Age Specific Migration Rates				Percentage of Migrants in the Age Category or Less			
	1936	1946	1960	1970	1936	1946	1960	1970
	%	%	%	%				
15-19	13	18	20	34	6	9	10	13
20-24	50	48	53	60	29	30	34	31
25-29	49	49	46	67	50	49	51	49
30-34	50	52	57	67	69	68	69	65
35-39	31	41	48	59	78	79	82	75
40-44	34	38	43	61	87	89	92	86
45-49	15	21	13	42	90	93	94	91
50-54	24	26	23	47	94	97	97	96
55-64	25	16	13	29	100	100	100	100
Average Rate	34	36	38	52				

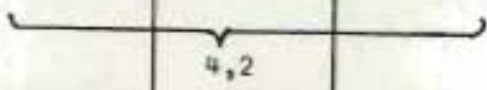
A. The estimates in Table 5.2. have been made using the basis outlined in Appendix A. The population in 1970 used for this estimate was the Zulu population in Homeland Rural areas in 1970, 96 per cent of whom were resident in KwaZulu rural areas. The population for 1960, 1946 and 1936 have been estimated on the assumption that 72 per cent of each age cohort

resident in Natal rural areas were in fact resident in the areas now the rural areas of KwaZulu. This percentage in 1970 was 76 per cent. The estimate for 1960 and earlier was reduced to 72 per cent to make some allowance for the resettlement of the Zulu population that took place in 1960-1970. The growth of new rural townships in KwaZulu over this period alone accounts for 3 per cent of the 4 per cent reductions. Detailed estimations are contained in Appendix B, Tables B1.1., B2.1., B3.1. and B4.1.

The data in Tables 5.1 and 5.2 shows clearly that whilst the rate of outmigration in every age cohort increased over the thirty four year period, the extent to which the migration rate increased varied quite substantially between the different age groups. In 1936 by the time a man from the KwaZulu rural areas reached thirty five years of age there was a better than two to one chance that he would have returned and been resident in the domestic economy. By 1970 nearly half the men aged 50 to 54 years of age were still absent from home. Similarly the rate of outmigration amongst the young age groups 15 to 19 years, whilst still below the average rate, has risen dramatically during the period, increasing from 13 per cent to 34 per cent. It seems, from this evidence at least, that firstly outmigrants from KwaZulu now leave home at a younger age than they did on average in 1936, secondly they leave in larger numbers and thirdly they remain away from KwaZulu on average for a longer period. The overall rate of growth of outmigration amongst adult Zulu men was nearly one per cent higher than the rate of growth of the male population of KwaZulu over the period.

Table 5.3. gives the estimated number of women who migrated from KwaZulu rural areas during the period 1936 to 1970.

TABLE 5.3.      ESTIMATES OF THE NUMBERS OF FEMALE MIGRANTS FROM THE RURAL AREAS OF NATAL THAT NOW FORM THE RURAL AREAS OF KWAZULU ON THE CENSUS DATES IN 1936, 1946, 1960 AND 1970

Age Group	Number of Female Migrants from Area in the Year				Rate of Growth %
	1936	1946	1960	1970	
	A	B	C	D	E
15-19	1,000	1,000	1,500	8,000	
20-24	9,000	5,000	7,500	9,000	
25-29	7,500	5,500	2,500	13,000	
30-34	2,000	6,500	5,500	12,000	
35-39		1,500	2,500	2,000	
40-44			2,000	9,000	
45-49					
50-54				3,000	
55-65					
Total	19,500	19,500	21,500	52,000	2.9
Rate of Growth %		 4.2			

A. From Table C4.2. Column 6.

B. From Table C3.2. Column 6.

C. From Table C2.2. Column 6.

- D. From Table C1. Column 5.
- E. Compound rates of growth for the separate age cohorts have not been calculated as the recorded age data appears to be unreliable.

As can be seen from the Table the number of female migrants is considerably smaller than the number of men who migrate. In 1970 six men migrated for every one woman. The rate of growth of female migration is however similar to that of the men over the period 1946 to 1970, and again exceeds the population growth rate of the area. It is interesting to note how the migration patterns of the women differ from those of the men. In 1970 in the age cohorts over forty four years of age there was no net female outmigration, whereas nearly half the men in the age cohorts 45 to 49 and 50 to 54 were still absent from home as migrant workers. Not only do fewer women migrate than men, as one would expect with the burden of family raising, particularly in the child bearing years, but the women who do migrate also return from the modern sector on average very much earlier than the men and show no apparent tendency to return to the modern sector work force once they have raised their children.

### 5.3. The Demographic Effect on the Supplying Economy

There is no doubt that the major impact that the migratory labour system has on KwaZulu operates through the effect that the system

has upon the population age distribution.

TABLE 5.4.            COMPARATIVE AGE DISTRIBUTIONS OF SOUTH  
AFRICAN POPULATIONS IN 1970.

Population	Percentage of the Population Aged		
	0-14	15-64	Over 64
The Republic as a Whole	43	53	4
All Africans in the R.S.A.	44	52	4
All Zulus	44	52	4
KwaZulu	49	46	5
White S.A.	31	62	7

Table 5.4. shows clearly how the migratory labour system operates to reduce the percentage of the population in the working age groups in the supplying region. Firstly if one compares the relevant percentages of the population "All Zulu People in South Africa" with those of the population in the rural areas of KwaZulu only, one finds that, whereas in the former population 52 per cent of the population falls into the age cohort 14-64 years and consequently is potentially capable of contributing to output, only 46 per cent of the rural population of KwaZulu falls into this category.

Secondly the ratio of economically active adults to the remainder of the population among Zulus as a group in 1970 was 1:2,86 whereas in the rural areas of KwaZulu this ratio was as high as 1:3,85; a difference of 35 per cent. This increase in the dependency ratio is

due to the relative increase in importance of both the young age groups 0-14 years, and the older age groups - over 65 years.

Thirdly the masculinity ratio amongst the age cohort 19-64 years in the rural areas is also extremely low being 1:3, consequently homeland families in these rural areas lack sufficient of the masculine influence - children grow up in a fatherless world and a large number of women shoulder the burden of raising a family alone, with only economic assistance from their men folk.

Apart from the demographic maladjustments that result from the continued absence of a substantial proportion of the adult work force, the economy has developed some striking economic imbalances. Table 5.5 shows the distribution of the economically active male population of KwaZulu and illustrates graphically how important a place employment outside the Homeland holds in the economic structure of KwaZulu. If permanent migration had taken place in response to the changes in the geographical demand for labour, the family would have moved to the new region. With the maintenance of temporary migration however, 50 per cent of the male work force find work outside the Homeland and the men migrate alone, leaving their families in the subsistence sector.

The data in Table 5.5 understates the degree of economic dependency that now exists between KwaZulu and White South Africa, even so far as employment opportunities are concerned, since individuals who work in the modern sector but live permanently in the Homeland, i.e. commuters, have been treated in the 1970

TABLE 5.5 DISTRIBUTION BY AGE GROUP OF ADULT MALE WORKERS  
IN KWAZULU IN 1970. (3)

	Percentage of Age Group in Industry						
	Under 20	20-24	25-34	35-44	45-54	55-65	Total
Agriculture	41	22	19	22	34	47	28
Manufacturing	5	8	8	7	6	4	7
Construction	2	4	4	5	5	4	4
Commerce	2	3	4	4	4	3	3
Transport		1	2	2	2	2	2
Services	3	4	4	5	6	8	5
Migrants <sup>(A)</sup>	47	58	59	55	43	32	51
	100	100	100	100	100	100	100

(A) Migrants here have been estimated on the basis explained in Appendix A using the population. Zulus in KwaZulu and not Zulus in KwaZulu rural areas, as some migrants migrate from the latter to the urban areas of KwaZulu itself.

census count as if they were employed in the Homeland areas. If one assumes that the commuter work force has the same age and job distribution as the migrant work force, then it would appear from the ratio of estimates of commuter earnings to those of migrants in 1967 made by the Department of Economics, Pretoria University,<sup>(4)</sup> that as many as 60 per cent of the adult males of

(3) Calculated from data in Table B 13 in Report 02-02-02, Population Census 1970. Department of Statistics, Pretoria, 1973, and data covered in Note (3).

(4) J.A. Lombard and P.J. van der Merwe [122]

KwaZulu were employed in the White Sector of the South African economy in 1970. A further 28 per cent were in subsistence agriculture, implying that jobs in sectors other than agriculture and situated in KwaZulu were only available for 12 per cent of the economically active men who would normally be resident in the economic region.

#### 5.4.0 Temporary Migration and the Standards of Living in the KwaZulu Rural Areas

It was argued in Section 2.4.4 that out migration affected the standards of living of those remaining in the supplying economy through the effect that it had upon the supply of labour and through the income transfer into the economy in the form of remittances from out migrants.

The relationship between the migrants average consumption and his marginal product in the supplying area, together with the regions' ability to reallocate work effort, was seen as determining the likely size and direction of the change in the output resulting from a reduction in the potential supply of labour. It was also argued that consumption levels in the domestic economy could rise as a result of the increased consumption by individuals financed the remittances received from migrants, quite apart from any increases that may result from the redistribution of income in the area consequent upon the reallocation of work effort.

#### 5.4.1 The Migrant Labour System and the Labour Supply of KwaZulu

The first effect that will be considered is the impact of out-migration

upon KwaZulu's labour supply, and its consequent impact upon the levels of domestic output. Unfortunately it was not possible to obtain an accurate estimate of the size of a "representative" migrant's marginal product in the subsistence sector, prior to his migration, vis à vis his average consumption level in that sector as there was not sufficient data available on the agricultural output, the distribution of output per worker or on the distribution of land between families in KwaZulu. If, however, one uses the behaviour of the ratio, subsistence output to economically active workers in KwaZulu, as a surrogate for the behaviour of the average product per worker in the subsistence sector, then one can at least obtain some indicative evidence as to the most likely trend in the marginal product of workers in the subsistence sector.

Average subsistence output per economically active worker in KwaZulu in 1960 was R56<sup>(5)</sup> and by 1970 it had fallen to R51, measured in current prices. From this, subject to the validity of the usual Neoclassical assumptions of homogeneity amongst workers, working conditions and general production conditions, it seems likely that average consumption levels in KwaZulu are above the marginal product of labour in the subsistence sector, even when one excludes consumption from remittances.

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(5) Estimated from data in South Africa 1974. P. 293. [250]  
and 1970 Population Census data. Report 02-02-02. [260]

Falling average products indicate that the marginal products, apart from being lower than the average product, are also falling and indeed far more rapidly than the average product. Robinson [167] p.30. This being so, it seems that it is likely that the average consumption levels of the potential migrants from KwaZulu are indeed above the contribution that they make to subsistence output levels. Consequently, providing that the migrants' absence does not alter the nature or the relative position of the production function of the supplying region in an adverse manner, the departure of the out migrants seems likely to increase average consumption levels in the KwaZulu rural areas.

Unfortunately, this is not a foregone conclusion because, as it was argued earlier, the extent to which consumption levels can rise will depend upon the following factors:

- 1) Whether or not those who remain behind in the area supplying the migrants are successful in reorganizing the work load to compensate adequately for the migrants absence.
- 2) The size and nature of the flow of remittances received from the migrants, together with the purpose to which these remittances are put in the region i.e. consumption levels can be affected by whether these remittances are invested or consumed.
- 3) The extent to which the absence of the migrants has detrimental effects on the overall productivity levels in the area that cannot be countered by the efforts of those who remain behind.

It has been argued and documented by many writers in the field of migration, notably Kuznets [106], Thomas [198], Herrick [71] and Zachariah [244], that migration is essentially a selective process and consequently the overall effects are directly dependent upon the degree and nature of the selection that takes place among the migrants.

One can say that out migration is more likely to be beneficial in consumption terms in areas where there is unemployment than it is in areas where there is a shortage of labour. Similarly Miracle and Berry [132] argue that temporary migration will be less detrimental to the supplying region if the periods of migration are dove-tailed to fit in with the labour requirements of the domestic economy.

Similarly migration is more likely to be beneficial, measured again in terms of the consumption levels of those who remain, if the migrant is negatively rather than positively selected, Lee [108] that is if the least productive workers migrate rather than the more productive members of the community.

As far as the selective nature of the migration process is concerned the KwaZulu rural economy seems to be no exception. From the data presented in Table 5.1 and 5.3 one can see that the migration process is heavily selective of adult men, particularly of those under forty years of age. This, coupled with the fact that indirect evidence was presented earlier to suggest that even among these age groups there is a further

degree of selection in that the better educated men appear to have a higher propensity to migrate than those with less education,<sup>(6)</sup> implies the following;

- 1) It may well not be a simple matter for those who remain behind in the supplying area to reorganize their work allocation in order to supply the effort previously provided by the migrants. With so very high a male absentee rate such a reallocation would imply that the very young, the very old, the women who have the burden of child raising, and the less educated are expected to be able to provide the work load of a very large percentage of the young adult male population in the area and indeed the most productive members of that group.
- 2) The long run effects of migration on the region's productivity could quite possibly be negative simply because of the magnitude of the degree of the out migration. There may not be sufficient remaining hands in the home economy to be able to perform the necessary maintenance tasks. Those hands that are available may not be sufficiently strong to perform the work required of them or sufficiently educated to make the correct decisions.

This being so, it appears that the benefits that accrue to those

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(6) Evidence to support this contention was presented in Table 4.5, and in the discussion on the data in the Table.

who remain behind, that result from the mere absence of the migrant, will be considerably less than would accrue to them had the supplying economy been able to maximise the sum of all the possible net gains that could accrue in this manner. Indeed these gains could be negative over time, once the results of capital consumption start to make their presence felt.

#### 5.4.2 Remittances from Migrants and the Domestic Standards of Living

As average productivity levels are very low and have fallen in recent years it appears that remittances from migrants are of critical importance in KwaZulu's rural areas. The level of domestic subsistence per capita production of R51 in 1936 suggests that the economy is now incapable of supporting its population without these transfers of remittances from the modern sector by the area's out-migrants. Remittances, as can be seen from the data in Table 5.6, which gives an estimate of the size of the remittances made to the KwaZulu rural areas, are indeed now a major source of consumption funds and in addition one that has grown in importance in the economy over recent years.

The estimate given in Table 5.6 is based upon the estimates of the migrants from the area, given earlier, their estimated intersectoral job allocation, the wage rates they earn and the proportion of their earnings that they remit. Details of the basis of this estimate and of the assumptions upon which it is based are given in Appendix C.

TABLE 5.6 THE ECONOMIC SIGNIFICANCE OF MIGRANTS' EARNINGS AND REMITTANCES TO KWAZULU IN CURRENT PRICES.

Year	Number of Male Migrants (A)	Migrants'		Remittances as a Percentage of:		
		Earnings R000 (B)	Remittances R000 (C)	Gross Domestic Product (D)	Subsistence Income (E)	Agri-cultural Output (E)
1936	107000	5879	1077			
1946	120000	15129	2798			
1960	144000	33804	6318	21	36	64
1970	317000	132319	25103	41	88	142

Notes on Table

- A. Total number of migrants has been estimated on the basis outlined in Appendix B. Detailed estimations are as follows. 1936 from Table B4.1, 1946 from Table B3.1, 1960 from Table B2.1 and 1970 from Table B1 in Appendix B.
- B. From Table C3 in Appendix C column I, estimated on the basis outlined in this Appendix.
- C. From Table C3 in Appendix C column J.
- D. From South Africa 1974 [250]p.292.
- E. Estimated from data in South Africa 1974 [250] p.292 and 293.

Over the thirty four year period the size of the annual stream of remittances into the rural areas of KwaZulu grew at an average annual compound rate of 9,7 per cent. This increase was the result of the interaction of three factors, namely:

- 1) The number of out-migrants from the area tripled, growing at an average annual compound rate of 3,25 per cent.
- 2) There was an increase in the rate of growth of job opportunities for migrants in the high wage sector of the modern economy relative to those available in the low wage sector and,
- 3) There was an increase in the average annual money wages paid to African men of 5,7 per cent per annum, compound over the period.

In 1960 on these estimations the average rate of remittance by migrants was 19 per cent of their earnings and these remittances were the equivalent of 36 per cent of subsistence output in that year. By 1970 migrant remittances had grown to the point where they were the equivalent of 88 per cent of subsistence income and 142 per cent of the agricultural output of KwaZulu. This means that for every one rand generated in the subsistence sector, a further 88 cents were sent home by the migrants and for every rand earned from the soil, a further R1,42 was sent into the area by the out-migrant men. Of even greater significance is the fact that over the period 1960-1970 whilst average output per worker in the subsistence sector of KwaZulu appears to have fallen, the average level of remittances per migrant rose from R44 to R79 per annum, which is an average compound growth rate of 6 per cent per annum.

In 1970 the Bureau of Market Research of the University of Pretoria undertook a series of income and expenditure surveys,

one of which covered the income and expenditure patterns of single Bantu households [210]. The total number of households covered by the report was 367 and of these individuals 219, that is 60 per cent, appear to have been migrant workers in that they entered the Durban area when they were eighteen years of age or older [210] p.24. Since such a large proportion of the data applied to migrant labourers in Durban it was decided to make a second estimate of the size of the total earnings of the migrants from KwaZulu rural areas and of their remittances for 1970 based upon the data contained in the Bureau's report, as a check upon the validity of the estimate presented in Table 5.6. These two estimates are presented for comparison in Table 5.7.

TABLE 5.7    A COMPARISON OF THE TWO ESTIMATES OF KWAZULU  
MIGRANTS' EARNINGS AND REMITTANCES TO KWAZULU  
IN 1970.

	Estimate 1 based one Table in Appendix	Estimate 2 based on B.M.R. Expen- diture Studies
Average Earnings per Migrant	R417 (A)	R562 (G)
Remittance Rate	19% (B)	18% (H)
Remittance in Cash per Migrant	R79 (C)	R101 (I)
No. of Migrants from Table	317,000 (D)	317,000 (D)
Estimate of Total Earnings	R132 319 000 (E)	R178 154 000 (J)
Remittances	R 25 103 000 (F)	R 32 067 720 (K)

Notes on Table

- A. Total earnings estimated in Table C3 in Appendix C ÷ Number of Migrants in 1970 from Table B1 in Appendix B.
- B. Total Remittances from Table C3 in Appendix C ÷ Total earnings of migrants from the same Table.
- C. Total Remittances ÷ Total number of migrants.
- D. From Table B1 in Appendix B.
- E. From Table C3 in Appendix C column I.
- F. From Table C3 in Appendix C column J.
- G. From Bureau of Market Research [210] p.25 Table 3.7a male incomes.
- H. From Bureau of Market Research [210] p.42 Table 3.21. Payments in support of relatives ÷ average male incomes in Table 3.7 of the same report.
- I. From Bureau Report [210] p.42. Payments in support of relatives - Average.
- J. = G x D.
- K. = H x J Note K  $\frac{1}{2}$  I x D due to rounding errors.

The second estimate of earnings and remittances contained in Table 5.7, namely the estimate based upon the Bureau of Market Research data is 35 per cent higher in respect of migrants' earnings and 28 per cent higher in respect of remittances, than the first estimate that is based on the assumptions contained in Appendix C. This difference can be attributed in a large

part to the fact that the Bureau's job distribution of single households understates the number of migrants in the low wage categories, since their survey excluded migrant agricultural workers living on White farms.

The cash remittance rate of the single households studied by the Bureau was only 18 per cent of total household expenditure. However, if one adds the percentage of total income saved to the cash remittances, on the grounds that savings by migrants will ultimately be remitted to the rural area, the per cent of expenditure remitted rises to 21 per cent, suggesting that, if anything, the estimate based on the assumption that migrants in the high wage sector remit only 19 per cent of their income is too conservative. A mean estimate of migrants' cash remittances lying between the two made in Table 5.7 gives an amount of R28 585 360, which is an increase of 14 per cent over the low estimate in the table. As the degree of accuracy of the estimates is unlikely to be less than 10 per cent in either case the two estimates serve as a useful back up for each other, as they are based on data obtained from sources that were independent of one another, apart from their common dependence on the estimate of the number of migrants away from the area on the census date in 1970.

In addition to the cash that they remit to their families, migrants also purchase goods which they take home on their return and pay for certain services for their families in the rural areas, such as visits to urban hospitals made by members

of their family and education. Estimates of remittances in kind are difficult to obtain but one can obtain a rough estimate of the relative size of such remittances from the expenditure surveys of single African households made by the Bureau of Market Research.[210] Such an estimate is presented in Table 5.8. It should however, be treated with caution as it is of necessity sensitive to the validity, or otherwise, of a number of arbitrary assumptions that have had to be made in presenting the Table.

TABLE 5.8 REMITTANCES BY MIGRANTS INCLUDING THOSE IN KIND  
IN 1970 ESTIMATED FROM THE BUREAU OF MARKET  
RESEARCH STUDIES.<sup>(8)</sup>

	Amount R	Percentage of Earnings
Average cash remittance per single household per annum	101	18
Remittances in kind		
Food (A)	31	
Clothing (B)	17	
Education (C)	1	
Medical Expenses (D)	3	
Furniture & Household Expenses (E)	3	10
Savings (F)	18	3
Total Maximum Remittance	174	31

Notes on Table

(A) Food purchased for consumption away from home or work.

(8) All the data in the Table is taken from Bureau of Market Research Report on the Income and Expenditure of Non White Urban Households Durban Survey of Single Bantu Households. [210]

- (B) Expenditure on baby clothing, childrens clothing plus half the expenditure by single households on adult female clothing assumed to be remitted to the rural family.
- (C) 100 per cent of single family expenditure on education.
- (D) 50 per cent of single household expenditure on medical expenses assumed to be expended on behalf of the rural family.
- (E) One quarter of the expenditure on furniture and household appliances assumed to be on behalf of the rural family.
- (F) Savings have been included here on the grounds that when the migrant returns to his rural home he will take his savings with him.

On this evidence it would seem that migrant workers could quite possibly remit as much as 10 per cent of their total earnings to the rural areas in the form of goods and services in addition to the amounts that they remit in cash.

If one accepts that typical rates of remittances by male migrants from KwaZulu could be as high as 30 per cent of their earnings, 20 per cent in cash and a further 10 per cent in the form of goods, then in 1970 remittances to KwaZulu rural areas might well have totalled as much as R39 371 000 on the basis of the low estimate in Table 5.6. Remittances of such a magnitude would be the equivalent of 66 per cent of the economy's Gross Domestic Product, 140 per cent of income generated in the subsistence sector and 225 per cent of the agricultural output of the economy.

No matter whether one accepts the lowest estimate of remittances or the highest, the conclusion remains the same; namely that the present welfare levels of individuals resident in KwaZulu,

particularly those of residents in the rural areas, is heavily dependent upon the remittances that they receive from the region's out-migrants. In 1970 subsistence incomes per head of the rural population of KwaZulu were approximately R16.<sup>(9)</sup> Remittances per head of the rural population on the low estimate were R16 in cash and a further R8 in goods and services. In other words of a total per capita income of R40 in the rural areas, 60 per cent is provided from the export of labour services and only 40 per cent generated locally.<sup>(10)</sup>

Since it is not a simple nor a short term task to provide employment opportunities for nearly half a million men, nor to provide the alternative of housing and social facilities for their families in the urban areas, one must conclude that the continued existence of the many women, children and senior citizens in KwaZulu is dependent upon the maintenance of the migratory labour system at least in the immediate future.

This argument does not however, imply either that the community as a whole benefits through time from the continued maintenance of the situation, nor that the system, should it prove to be beneficial to all parties, is necessarily the optimal solution, in

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(9) Subsistence income from South Africa 1974 [250] p.292. Rural population from the 1970 Census Report 02-02-02 p.58.

(10) Clarke and Ngobese [37] in a study of 150 families in the Ngutu district of KwaZulu give an average monthly income per family of R14,87 of which R9,90 was in the form of remittances. In other words 67 per cent of the family's income was not generated within the district on average in terms of their findings.

that it is superior to the alternative of the provision of employment opportunities with the KwaZulu economy for those men who at present migrate.

It will be argued that the major economic disadvantages of the migratory labour system vis à vis the provision of alternative employment within KwaZulu are the following.

- 1) The migratory labour system affects family welfare levels as it causes a redistribution of income within the family itself and this redistribution is detrimental to the overall welfare levels of the family.
- 2) The low level of remittances means that the income generating effects of the migrants' earnings are smaller within KwaZulu than the earnings of individuals who are employed within the area itself.
- 3) The long run effects of the migratory labour system on capital accumulation and technical progress are also detrimental and have contributed substantially to the continuing underdevelopment of the rural areas.

The first of these disadvantages could be considered as the consumption effects of the migratory labour system and the latter two as the effect that the system has upon the production capabilities of the supplying economy and they are discussed more fully in the following section.

### 5.5 The Consumption Effect of the Migratory Labour System

On the consumption side it is argued that the migratory labour system alters the consumption patterns of the migrant and further that these alterations can be detrimental to economic welfare should they represent a transfer of funds, either from investment to consumption, or from individuals with a high marginal utility of expenditure to those with a lower utility.

In this section an attempt will be made to investigate the extent to which temporary migration alters family spending patterns. To do this further use will be made of the Bureau of Market Research's Household Expenditure Surveys in order to compare the expenditure patterns of urban settled workers with families (multiple households) with those of the migrant worker, taken to be represented by the single households in the Bureau's survey.

It is often asserted that the migratory labour system affects family consumption patterns on two levels:

- 1) The migrant man consumes a greater proportion of his income in the form of entertainment, alcohol and cigarettes than a man who lives with his family, simply as a result of the unnatural existence that the migrant is forced to lead in the towns. Clarke Ngobese [37] Wilson [233].
- 2) That the migrant consumes a far higher proportion of his family's total income than does the man who lives with his family. Consequently the migrants' family is not as well

cared for as that of the family living with their parents in the town. Wilson [233], Clark and Ngobese [37] .

Since commodities have different income elasticities one can only expect families to exhibit similar expenditure patterns if they are on similar expenditure levels. If the migrant worker, for example, typically fills the lower paid positions in the work hierarchy and the stabilised worker the better paid jobs, one would expect their expenditure patterns to differ simply as a result of the differences in their income levels.

Table 5.9 compares the expenditure levels of multiple and single households found to exist in the Durban Pinetown Area by the Bureau of Market Research in their 1970 survey. [213]

TABLE 5.9 A COMPARISON OF THE EXPENDITURE PATTERNS OF MULTIPLE AND SINGLE AFRICAN HOUSEHOLDS IN THE DURBAN PINETOWN AREA IN 1970. (11)

	Multiple Households	Single Households
Cash Expenditure	R 909	R 298
Receipts in Kind	54	146
Savings	42	18
Remittances in Cash	27	101
	1032	563
Savings rate	4 per cent	3 per cent
Remittance rate	3 per cent	18 per cent
Expenditure per Earner		
1 earner per household	1032	563
1,4 earners	737	
1,7 earners	607	

(11) Calculated from data presented in Research Report No. 34. Bureau of Market Research, Pretoria. [213]

It can be seen from the data presented in Table 5.9 that, although family expenditures of multiple households exceed those of single households by as much as 83 per cent, once an adjustment has been made to allow for the fact that on average the number of earners per multiple household is greater than one, earnings per worker (measured in terms of expenditure) are much more similar; dropping to as low a differential as 8 per cent on the assumption that there are 1,7 earners per multiple household, and to 31 per cent in the case of 1,4 earners per household. (12)

When one considers that the jobs in the highest income echelons are far more likely to be filled by men who live permanently in the area than by migrants, this implies that the income spread amongst the former workers is likely to be substantially greater than that of the migrants. This will have the effect of pushing up the value of the mean level of expenditure of the multiple household. It is therefore quite possible, that due to the greater income dispersion among the multiple households the modal values of expenditure per worker of the two groups are more similar to one another than is implied by a simple comparison of the mean incomes. If this is the case then one is justified in assuming that the differences in the expenditure patterns of the two types of household that do exist, once adjustments have been made to exclude the stabilised worker's

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(12) The average number of earners per household in the Bureau of Market Research's survey of income and expenditure patterns of multiple Bantu households in Durban [211] was 1,6 earners per family.

family expenditure, are indeed a reflection of the differences in the life styles of the migrant and the settled urban worker.

The problem is however, further complicated by the fact that single households, amongst which are the migrant workers, were shown to receive as much as 26 per cent of their incomes (expenditure) in kind, whereas multiple households received only 5 per cent. On this evidence the migrant worker's ability to allocate his total income, according to his personal preference set, is quite heavily circumscribed, as he only has direct allocative control over three quarters of his total personal expenditure.

Subject to these problems an attempt has been made to compare the spending patterns of migrant men and the men living in towns with their families. A large number of arbitrary assumptions have been made in obtaining this comparison the most important being the following.<sup>(13)</sup>

- 1) That single Bantu household expenditure patterns are a reasonable reflection of a typical migrant worker's spending patterns; 67 per cent of these households were in fact migrant workers.
- 2) That the mean income levels per worker are not significantly different from one another.

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(13) The other assumptions that have been made are listed as Table footnotes on Table 5.10.

TABLE 5.10 A COMPARISON OF THE SPENDING PATTERNS OF  
PERMANENTLY SETTLED AFRICAN URBAN MALE  
WORKERS AND THOSE OF MIGRANT LABOURERS<sup>(14)</sup>

Item Purchased	Permanent Workers		Migrant Workers	
	Amount Spent	Per cent of Total Expenditure	Amount Spent	Percentage of Total Expenditure
Food Consumed (A)	R 130	32	R 202	51
Adult Clothing (B)	96	23	40	10
Housing (C)	36	9	36	9
Fuel & Light (C)	11	3	2	1
Transport (D)	37	9	22	6
Furniture (E)	26	6	14	3
Alcohol (F)	35	8	41	10
Cigarettes & Tobacco (G)	20	5	13	3
Cosmetics & Medicines (H)	5	1	7	2
Dry Cleaning (I)	8	2	8	2
Miscellaneous (J)	10	2	12	3
Total	414	100	397	100

Notes on Table

(A) Multiple Household expenditure on Food consumed has been allocated to the male on the assumption that he consumes one quarter of the total expenditure of a family of six and 100 per cent of all food received in kind.

(14) The data in the Table has been estimated from data contained in "Market Potentials of Consumer Goods and Services for Non White Population Groups in the Five Main Metropolitan Areas of the Republic in 1970" Research Report No. 34, Bureau of Market Research, Pretoria. [213]

- (B) Expenditure on clothing by single households has been allocated on the assumption that 100 per cent of the male clothing bought is for the worker himself and that 50 per cent of the expenditure on female clothing is in fact a remittance to the rural family, the remaining (50 per cent of the single households expenditure on female clothing being taken as representing clothing purchased by female migrants for themselves) and so is excluded from the estimation.
- (C) Housing and Fuel and Light expenditure by multiple households has been allocated 50 per cent to the male worker on the assumption that if multiple families were to live as migrants two households would be required.
- (D) Transport expenses incurred by multiple households have been allocated on the assumption that the male worker incurs 50 per cent.
- (E) Furniture purchases by multiple households have been allocated two fifths to the male, two fifths to the female and one fifth to the children.
- (F) It has been assumed that the male worker consumes two thirds of the total expenditure on alcohol.
- (G) On the assumption that the male in the household consumes 100 per cent of the purchases of cigarettes and tobacco.
- (H) It has been assumed that half of the single households expenditure on medicines is on behalf of the rural family.
- (I) 75 per cent of the multiple households expenditure on dry cleaning is assumed to be on behalf of the adult male worker.
- (J) 100 per cent of the multiple household's expenditure on miscellaneous items is assumed to be on behalf of the adult male worker.

Subject to the acceptability of the assumptions that have been made in arriving at the estimates presented in the Table, the following differences in expenditures emerge:

- 1) Migrant workers spend a larger absolute amount on food than settled male workers and a far greater proportion of their total personal expenditure; 51 per cent as against 32 per cent.

- 2) Migrants appear to spend more in both absolute and relative terms on alcoholic beverages, medicines and cosmetics.
- 3) On the other hand migrants spend a lower proportion of their income on adult clothing, fuel and light, furniture, transport and tobacco.

However, when one considers that, with the exception of alcohol it is precisely these goods and services that the migrant receives in kind it seems unwise to attribute too great a significance to these differences.

A far more interesting feature of the data presented in Table 5.10 is the degree of similarity present in the absolute levels of expenditure of the two classes of individuals, implying that the standards of living of the settled worker and the migrant in the urban area are much the same the stabilised worker spending R414 per annum on average on personal maintenance and the migrant R397 per annum. It would seem, therefore, that since presumably the migrants, prior to entering the urban region, were accustomed to a different way of life, once in the town these men either choose, or are obliged, to maintain living standards equivalent to those of the settled male labour force.

Since the migrant workers also appear to earn much the same as the stabilised workers, the fact that the migrant men live as do the men who have their families with them should not unduly prejudice the living standards of their families in the rural areas, *ceteris paribus*. However, if the migrant, by maintaining relatively higher standards of living in the town, is consuming a

substantially greater proportion of his family's total income than does the man who lives with his family in town, then the migrant's urban consumption may well prejudice the welfare of his family in the rural area.<sup>(15)</sup>

Table 5.11 contains three estimates of family incomes for families resident in the KwaZulu rural areas but living in different circumstances and compares them with the living standards of our urbanised family. The first rural family is assumed to have land, a worker to work that land and a migrant away from home who remits a portion of his earnings to the family. The second family is dependent entirely on migrant remittances and subsistence activities apart from agriculture, whilst the third family has no migrant worker away. These estimates are likely to understate the degree of disparity in the living standards of families in the rural areas however, as they have been made in terms of average earnings in the three categories.

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(15) This is further supported by the conclusions of the economic sections of the Keiskammahoek rural survey which argued that the best insurance for a reasonable standard of living for the family was for the breadwinner to have a job outside agriculture but within the reserve itself. Hobart Houghton and Walton [78].

TABLE 5.11 ESTIMATE OF AVERAGE RURAL FAMILY INCOMES IN KWAZULU IN 1970 AND A COMPARISON WITH THOSE OF AN URBANISED AFRICAN FAMILY.

	Family with land - one agricultural worker and one migrant	Family with no land and one migrant	Family with land and no migrant	Urbanized family
	(R)	(R)	(R)	(R)
Agricultural output per worker (A)	51		51	
Other subsistence income per worker (B)	31	31	31	
Modern Sector Earnings (C)	417	417		
Family Income (D)	499	448	82	1032
Single Male Consumption (E)	296	296	-	414
Disposable Family Incomes	203	152	82	618
Per Capita Family of 6	41	30	15	124

- A. Agricultural Output data from South Africa 1974. [250]  
 Agricultural Labour Force from 1970 Census Report 02-02-02 [260]. This implies the assumption that no members of the commuter work force are employed in agriculture, i.e. that all agricultural workers enumerated in the 1970 census as resident in Kwa Zulu rural areas and employed in agriculture were employed in subsistence agriculture.

- B. Subsistence income has been estimated in terms of the ratio of subsistence income to agricultural incomes given in South Africa 1974.[250] p.293.
- C. Migrants' earnings have been estimated from Total Earnings of Migrants and the estimated number of migrants contained in Table C3.
- D. Urban family incomes from Table 5.9.
- E. Migrants' consumption has been estimated from the proportion of expenditure of single households in Table 5.10 to the Average Total Income of those households given in Table 5.9 i.e. it has been assumed that the migrant consumes 71 per cent of his income and remits the remaining 29 per cent to his family. Urban Male Consumption from Table 5.10.

The data in Table 5.11 shows that there is indeed a substantial gap between the living standards of the families of the settled workers and those of the rural urban migrant. On the high estimate, the average per capita gap between the members of the families in the urban areas and those in the rural areas is as large as 202 per cent. It seems that whereas the migrant worker consumes at approximately the same absolute level as the settled worker, the latter's family consumption per head on subsistence items is more than twice as great as the per capita consumption of a rural family. In addition, whereas the male worker in the urban family has an estimated per capita consumption three times greater than the family average, the migrant worker's absolute consumption level is seven times greater than that of his family.

It appears from the data presented in Table 5.11 that migrant workers do indeed consume the major proportion of their family's total income and, as a result, whereas the living standards of the migrant worker and the settled workers are similar, those

of their families are substantially different. However, since the earning rates of the two classes of workers are not very different, it seems that, although undoubtedly a contributory factor, the low rate of remittances and earnings of migrants is not the major cause of the gap between urban and rural family living standards: more significant is the difference in the earning potential of the family's second worker. Whereas the second worker in the rural family, working on the land, if the family still holds the right to land, brings into the family income an additional R82 per annum, the second urban worker contributes on average R350 per annum, suggesting that there is a four fold difference in the labour productivity between the sectors.

It is often argued that it is indeed this low level of labour productivity in the homelands that drives migrants away from their homes to seek work in the more productive modern sector. However, the following section argues that this link may not be as simple as it appears and that the low labour productivity of the homelands is as much a result of, as it is a cause of the migrant labour supply.

#### 5.6 The Migrant Labour System and Production in KwaZulu

It was argued earlier that there are two different and quite distinct views of the production effects of out-migration, the one seeing migration as a positive force in economic growth and development, the other arguing that out-migration results in the further impoverishment of the supplying economy.

If out-migration is to affect production in the home economy it will do so through the effect that it exercises upon the following:

1. The rate of capital accumulation in the area.
2. The choice of techniques in the home economy.
3. The rate of technical progress experienced.

#### 5.6.1 Migrant Labour and Capital Accumulation in KwaZulu

Ideally if one wishes to seek out the effects that the continuance of the migratory labour system has had upon the KwaZulu economy over the years, one needs information concerning the modes of production in the economy, the overall levels of productivity of both capital and labour and any changes that have occurred. However as there is very little data on the process of production and on the changes that might have occurred in the production modes over time in KwaZulu, one is, therefore, forced to rely on indirect indicators of the trends in productivity and growth in the rural areas supplying the migrants. Table 5.12 shows the behaviour of certain selected indicators in KwaZulu.

TABLE 5.12 SOME INDICATORS OF INVESTMENT IN THE KWAZULU  
RURAL AREAS FOR THE PERIOD 1936-1970- SELECTED  
INDICATORS ONLY<sup>(16)</sup>

Year	Index of the Number of:						
	Cattle Units	Woolled Sheep	Ploughs	Cultivators	Wagons and Trolleys	Children in School	Migrants Remittances
	(A)	(A)	(B)	(B)	(B)	(A)	(C)
1936	100	100	100		100	100	100
1946	102	103	132	100	108	184	260
1960	104	101	156	201	127	451	587
1970	93	115	130	180	71	781	2331
Growth Rate per Year % Compound	- ,2	,43	,76	2,47	- 1,00	6,22	9,7

- A. Data used to create these indices refers to all Bantu Reserve Areas and not simply to Natal or KwaZulu.
- B. Data here refers to Natal Rural Bantu Reserve Areas for the years 1936, 1946 and to KwaZulu for 1960 and 1970.
- C. From Table 5.6 column 6.

(16) Data on which the indices in Table 5.12 are based is given in Appendix D.

The data presented in Table 5.12 paints a depressing picture. Investment, apart from investment in cultivators and in education appears to be almost non-existent in the KwaZulu rural areas. This lack of net investment in subsistence agriculture, apart from the labour saving investment in cultivators, when coupled with the rapid growth of investment in education is certainly indicative of a change in the underlying social values of the community. The evidence in Table 5.12 suggests that this change does indeed represent a movement away from the pursuit of subsistence agriculture towards an increasing dependence upon the migratory labour system supporting the arguments advanced by Arrighi [6] and Amin [4] .

Low levels of investment in agriculture, particularly when coupled with acute shortages of particular forms of labour must lead to little or no growth in the output of the sector. Evidence of this being the case is given by the behaviour of the the index of maize output per head in the African Reserve areas of South Africa which has fallen from 100 in 1936 to 83 in 1970. Over this same period the total maize output of these areas grew at an annual compound rate of 1.26 per cent.<sup>(17)</sup> It seems from

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(17) See Table D2 in Appendix D for the data on which these indices are based.

this data that the level of investment and technical progress in subsistence agriculture in these areas was not sufficiently high, therefore, to enable the community to maintain their living standards in the face of an expanding population.

It is possible to argue that the low level of investment in subsistence agriculture vis à vis that in education simply reflects the relative returns on such investments. This is undoubtedly true but the more interesting question is why is there such a gap in the prospective returns on these two types of investment? Merle Lipton [119] has argued that the Transkeian rural areas would be capable of supporting a much larger population than they do at the moment if they were intensively farmed. Presumably this would also be true of the KwaZulu rural areas, particularly in view of the fact that large areas are suitable for the cultivation of sugar.

The view was advanced in Chapter Three<sup>(18)</sup> that the selectivity of the migration process mitigates against investment and technical progress in the supplying area and consequently acts to increase the gap between the returns on investment in agriculture and those from migrant labour rather than acting to introduce conditions that would act to equalise the returns on migrant labour and peasant farming. The relationship is seen as operating in the following manner.

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(18) See Section 3.

Firstly, as was shown earlier, the migration process in KwaZulu is age and education selective in nature with the migration propensities being higher than average amongst the young and the better educated.

As youth is the innovator of most change, a high rate of absence amongst those aged under forty years means that it becomes increasingly difficult to introduce new techniques in an area so denuded of men in those age groups. In an African context where the man is traditionally the decision maker, this effect is reinforced and the decision making process becomes increasingly cumbersome as the proportion of males absent from the area rises.

Secondly, innovation in agriculture requires investment. The low level of remittances by migrants to the rural areas, coupled with the low levels of productivity in those areas which are intensified by the drain imposed by the continued residence of the migrant's dependents, means that rural family incomes are too small to permit any substantial savings to be made out of these incomes as is evidenced by the data in Table 5.12.

Thirdly, the massive transfer of labour power from the homeland rural areas to the urban areas alters both the economic and social relationships in these communities. Schmookler [179] argues that innovations follow, rather than generate, changing demand patterns and that consequently innovation is a function of the level of socio-economic change. It is in this regard that one can explain the relationship between migration, the

pattern of investment in KwaZulu rural areas and the change in techniques. Development in South Africa as a whole has not been accompanied by development in these rural areas; the changing relative rewards to be gained from peasant agriculture and migrant labour has led to a growth in the demand for the latter by work seekers. Changing demand patterns in the job market have encouraged innovations and changes in techniques that will facilitate the acquisition of jobs in the modern sector. Hence one finds a substantial growth in investment by the rural family in education and in labour saving equipment on the farm such as cultivators and ploughs in order, firstly to fit the emergent worker for a job in the modern sector and secondly, to free him from his traditional tasks in order that he can take up the desired occupation.

In terms of this argument, development with a system of oscillating migration distorts the social and economic relationships to the point where the market acts to reinforce the imbalances in the system rather than to correct them. There is no tendency to stability in the system; oscillating migration continues and indeed the rate of migration increases as the general impoverishment of the rural areas rises, intensifying the problem. Investment in agriculture all but ceases, past capital accumulation is consumed by neglect and traditional agriculture stagnates. The inhabitants of the region become totally reliant upon the growing sector; even their very existence depends upon the remittances received from the oscillating migrants.

Although there is no hard, grass roots evidence that would support the view that this is indeed the relationship between oscillating migration and labour productivity in the supplying region, the general economic situation in the rural areas of KwaZulu is certainly one of abject poverty, economic stagnation, and dependence which is in keeping with the overall picture of the effects that one would expect following the arguments presented above.

#### 5.6.2 Migrant Labour and the Income Generating Leakages in the System.

A migrant worker typically remits between 20 - 30 per cent of his earnings to the rural areas where his family lives. The remaining percentage he spends in the area where he works. This means that the value of the expenditure multiplier in KwaZulu of a migrant worker is of the order of one quarter of the value of that of a worker employed in the area in a similarly productive job. When one remembers that the low estimate of the earnings of migrant workers from KwaZulu rural areas that are not remitted to the homeland totalled R107 216 000 in 1970 which was the equivalent of 174 per cent of KwaZulu's Gross Domestic Product in 1970, it becomes evident that this is a leakage of massive proportions particularly when one considers that a portion of the income that is remitted is spent on goods imported from the modern sector and that consequently this represents an underestimate of the magnitude of the 'import leakage'.

From the modern sector viewpoint, if the average propensity to save in the sector is assumed to be twenty per cent, the expenditure of migrants from KwaZulu in 1970 would have generated additional investment in the modern sector of R21 443 000. Investment of this magnitude would have been sufficient to create 7000 new jobs in 1970 if one assumes that the capital labour ratio is R3 000 per man. 7000 new jobs would be equivalent of 44 per cent of the official estimate of the new jobs that are required annually in KwaZulu.<sup>(19)</sup>

It is interesting to note that the grant payable to the KwaZulu Government by the Central Government in terms of sub section 6(2)(c) and (d) of the Bantu Homeland Constitution Act, 1971 totalled R33 776 000 in respect of the year 1973-1974. Two-thirds of this grant could therefore be viewed simply as a transfer of the savings generated in the modern sector by the expenditure of KwaZulu's migrant workers there.

If one undertakes an academic exercise similar to that done by Amin [4] in respect of West Africa and assumes that the migrant workers could have been employed in KwaZulu had the capital supply in South Africa been more mobile, one can obtain an estimate of the opportunity cost to KwaZulu of the migratory labour system in terms of profits and investment lost and the consequent reduced levels of employment creation.

In order to obtain the estimate the following assumptions have been made :

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(19) Official estimates of the number of new jobs required annually inside KwaZulu is 16 000 per annum. South Africa, 1974 [250] p.302.

1. That the ratio of wage payments to profit that exists for the South African economy as a whole, represents the ratio of the surplus generated by the migrants from KwaZulu to their total earnings in the modern sector.
2. That the average savings rate out of this surplus is 20 per cent and that all this saving is productively invested.<sup>(20)</sup>
3. That the cost of creating a job in KwaZulu was R948 in 1936; R1568 in 1946; R2049 in 1960 and R3500 in 1970, giving a weighted average cost of job creation over the period of R1587.<sup>(21)</sup>

On the basis of these assumptions, a conservative estimate of the number of jobs that have been created from investment resulting from the contribution to output made by the migrants from KwaZulu over the period is 113 000 jobs which represents an investment of R1 793 million rand.<sup>(22)</sup> Although this investment was

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(20) The ratio of Gross Domestic Capital formation to Gross Domestic Product in South Africa was - 1946-24 per cent, 1960-20 per cent, 1964-24 per cent, 1968-23 per cent and 1970-29 per cent. [249]

(21) These figures have been obtained by deflating the 1970 cost of R3500 per job by the wholesale price index 1970=100. The 1970 cost per job of R3500 has been obtained on the following basis:

Cost per job to the corporation in Isithebe <u>South African Year Book 1974 [250] p.296</u>	1572
Cost of inducements per job <u>Permanent Committee Report 1969</u>	343
Social overhead investments estimated	<u>1585</u>
Total Estimated cost of job creation in KwaZulu	<u>R3500</u>

(22) See Table D3 in Appendix D for the data from which these magnitudes have been estimated.

generated partly as a result of the labour exported from KwaZulu the output flowing from it has accrued for the benefit of individuals outside KwaZulu, except insofar as the investment has provided jobs for additional migrants from the area, in which case KwaZulu has at least benefitted from the remittances sent home by these migrants.<sup>(23)</sup> If one assumes a capital output ratio of three<sup>(24)</sup> then in 1970 investment of this magnitude would have generated output of the value of R598 million rand, which is nine times greater than the value of KwaZulu's Gross Domestic Product in the same year.<sup>(25)</sup>

This type of estimate will overstate the magnitude of the loss to KwaZulu from the migrant labour system since it overlooks any transfer made by the central government for the development of the social overhead capital in the area and also assumes that jobs could have been created within KwaZulu had the development path of the South African economy been different. It does however serve to highlight the costs of the migrant labour system to KwaZulu in terms of development opportunities foregone.

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(23) Although as it was argued in Section 4.6 this may not represent a positive long run gain.

(24) de Jager [42] p.21 estimates average capital output ratios for the South African economy as a whole of 1946-1950 2,03; 1956-1960 2,25; and 1966-1970 2,18.

(25) Kwa Zulu's Gross Domestic Product from South Africa 1974 [250]

5.7 The Impact of the Migrant Labour System on the Development of KwaZulu - A Summary of the Main Findings.

The main findings concerning the impact that the migrant labour system has had on the rural areas of KwaZulu that emerge from the analysis carried out in this study are the following:

1. The degree of out-migration amongst adult men in the area has accelerated throughout the period 1936 to 1970, increasing most rapidly in the ten year period prior to 1970.
2. In 1936 on average one in three adult men aged between 15 and 64 years was absent as a migrant worker on the census date. In 1970 one out of every two adult men in this age category was a migrant and in the category 25 - 45 years, two out of every three men were absent.
3. In particular districts of rural KwaZulu such as Msinga, Nkandla, Umvoti and Alfred County, the absentee rate was above 70 per cent in 1970.
4. Over the thirty four year period studied here, the demographic patterns of the migration stream have altered quite substantially. In every age group a greater proportion of men migrated in 1970 than was the case in 1934 but in addition migrants leave the rural areas on average at younger ages than they did in the earlier years and remain away from their homes for a longer total period.
5. Over the thirty four year period out-migration grew nearly one per cent faster than population and over the ten years

1960 to 1970 the rate of out-migration amongst adult men was more than twice as high as the rate of growth of population.

6. Although the rate of female migration is considerably smaller than that among men the behaviour of the stream of female migrants has similar characteristics to that of the men. Women do however retire from the modern sector work force at a substantially younger average age than the men.
7. The migrant labour system has significantly distorted the relationship between the demographic variables in the rural areas. Whereas the ratio of dependents to economically active individuals among the Zulu speaking people in South Africa as a whole in 1970 was 2,86:1 in the rural areas of Kwa Zulu, this ratio was 3,85:1 an increase of thirty five per cent in the dependency burden.
8. The masculinity ratio in the rural areas of Kwa Zulu was 1:3 for the age cohort 19-64 years, whereas in a normal population distribution one would expect this ratio to be of the order of 1:1. Thus the economy is suffering from a severe shortage of adult male workers which must substantially affect the prospects for successful development in the area.
9. The distribution of adult men by occupation highlights the inability of the area to provide jobs for its work force. 51 per cent of all men between 15 and 64 were absent as

migrants. A further 9 per cent live in KwaZulu but commute to white South Africa to work. 28 per cent are still employed in subsistence agriculture, and so may include some degree of under-employment. Jobs outside agriculture within KwaZulu itself were only available for 12 per cent of the adult male work force in 1970.

Statistics of this order of magnitude indicate that the KwaZulu rural areas are heavily dependent upon White South Africa to provide employment and so a large proportion of the means of subsistence for sixty per cent of the areas total population.

10. Such evidence as is available indicates that it is highly probable that the marginal product of a migrant in the subsistence sector is below his average consumption. This being so per capita consumption levels in the rural areas will rise as a result of his migration.

However, the magnitude of the degree of out-migration, coupled with the fact that it is more highly concentrated among the young better-educated men implies that although *prima facie* one would expect average consumption levels to rise, the migrants absence may shift the area's production function downwards so that total and average outputs fall rather than rise as a result of the migration. Falling average products in agriculture over the period 1960-1970 support this contention.

11. The remittances sent into the rural areas of KwaZulu by

migrants are very substantial being the equivalent of 41 per cent of the Homelands' Gross Domestic Product in 1970, 88 per cent of the economy's subsistence production and 142 per cent of its agricultural output in the same year. Remittances from migrants over the thirty four year period have grown at an annual compound rate of 9,7 per cent. This rapid rate of growth in the amount of the remittances is due to a combination of three factors, namely the rate of growth of out-migration itself, the growth in the average wages paid to African workers over the period, and finally to the structural change that has accompanied South Africa's economic development which has resulted in a faster rate of growth of better paid jobs for Africans vis à vis the growth of jobs in the low wage sector.

12. On average it would appear that a family in the rural areas of KwaZulu had a locally generated subsistence income per head of R15 in 1970. Remittances per head on average, in terms of the low estimate made in this section, were R16 in cash with a further R8 in the form of goods and services. On such data it is obvious that in the short term the maintenance of the migrant labour system is essential for the continuance of the very existence of a large portion of the area's population.
13. The migratory labour system, whilst essential in the short term in no way represents an optimal allocation of resources in the longer term since it was shown that the system leads to a transfer of income within the family from those with

lower levels of consumption to the migrant himself as a result of institutional factors in the system that apparently make it necessary for the migrant to maintain living standards in the urban areas that are the equivalent of those of a settled urban worker.

14. Due to the fact that the migrant appears to consume approximately 70 per cent of his earnings in the modern sector and also to the low productivity of the second worker in the rural sector vis à vis the second earner in the family settled in the modern sector, per capita incomes of the family in the rural areas are of the order of one third of the per capita incomes of a similar family in the urban area, despite the fact that the male workers in both families appear to be earning equivalent wages.
15. Evidence presented in this chapter supports the view that whilst there has been very little private investment in the subsistence sector, what investment there has been has been allocated to education and to labour saving devices. It was further argued that this reallocation of investment reduces the productivity of subsistence agriculture and increases the rate of out-migration.
16. The evidence presented also supports the contention that the migrant labour system has mitigated against technical progress in the rural areas since it has drastically reduced the labour supply in the area, has resulted in low levels of

family incomes that make saving almost impossible and has been highly selective of the young, better-educated men who one would expect to be the innovators in the area.

17. The low level of remittances by migrants has led to the generation of a massive expenditure leakage. Had the migrants spent all their earnings in KwaZulu rather than a mere 30 per cent, this additional expenditure would have provided jobs for 7000 men in 1970 assuming a savings ratio of 20 per cent and a cost per job of R3000.
  
18. If one assumes that capital invested in the modern sector to provide jobs for migrants could equally well have been invested in KwaZulu then a conservative estimate of the jobs that have been created in the modern sector from the surplus created in that sector by KwaZulu migrants amounts to 113 000 which represents investment over the period of R1 793 million rand, which in turn with the assumption of a capital output ratio of 3 generated output in 1970 of R598 million rand which is nine times greater than the Gross Domestic Product of KwaZulu in 1970.

CHAPTER 6

THE MIGRANT LABOUR SYSTEM AND  
SOUTH AFRICA'S FUTURE DEVELOPMENT

6.1 Introduction.

It appears that three major conclusions emerge from this study of the migrant labour system and economic development in South Africa. These three conclusions are:

1. The migrant labour system has now become institutionalised as a way of life in the South African economy. Both the economies of the supplying regions and that of the receiving area are totally dependent at present upon its continuance. The system has continued more or less unchanged, apart from some institutional reinforcement in the form of the influx control measures instituted in recent years, for more than a century. Throughout this period the size of the stream of oscillating migrants has continued to grow and, what is more, the rate at which the stream of migrants is growing has itself increased in recent years.
2. Throughout the period of development with migrant labour the modern sector of the South African economy has progressed at a very satisfactory rate. During the sixty years from 1911 to 1970, Gross Domestic Product at factor incomes

measured in current prices, grew at a compound rate of 5,36 per cent per annum. The retail price index showed an annual average compound rate of growth of 2,32 per cent over the same sixty year period.

Over the thirty four year period covered by this study, 1936 to 1970, the average annual compound rate of growth of Gross Domestic Product increased to 8,33 per cent whilst the rate of growth of retail prices rose to 3,41 per cent per annum over the same period. During the ten year period 1960 to 1970 the annual average rate of growth of Domestic Product rose still further to 8,96 per cent per annum, whilst the rate of growth of retail prices dropped to annual average rate of increase of 2,75 per cent.<sup>(1)</sup>

In 1911 agricultural output contributed 21 per cent of Gross Domestic Product and by 1970 this percentage had declined to 9 per cent. Mining and agriculture combined, formed 49 per cent of the Gross Domestic Product in 1911. By 1970 the percentage share of mining and agriculture in Gross Domestic Product had declined to 19 per cent. These statistics show that the modern sector of the South African economy, apart from mining and large scale agriculture, grew at a rate considerably above the rate of growth of the

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(1) Growth rates of South Africa's Gross Domestic Product have been estimated from data given in Table 21.4 South African Statistics, 1974 [249]. Growth rates of retail prices have been taken from Table 8.4 in the same publication.

economy as a whole, despite the sector's increasing reliance upon migrant labour.

3. If, however, one take the economy of KwaZulu as being representative of the economies of all the areas supplying migrant labour to the modern sector of the South African economy, then from the indicators that it is possible to obtain, it seems that economic progress in these areas has been far less satisfactory. Over the thirty four year period 1936-1970 maize output in African Reserve Areas in South Africa rose by an annual average compound growth rate of only 1,26 per cent.<sup>(2)</sup> This rate of growth was insufficient to counteract the increase in population in the areas and maize output per head fell during the period at an annual average compound rate of just over one half of one per cent.

The data assembled in chapter five also indicates that investment in KwaZulu's rural areas, measured in current prices, was for all intents and purposes static over the period 1936-1970. When one considers that over the same period the wholesale price index increased at an average compound rate of growth of 3,85 per cent<sup>(3)</sup> these statistics

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(2) From Table D2 in Appendix D.

(3) Indicators of investment in KwaZulu are contained in Table D1 in Appendix D. Wholesale prices were taken from Table 8.4 in South African Statistics, 1974 [249]

in fact imply that there was net capital consumption in the rural areas of KwaZulu rather than net investment. Capital consumption threatens future productivity and it seems possible that future output levels could fall rather than rise in these areas. There was, however, positive net investment in education in the Black areas, as the number of African children in school in South Africa grew at an average annual compound rate of 6,22 per cent over the thirty four year period 1934-1970.

It seems very clear from this study that whilst the South African economy has grown satisfactorily in aggregate terms in the past with the migrant labour system, a closer investigation reveals that this growth has been highly uneven and has been to the detriment of the areas supplying labour and to the benefit of the area receiving the migrants.

In the light of the analysis presented in Chapter 2 and Chapter 3 it appears that all the evidence that has been assembled in this study supports the view that South Africa has developed along a development by underdevelopment growth path, similar to that described by Arrighi [7] in respect of Rhodesia and Amin [4] in respect of certain West African countries.

It also seems from the evidence presented in Chapter 5 that it is possible that the migrant labour system itself contributed to the further underdevelopment of the Homeland rural areas. This

underdevelopment is the result of the effects that the system has had upon the supply of productive labour in those areas, the accumulation of capital, the patterns of investment and the general level of technical progress in the domestic economy.

Since the present South African Government is now committed to a policy of separate development, which entails the establishment of independent African Homeland areas that must eventually become economically viable, it would seem essential that steps are taken to attempt to prevent any further underdevelopment of the Homeland economies and indeed to ensure that in future the South African economy grows upon a development path that offers a more equal distribution of the gains from economic growth.

Since the migrant labour system is in part the cause and in part the result of the continuing economic underdevelopment in the Homelands, one of the major priorities in the development strategy should be an assessment of the likely future behaviour of the streams of domestic migrants.

Wilson [233] argues that the South African economy has developed beyond the level where oscillating migration would continue if it were not for the artificial government imposed barriers against permanent in-migration by Africans from the rural areas. Consequently he believes that the removal of these barriers would go a long way towards the achievement of the eventual

elimination of the migrant labour system in South Africa. It was, however, argued in Chapter 3 that Wilson's view of the evolutionary forces underlying the migration streams in South Africa implicitly assumes that the economy is travelling along a path in which development occurs in all sectors of the economy such as that described by Lewis [115] and Fei and Ranis [54]. If, on the other hand, the economy is developing along a development with underdevelopment path, the removal of the artificial barriers, although it might reduce the size of the stream of migrants would certainly not eliminate the system since the cause lies in the growth process itself in such a case.

Since the policy prescription pertaining to the elimination of the migrant labour system and to the time scale involved are totally different on the two growth paths, it becomes essential that one forms an assessment as to which development path is the relevant one. As the predicted behaviour of future migration streams is also different on the two growth paths, it is possible to distinguish between the alternatives by predicting the future behaviour of the forces determining domestic migration. One can then make use of these predictions to assist in the identification of the nature of the development path of the South African economy.

#### 6.2. The Evolution of the Forces Affecting Domestic Migration in South Africa.

It was argued in Chapter 3 that there are four forces acting upon

domestic migration streams; rural push forces, rural pull forces, urban pull forces and urban push forces and further that these forces act upon the migrants in different fashions and will evolve in differing manners as development proceeds. The behaviour of these forces in the past, together with an assessment of their likely future behaviour will be considered separately in the following sections.

#### 6.2.1. The Evolution of the Rural Push Forces.

The major rural push force is undoubtedly the level of income that can be generated in the rural area itself. The evidence presented in Chapter 5 showed that income per head generated within the Homeland rural areas had fallen over the period in absolute terms. Subsistence output per head per economically active worker in KwaZulu measured in current prices fell from R56 in 1960 to R51 in 1970. In addition, the area has become increasingly dependent upon the remittances from its out-migrants for its survival. Migrants remittances formed an increasing proportion of KwaZulu's disposable income, increasing from 21 per cent of the Gross Domestic Product in 1960 to 41 per cent in 1970. (4)

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(4) Subsistence output per head was estimated from data contained in South Africa 1974 [250] p.293, and Report 02-02-02 of the 1970 Census [260] Migrants remittances are taken from Table 5.6 in Chapter 5.

On this data there seems no doubt that the intensity of the rural push forces has continued to increase in recent years. When one combines this information with the knowledge that the area has had rapid population growth rates and with the fact that capital consumption appears to have taken place in recent years in the rural areas of KwaZulu, it seems evident that the rural push forces will continue to increase in intensity in the immediate future. If this is indeed so then this anticipated increase in the push forces can be expected to increase the flow of out-migrants from these regions providing there is no other interference in the present economic matrix.

#### 6.2.2. The Evolution of the Rural Pull Forces

When one turns to consider the evolution of the rural pull forces, the position becomes less clear cut. It has been argued by Watson [224] that there is a maximum rate of out-migration that can be tolerated by a society before its traditional, social and economic modes become substantially disturbed. If this is so, one would expect the rate of increase of out-migration to drop as the level of out-migration approached the socially critical level.

A study of the behaviour of migration rates in twenty eight districts of KwaZulu for the years 1960 and 1970 revealed the following information:

1. Nine out of the twenty eight districts had growth rates of

migration above the mean growth rate for the area as a whole. Of these nine districts all but two had average migration rates below the mean migration rate for the area as a whole in 1960.

2. Seven districts had average rates of migration above the area mean rate in 1960 and all seven of these areas had growth rates of out-migration below the average rate over the ten year period.

This data does support the view that the costs of migration to the supplying community increase as the average rate of absenteeism rises, increasing the power of the rural pull forces on the would-be out-migrant.

If this is indeed so, it would seem that once the rate of male absence has reached the limit that is tolerable in terms of the present set of social values of the community, the rate of growth of out-migration will tend to be limited to the rate of increase in the supply of available men in these areas at least in the short term. Time is required to change social values even when there is substantial economic pressure for such change. However, it should be noted that although this argument implies that there may well be a tendency for the rate of increase in the rate of out-migration to stabilise itself at the rate of population growth, the absolute numbers of out-migrants from the areas will continue to increase.

The second major rural pull force stems from the fact that the

traditional society offers a form of social security to its members, and that so long as the employers in the modern sector fail to supply an adequate substitute, migrant workers will retain their ties with their traditional culture and economy in order to obtain this social security; both as a hedge against illness or unemployment in the modern sector and in order to provide a means of survival on their retirement.

There is very little data available to enable one to establish the extent to which modern sector employers are now paying pensions and other social security payments to their migrant workers. If one could obtain adequate data of this nature, it would enable one to make some assessment of the extent to which modern sector employers attempt to offset the rural pull force that arises from the migrant worker's inherent feeling of insecurity in his new environment. What data that is available indicates the extent of the provision of such services for migrant labourers is insignificant. The Bureau of Market Research's study [210] into the expenditure patterns of single African households in Durban in 1970 showed that only three income groups, out of the eleven surveyed, had members contributing to pension funds and that the average contributions were, in all instances, less than one half of one per cent of the average income of the group, indicating that a very small number of individuals in each group actually contributed to such funds. This data is certainly not indicative of substantial provision of social security payments to

migrant workers by modern sector employers.

It would seem on this evidence that, far from declining as economic development proceeds as Wilson [233] believed, the rural pull forces appear to be increasing as:

- 1) There appears to have been little effort made to provide social security benefits for the migrant workers to the modern sector
- 2) As the male absentee rate rises in the rural areas, so the relative costs to the family of a migrant's absence appears to increase, which will encourage the family to exert pressure upon the migrant to return as often as is economically feasible.

### 6.3 The Evolution of the Urban Pull Forces.

It was argued in Chapter 3 that there are two major urban pull forces. The first force is the result of the existence of differences in the average levels of earnings in the rural and the urban sector Lewis [115]. The second force is the result of increasing job opportunities in the modern or high-wage sector. Todaro [204]. In order to evaluate the size and direction of these forces adequately, one would ideally like to have information on the behaviour of the following economic variables:

1. the average wage rates paid to migrant workers in the modern sector,
2. the number of migrant workers employed in the high wage sector as opposed to those who find work in the informal sector of the modern economy. Berg [17] Reynolds [162]

3. the relative rates of growth of unemployment in the high wage sector and the informal sector.

Unfortunately, such statistics are not available for the South African economy and once again one is forced to rely upon the behaviour of surrogate data.

Table 6.1 contains information on the behaviour of African employment, average African wage rates in real terms and the average capital/labour ratio for the manufacturing and construction sectors of the economy. These variables have been chosen as representative of the behaviour of African employment in the whole of the modern sector and average African wage rates in the modern sector. The capital/labour ratio has been included in order that it can be used as an indicator of the likely future trends in the growth of employment relative to that of investment in the modern sector and the behaviour of this ratio will be discussed in section 6.2.4 as being representative of one of the urban push forces.

If one accepts the indicators used in Table 6.1 as being adequate surrogates for the behaviour of the true variables that affect the strength of the urban pull forces, it seems clear from the evidence in the table that over the period covered by this study, the pull forces generated by increasing job opportunities in the modern sector were positive throughout the period. In addition it seems highly likely that these forces gained in strength over

TABLE 6.1 INDICATORS OF THE EVOLUTION OF THE URBAN FORCES THAT ACT UPON MIGRATION STREAMS.

Year	Manufacturing Sector			Construction Sector			Number of Migrants from Rural Areas
	Employment of African Men	Average African Wage in Real Terms	Capital Labour Ratio in Real Terms	Employment of Africans	Average African Wage in Real Terms	Capital Labour Ratio in Real Terms	
	A	B	C	D	E	F	G
1936	122 357	274	-	-	-	-	476 000
1946	187 468	467	906	34 646	432	451	635 000
1960	335 560	486	1601	83 488	446	355	887 000
1970	516 531	660	1790	248 300	639	391	1357 000
<u>Growth Rates%</u>							
1936-46	4,36	5,48	-	-	-	-	2,9
1946-60	4,25	,29	4,15	6,48	,23	-1,70	2,4
1960-70	4,45	3,11	1,12	11,52	3,66	,97	4,3
1936-70	4,34	2,62	-	-	-	-	3,13
1946-70	4,33	1,45	2,68	8,55	1,64	-,59	3,2

A : Total male African employment in manufacturing taken from the following sources: 1936 Van der Horst [217] p.29. 1946 From Statistical Year Book 1964 [247] p.H.25. 1960 from South African Statistics 1974 [249] p.7.7. 1970 from Manufacturing Census 1970 [256]. The growth rates in the table are average annual compound rates of growth in all cases.

B : Average African real wages have been calculated from data obtained from the sources given in A. Money wages were then inflated by the inverse of the consumer price index given in South African Statistics 1974 [249] p.8.4. 1970 was taken as 100.

C : The capital/labour ratio has been obtained by dividing the estimates of the capital stock in manufacturing in the year made by de Jager [42] by the total employment in manufacturing for the same year taken from South African Statistics 1974 [249] p.7.3. It is given in constant 1963 prices.

D : Obtained from the same sources as were outlined in A, but for the Construction industry. 170 data from South African Statistics 1974 [249]

E : Obtained in the same manner as B, but for the construction industry.

F : Obtained in the same manner as C, but for the construction industry. As de Jager [42] includes only contractors in his estimate of the capital stock of the construction sector, this estimate of the capital/labour ratio is understated and its use implies the assumption that movements in this ratio are indeed representative of movements in the capital stock ratio of the construction sector of the economy.

G : From Table 4 in Chapter 4.

the ten year period 1960-1970. Jobs for African men in manufacturing and construction grew at an annual average compound rate of 5,3 per cent over the period 1946-1970. Out-migration from South Africa's rural areas by African men grew at an average annual compound rate of 3,2 per cent during the same period. However, during the period 1960-1970 employment of African men in the modern sector grew at an average compound rate of 6,23 per cent and the growth rate of out-migration increased to 4,3 per cent.

On the other hand average African wage rates in real terms showed no apparent growth in these two sectors of the modern economy over the period 1946-1960. However, African real wage rates did start to increase after 1960 and grew at an annual average compound rate of slightly over 3 per cent for the ten year period 1960-1970.

It would seem, therefore, that one can identify two distinct periods of time in which the behaviour of the urban pull forces differed quite substantially:

1. The period 1946-1960 during which the urban pull force came exclusively from an increase in job opportunities in the sector.
2. The period 1960-1970 when two pull forces were operating, one from increased job opportunities; which in fact increased in its strength over this period and the second, the result of rising real wage rates in the modern sector.

Consequently it is apparent that the strength of the urban pull forces increased substantially during the ten year period 1960-1970, when compared with the earlier fourteen year period 1946-1960. The relative magnitudes of the numbers of migrants away from the rural areas of the South African economy on the census dates over this period support this view. Domestic migration grew at an annual average compound rate of 2,4 per cent over the period 1946-1960 and then accelerated to an annual rate of 4,3 per cent over the ten year period 1960-1970.

On this evidence it seems that the urban pull forces have gained in strength as the economy has continued to develop in the manner that Wilson argued would happen.

#### 6.2.4 The Evolution of the Urban Push Forces

As far as the evolution of urban push forces as a result of economic development was concerned, Wilson [233] argued that increasing capital intensity in the modern sector would result in a need for a more sophisticated work force. This being so, he believed that the costs of a higher labour turnover, which is a concomitant of the migrant labour system, would become so great that it would pay employers to stabilise their labour force. Previously, when less capital was embodied in the individual labourer, Wilson argued that it had been more profitable for the employer to support the maintenance of the migrant labour system since by doing so the employer was able to escape some of his

commitments to the maintenance of the migrant's family.

There are two problems with this argument;

1. It has been argued by Reynolds [162] that it is not correct to assume that increased capital intensity in production implies that a higher level of skill is required from the labour force. Increased capital intensity may well 'deskill' labour and reduce the level of training required. If this is so then it is possible that, as the degree of capital intensity in industry increases, so will the intensity of the urban push forces arising from the employers likewise increase rather than diminish.
2. The data in Table 6.1 on the behaviour of the capital/labour ratio in manufacturing and construction over the twenty four year period 1946-1970 does not support Wilson's contention either. The data shows that in fact the capital/labour ratio has not increased very rapidly in manufacturing over the period and has actually fallen in the construction sector. In addition, the capital/labour ratio increased more rapidly in manufacturing over the period 1946-1960 than it did in the ten years 1960-1970. These statistics do not show that Wilson's belief that the capital/labour ratio must eventually increase as development continues is incorrect, but merely that the South African economy has not yet attained that stage of development. Consequently taking Wilson's argument on his terms, the employers have not yet reached

the point where it will pay them to cease from supporting the continuance of the migrant labour system.

It would seem therefore that there appears to be no reason to assume that the urban push forces will be substantially different in the immediate future.

### 6.3 The Future of Domestic Oscillating Migration in South Africa

From the analysis presented above, it appears that in recent times all the forces acting upon the domestic migration streams have increased in intensity and that Wilson's argument;

*"that the balance of economic forces which previously maintained the oscillations has been so altered by the process of economic growth that if it were not for other constraints (my emphasis) more and more people would be moving to town." [233] p.158.*

appears to be too optimistic a view of the nature of the current South African development parameters.

It seems evident that since the growth processes, together with the market forces operating within the growth path, have exacerbated the extent of the migratory labour system and have increased the degree of underdevelopment of the regions supplying the migrants, substantial government intervention will be required to alleviate the situation. This intervention will have to be on a scale far beyond that of simply removing the present barriers to black advancement, if the stated government aims of

creating independent economically viable African Homelands are to have any hope of realisation.

Up to the present time development in South Africa has resulted in the institutionalisation of a massive structural imbalance in the relationship between the geographical location of job opportunities vis-à-vis that of the African population in South Africa. Exactly how large this imbalance is can be gauged when one recalls that according to these estimates 43 per cent of all the economically active African men in South Africa are migrant workers.

This massive reliance upon the system of migratory labour has resulted in the Homeland rural areas losing the major portion of their young, better educated, economically active male workers. More than half the adult males in the Homeland rural areas are absent from their homes for the greater part of their working life and amongst the better educated echelons, this absentee rate reaches nearly ninety per cent.

The dependence of the Homelands on remittances, coupled with the high degree of dependence of the modern sector of the economy on the continuance of the supply of labour from the Homelands implies that it will not be a simple task to eliminate or even to reduce the degree of reliance on the migratory labour system. Any problem that grows worse over time and which is allowed to persist is likely to prove highly intractable when one attempts to alleviate it. It seems that the migratory labour system will be no exception. Men from the rural areas show a greater pro-

ensity to migrate now than they did even ten years ago, and they migrate at a younger age and for longer average periods than previously. Consequently it will be necessary to approach the problem from the point of view of both the supplying and the receiving economies since, until it is possible to offer an out-migrant a viable employment opportunity in his home region, he has no alternative but to migrate in order to enable his dependents to survive.

There are three major problems to be tackled in respect of the migrant labour system, namely:

1. How to reduce the social and economic costs that arise from the fact that continued migration is essential for the immediate future due to the continued interdependence of the two economies.
2. How to reduce the level of dependency of the Homeland economies on the modern sector of the South African economy with a view to eventually eliminating the migrant labour system in its present form.
3. How to replace the system with a permanent reallocation of workers and their families, which more closely approximates the patterns of demand for labour in the economy.

#### 6.3.1 Policy Measures Designed to Reduce the Social and Economic Costs of the Migrant Labour System.

The major economic and social costs of the migrant labour system

stem in the main from the fact that the migrant himself is spatially separated from his family, and apart from the costs that arise from the increasing underdevelopment of the supplying area, are made up of such things as high labour turnover, increased illegitimacy, bigamy and prostitution, parental neglect of children left in the care of foster parents, increased corruption, increased disease levels, etc.. (5)

As these costs are mostly the result of the family separation, it follows that they can be substantially reduced by decreasing the extent of this separation. This might be achieved in a number of ways:

1. Additional family housing could be provided in Homeland areas adjacent to existing pockets of employment. Areas such as Clermont and Umlazi, which although they are part of KwaZulu, are adjacent to the Durban-Pinetown Complex, would be ideally suited for this type of additional housing development. Such housing should however be financed from central government funds, apart from those funds earmarked as development finance for the Homelands, since the rate of return on this type of investment is likely to be higher to the White sector than to the Homeland government, as the bulk of the worker's output accrues to the modern sector and not

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(5) An excellent description of the major economic and social costs of the migrant labour system is given in Wilson [233] Chapter 9.

to the Homeland itself.

2. Additional impetus should be given to the continued decentralisation of industry to areas within easy reach of the new Homeland urban areas that are being developed, that is to areas both inside and adjacent to the Homelands. Although the development of border industries is not likely to lessen the degree of dependence of the Homeland areas, it will have the beneficial effect of reducing the extent of the 'leakages' as the migrant will now live in the Homeland and spend the major portion of his earnings in the area. This increased expenditure should generate employment within the Homelands as a consumption goods sector starts slowly to emerge.
  
3. The present government policy towards the permanent settlement of migrants and their families in the modern sector should be changed to allow for a greater degree of permanent in-migration. If this was done it should be coupled with measures designed to encourage the private sector to stabilise their labour force to a greater extent, and to assist with the financing of the additional housing that would be required.

An additional cost of the migrant labour system to the Homelands that is not linked simply to family separation, is the cost that arises from the very high degree of out-migration among the more highly educated members of the community. On these grounds since

the White sector appears to be the major beneficiary of expenditure on African education, additional subsidies specifically for education should be transferred from the central government to the Homelands, as the social rate of return on such investment to the Homelands themselves is again likely to be very low.

Finally, since as it was argued in Chapter five, the investible surplus that is partly created by the labour of the migrant workers accrues almost exclusively to the modern sector, apart from some Central Government investment in the Homelands and the transfer of budgetary assistance to the Homeland governments, some part of the cost of migrant labour system could be offset by substantially increasing the transfer income flowing into the Homelands from the central government. This increase should not, however, be viewed as 'aid', but rather as 'reparation payments' made in compensation for the loss of surplus generating labour power in the Homelands that has resulted from the migrant labour system.

#### 6.3.2 Measures Designed to Reduce the Overall Dependency of the Homeland Areas on the Modern Sector of South Africa.

As one of the major problems as far as the Homelands are concerned is their almost total dependence upon the employment opportunities offered in the modern sector of the economy, every effort should be made by the Homeland governments to reduce this level of dependence by encouraging growth within the Homelands to the point where these areas are able to offer their citizens

a viable alternative to migration. This is not an easy task and one that is made more difficult by the high male absentee rate induced by the migratory labour system. However, some steps could be taken in an attempt to redress the balance:

1. Homeland governments could centralise control over the supply of their migrant labour in an attempt to increase the bargaining power of this labour and so transfer part of the modern sector surplus to the Homelands. This surplus could be transferred in part in the form of increased wage payments to migrant workers and in part in the form of an increased levy on employers payable directly to the Homeland governments.
2. Wilson [235] makes the excellent suggestion that one of the best ways that the supplying economies could use the bargaining power that they have over the White government due to their monopsonistic position in the labour market, would be to bargain for guaranteed markets for their domestic production in the modern sector. Such exports would hopefully lead to further development within the supplying economy.
3. Homeland governments could impose an additional tax either upon the employers of migrant labourers or upon the migrants themselves and then use the proceeds as a payroll subsidy to employers located within the Homeland to encourage the adoption of labour intensive techniques in the domestic economy.
4. Greater emphasis should be placed upon the development of

agriculture, but in order to develop a viable agricultural industry a deliberate policy should be followed to encourage men to choose permanently between farming and industrial work. Men who choose to work as migrants should then be:

- (a) guaranteed a job or some sort of social security benefit for their working life;
- (b) encouraged to relinquish all title to agricultural land for due compensation. This land should then be re-allocated to an emergent peasant farming class;
- (c) re-housed with their families in an urban area as close to the migrants' work as is feasible. Closer contact between the migrant and his family will hopefully :
  - (i) reduce the social costs of migration;
  - (ii) reduce the migrant's living costs;
  - (iii) increase the income generating effects of the migrant's employment as he will spend a far larger portion of his wage packet in the Homeland than he does at present.

5. Every effort should be made to encourage the development of the manufacturing sectors within the Homelands, but care should be taken to ensure that the growth of these sectors does not reinforce the level of dependency on the rest of South Africa. The following steps could be taken to reduce the likelihood of such an increase in dependency:

- (a) Foreign capital, including that from the Republic, should be encouraged on a partnership basis only or for limited periods of time.

- (b) Care should be taken to encourage labour intensive industries in the initial phase of development in an attempt to reduce the rate of out-migrancy.
- (c) Encouragement should be given initially to import replacement industries as far as is economically feasible, as these:
  - (i) have a guaranteed market for their product;
  - (ii) will lessen the dependence on industrial South Africa, resulting from the high level of imports;
  - (iii) may help to offset any deterioration in the terms of trade between the Homelands and the rest of South Africa that may result from the increased wages paid to migrants or from the tax imposed upon their employers.

Although this list of policy recommendations is lengthy and the implementation is likely to prove very costly, the estimated size of the present migration stream, coupled with the recent rapid rise in the growth rate of the number of migrants and the increase in the length of the migration period shows, in the writer's opinion, that if such measures are not put into effect quickly and on a large scale, the social, political and economic problems that are created by the South African economy's continued and increasing reliance on the migratory labour system could well become insurmountable.

#### 6.4 The Future Outlook

The policy recommendations contained in the above sections do not appear to differ radically from the expressed policies of

the present South African government. If this is indeed so, then one should query why the migrant labour system has continued to grow in the face of such policies. The answer lies, in the writer's opinion, in the fact that although the present South African government has these stated aims, it lacks the true commitment required to put them into practice.

In terms of the analysis presented in this thesis, it is easy to see why the government has this ambivalent attitude. Morally the maintenance of the migrant labour system is indefensible, but up to the present time, its continuance has been beneficial to the development of the economy's modern sector. Since the government has itself benefitted from the continued development of this sector, both from an economic viewpoint and from a political viewpoint; as the power base of the present government has become increasingly centred on the White urban electorate, it has had no incentive to impose measures to ensure a more even development path as such a path may well have been achieved at the cost of lower overall rates of development in the modern sector. In addition the bargaining position of the groups of individuals, who would have benefitted from the large scale introduction of these measures, was so weak, due to the nature of the South African institutions, that they were unable to force such an introduction.

It follows, therefore, that one must enquire whether there are at present grounds for believing that the situation will change

in the near future. Change is essential to ensure that the policies recommended will be introduced on a scale sufficient to have any hope of success.

Three factors could well operate to effect the introduction of such changes:

1. World opinion against the unequal nature of South Africa's economic development is mounting. This coupled with the changing nature of the ruling regimes in countries in Africa, other than South Africa, makes it increasingly difficult for the present South African Government to continue to ignore the inequalities.
2. There are indications that South Africa may be reaching a situation where future development will take place in a labour limited, rather than in a labour surplus, context. Employment in the modern sector, from the indicators used earlier, appears to have grown faster than the labour supply and black wages have started to rise in real terms in recent years. If this is indeed the case then the relative bargaining strength of the Black labour supply can be expected to increase in the future. Providing the labour force is able to utilise this increase in bargaining power it may well be able to accelerate change in the South African scene.
3. The nature of the independent Homelands provides, on the

face of it, a means of harnessing this increased bargaining strength of labour. The Homeland governments could under certain circumstances effectively control the supply of labour to the modern sector for the attainment of their own ends.

It could well be, therefore, that in future if South Africa is to continue to develop peacefully along the lines laid down by the policy of separate development, the price of such development will be the successful attainment of a development path on which the proceeds of development are more equally shared by all the sectors of the economy. The present government and the 'captains of industry' may well soon be faced with a choice between continued growth with a bigger slice going to the Homelands and little or no growth due to increased political instability. For the continued wellbeing of all members of the community let us hope that, if they are faced with such a choice, they choose as "good capitalists" should, namely to continue to grow.

It is obvious that the development strategy outlined in the policy prescriptions requires very high levels of investment in the Homeland areas. It is equally obvious from the present economic development levels in the Homelands, taking KwaZulu as a representative of these areas, that the funds for such investment cannot be generated within the Homelands to any extent. Investment in these areas will, therefore, require massive transfers of resources from the modern sector of the economy. Consequently, one must

ask firstly under what circumstances such transfers are likely to be forthcoming and secondly, if they are forthcoming, what other difficulties will be encountered in generating the desired development levels.

The Homeland governments will only succeed in forcing a transfer of additional investment funds to the Homelands if:

1. they succeed in improving their bargaining position, and
2. if they choose to exercise this increased strength.

It was argued above that there are three positive forces working for change in South Africa. Whilst it seems at present that the first of these; the pressure of world opinion on the White government's attitudes is likely to increase, it is not so certain that the Homelands will succeed in gaining control over the supply of labour to the modern sector. Nor indeed is it necessarily the case that, even if they should attain such a position, these governments would in fact choose to use this power to reduce the Homelands dependency on White South Africa.

Effective control of the labour supply implies firstly, co-operation and cohesion between the various separate Homelands and secondly, that these governments have sufficient popular support to ensure that any movements that they may make to withhold labour supplies are actively supported by their countrymen; both may be in doubt.

It is conceivable that development in the Homelands will take place in a manner that will not allow the Homeland governments to develop a common set of objectives. The way in which the Homelands have been set up is almost sufficient to guarantee the emergence of a conflict situation. The Homelands are autonomous but compete with one another for investment funds from the central government<sup>(6)</sup> and probably of more significance in this context is the fact that they also compete with one another for the jobs that are available in the modern sector for the migrant workers that they export. Consequently it will be difficult for a Homeland government to exercise any meaningful control over the labour supply until the economy reaches a position close to full employment. As long as there is unemployment there is substantial competition amongst migrants for jobs and in such circumstances it will pay an individual Homeland to 'opt out' of a general agreement to withhold labour supplies to the modern sector. By doing so the Homeland will be able to increase its earnings from the export of labour through filling jobs previously held by the citizens of other Homelands with its own citizens.

Another substantial problem that might prevent the Homeland governments from emerging a substantial bargaining force in the

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(6) An example of this competition can be seen in Chapter of South Africa 1974, where a table is given showing the central government's view of the relative ratings of the Homelands in terms of the need for the provision of additional employment creation. [250]

labour market could arise from the nature of the emerging Homeland governments themselves. The imposition of measures that are designed to reduce the overall levels of dependency in the Homelands requires that the policy makers, together with those who implement the policies, should be comprised of groups of individuals who do not themselves benefit from continuing the dependence relationship. If development in the Homelands should generate a ruling class comprised of bureaucrats, professionals and traders, as has been the case in so many developing countries, particularly in Africa, it is highly unlikely that a government composed of such people or who are dependent for their survival on them would ever embark on any set of policy measures that might threaten the relative position of the elite class.<sup>(7)</sup>

Bearing these problems in mind, it seems that one can draw the following conclusions:

1. Unless the Homeland governments are comprised of men who are truly representative of the interests of the majority of the people in the Homelands and have their common aims, it seems highly unlikely that such governments will undertake the measures necessary to reduce the levels of dependency of the Homelands on the modern sector of South

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(7) Wallenstein [225] discusses the relationship between the power of the state, the class structure of society and the role played by the state in the development process. So also do Arrighi and Saul [8]

Africa as the implementation of such policies are likely to threaten the position of the ruling parties.

2. Even if such 'popular' governments should emerge in the Homelands, the poverty levels of the people are such that any action designed to withdraw labour from White South Africa on anything other than an extremely short term basis, would extract such a cost in terms of human suffering that it would probably be out of the question.
3. Generating development in any country is not a simple matter and the policies outlined have their own problems although they represent, in the writer's opinion, the 'optimal' strategy. Import substitution is slow and expensive and initially increases the degree of dependency of the economy.<sup>(8)</sup> Reliance on capital from outside, whilst essential in the present context, can also prove unsuccessful from the long term view in that it implies the export of profits, reliance on foreign technology and again increases the level of overall dependency.<sup>(9)</sup>

If development in the Homelands does indeed increase rather

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(8) The problems that result from following a policy of import substitution are well spelt out in Little, Scitovsky and Scott [120]

(9) A good summary of the disadvantages that result from development with foreign capital is given in Griffin [61]

than decrease the level of dependence of those areas, then in a bargaining context, one must hypothesise that it will be the desires of the stronger party, the White government that will prevail. In such a case the development strategy followed in South Africa will be comprised in the main at least of the development strategy mapped out by the White government. Consequently, pressures for 'reformist change' will effectively be limited to those that can be directed at changing the White government's development strategy in favour of one that offers a more egalitarian distribution of income.

It seems likely that in view of the above arguments, the Homelands will remain as major exporters of labour and that continued economic growth in South Africa, whilst it may well reduce the rate of growth of migration, as full employment levels are approached, is unlikely to eliminate the system in the foreseeable future.

There is, however, no doubt that government policies could be adapted fairly simply to effect changes that would drastically reduce the social costs of the system and indeed in the present political climate it could well be argued that continued economic growth in South Africa may be contingent upon the implementation of such measures. Horwitz [86] describing the gap in wage rates and working conditions that exist originally between White skilled immigrants and Black African migrant workers, says:

*"But the gap that was formed by market realities became the gulf of institutionalised culture and, finally the chasm of the South African social system."*  
[86] p.168.

If South Africa is to have any future as a multiracial state, it is essential, in the writer's view, that work is commenced now on a project to bridge that chasm.

APPENDIX A

THE BASIS OF THE ESTIMATES OF MIGRATION.

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The estimates of the extent of temporary migration amongst South African Africans have been made by establishing some standard demographic features for the African population of South Africa as a whole and then utilising the characteristics of these features to generate an estimated standard population for the area from which the estimate of out-migrants is to be made. The difference between the standard population generated and the actual population is then the number of migrants.

The basic demographic features used are; firstly the ratios of women to children in the different age cohorts and secondly, the masculinity ratios. For example, in order to estimate the number of migrants from the areas now KwaZulu in 1970, firstly the ratio's of all Zulu women to Zulu children 0-14 years in South Africa in the separate age cohorts were estimated from the census data. These ratios were then assumed to hold in the Zulu Homeland. The number of children under 14 years in the homeland was taken from census data and the ratios of the various adult age cohorts were applied to the number of children in the homeland, in order to obtain an estimate of the number of adult women in each age group that should be in the homelands to support the number of children actually present. The difference between the standard population and the actual population gives the number of female migrants from the area.

In order to obtain a standard population of adult males, the

standard masculinity ratio for the specific age cohort was applied to the estimated number of females. Again the actual number of males was then subtracted from the estimated male population in order to obtain the number of migrants in the age cohort.

Table A1. illustrates this process for the Bantu Homeland Rural areas of South Africa.

Tables A5.1 through to A15 contain estimates of the number of migrants from the rural areas in 1960, 1946 and 1936, from areas that are not Homeland areas and from the Homeland areas of Xhosa, the Zulu, the Bapedi and the Sotho people for 1970. There are a number of other working papers included for interest and these are referred to in chapter 4 of the thesis.

The validity of any estimate of migration made by this type of method depends on whether or not the key demographic variables, the ratio of children to adult women in particular age cohorts and the masculinity ratios, that were assumed to be constant, were in fact relatively constant both through time and between different selected populations. The masculinity ratio is normally constant between populations and so in the absence of any sex selective catastrophes, one would not normally expect any difficulties to arise with the behaviour of this variable. The ratio of children to women is, however, in a different category since if family patterns vary between regions one would expect this variable to behave likewise. Table A2. shows the ratio of adult women in five year age cohorts to children 14 years and under for various South African populations through time.

TABLE A1. ESTIMATION OF THE NUMBER OF AFRICAN MIGRANTS FROM THE HOMELAND RURAL AREAS OF SOUTH AFRICA IN 1970.

Age Group	Ratio Women/Children in South Africa	Population Female		Female Migrants	Masculinity Ratio	Population Male		Male Migrants
		Estimated	Actual			Estimated	Actual	
	A	B(1)	C(1)	D	E	F	G	H
15-19	,13	413 000	377 000	36 000	10	413 000	296 000	117 000
20-24	,10	318 000	282 000	36 000	,99	315 000	123 000	192 000
25-29	,09	286 000	250 000	36 000	,98	280 000	88 000	192 000
30-34	,08	254 000	219 000	35 000	,98	249 000	81 000	168 000
35-39	,06	191 000	187 000	4 000	,98	187 000	75 000	112 000
40-44	,05	161 000	161 000		1,0	161 000	74 000	87 000
45-49	,04	139 000	139 000		,98	136 000	74 000	62 000
50-54	,04	124 000	124 000		,95	118 000	68 000	50 000
55-65	,05	184 000	184 000		,89	164 000	114 000	50 000
Totals		2 070 000	1 923 000	147 000		2 023 000	993 000	1 030 000

A = All African Women in S.A. in age cohort  
 All African Children in S.A. aged 0-14 years. e.g.  $\frac{\text{All African Women 20-24 yrs}}{\text{All Children 0-14 years}} = \frac{544\ 720}{6\ 408\ 320} = .10$

B = Number of children in rural areas 0-14 yrs. x ratio A for particular age cohort

C = From 1970 census rounded to the nearest 1000.

D = B - C.

E = From J. L. Sadie, [174]

F = B x masculinity rate for that particular age cohort.

G = From 1970 census rounded to the nearest 1000.

H = E - F.

(1) Where actual figures for women are greater than the estimated, the actual figures have been used to estimate the male population in column F. However, in the case 50-54 years, the actual population is 3000 less than the estimated, but has still been used as the basis for calculating male migrants as it was felt that the difference reflected incorrect age admissions rather than true out-migration.

TABLE A2. RATIO OF ADULT FEMALE AGE COHORTS TO CHILDREN  
0-14 YEARS FOR SELECTED SOUTH AFRICAN POPULATIONS.

Age Group	Ratio of Adult Females in Cohort to Children 0-14years				
	All Africans 1936	All Africans 1946.	All Africans 1960.	All Africans 1970.	All Zulus 1970.
15-19	,12	,13	,11	,13	,13
20-24	,11	,11	,11	,10	,10
25-29	,09	,10	,09	,09	,09
30-34	,09	,09	,08	,08	,08
35-39	,07	,07	,07	,06	,06
40-44	,06	,06	,06	,05	,06
45-49	,04	,05	,04	,04	,04
50-54	,04	,04	,04	,04	,04
55-64	,05	,05	,05	,05	,05

SOURCE: Estimated from data given in Vol. II of the Report on the Seventh Census of the Population of the Union of South Africa. U.G. 60/1950. Government Printer, Pretoria, 1950. Report on the Population Census 6th September, 1960. Vol. 7, No. 1 D.1, D7 and D.10. Government Printer, Pretoria, 1968; and Report 02-02-02, Population Census, 6 May, 1970. D.1, D.10, Department of Statistics, Pretoria, March, 1973. [257] [258] [260]

The data in Table A2 shows that in fact over the 34 year period from 1936 to 1970, these demographic ratios have remained very stable. Only in the case of women 15-19 years in 1960 did the ratio vary by more than 1 per cent in any instance. Since the 1960 census is not noted for its high degree of accuracy, this deviation probably reflects census undercounting rather than a marked change in demographic patterns. This opinion is borne out by the fact that this age cohort in the 1970 census then 25-29 years, shows no deviation in pattern from the ratio of similar age cohorts in previous census years. Consequently estimates for

1960 will be based on the assumption that the percentage of women 15-19 years to children under 14 is in fact 13 per cent and not eleven as shown in Table A2.

The evidence in Table A2 is not sufficient *per se* to justify the assumption that family patterns in the area from which the out-migration occurs are the same as those of the standard populations selected. Had the urban population been selected as the standard population this assumption would most certainly have been invalid as the migration process generates structural demographic imbalance in the urban populations in the same way as it does in rural populations. However, since the global African populations have been selected as standards i.e. All Africans in South Africa for total South African migration and All Zulus in South Africa for migration from KwaZulu, it is reasonable to assume that since 67% of all Africans (without the migrants) were in fact in the rural areas on the census date in 1970, the family patterns of the global population are a reasonable surrogate for family patterns in the various rural regions.

The second set of demographic magnitudes that are assumed to remain constant are the masculinity ratios of the various adult age cohorts. Since the masculinity rate among new born babies is constant as was pointed out earlier one would expect, apart from a major catastrophe that was male selective, such as war, or the presence of a phenomenon that is selective of particular age groups such as migration, that the population would exhibit fairly constant masculinity ratios between similar age cohorts through time.

Table A3. gives masculinity ratios for age cohorts of various South African African populations at selected census years and one can see from the data in the table that far from being constant, masculinity ratios fluctuate widely.

TABLE A3. MASCULINITY RATIOS IN CERTAIN SELECTED SOUTH AFRICAN AFRICAN POPULATIONS.

Age Group	Population					
	All African Populations				All Zulu 1970	Sadie's Masculinity Ratios
	1936	1946	1960	1970		
15-19	1,06	1,07	1,02	,94	,88	1,0
20-24	1,01	,95	1,00	,97	,79	,99
25-29	1,20	1,15	1,06	,95	,78	,98
30-34	1,09	,99	1,04	,95	,77	,98
35-39	1,24	1,15	1,13	,98	,82	,98
40-44	1,07	1,00	1,07	1,0	,84	1,00
45-49	1,21	1,14	1,21	1,04	,93	,98
50-54	,94	,87	1,03	,98	,86	,95
55-64	,89	,83	,97	,91	,84	,89

SOURCE: Estimated from the Population Census data for 1936, 1946, 1960 and 1970 censuses, and J. L. Sadie [174] population projections.

The extent of the variations of the masculinity ratios through time varies considerably between age cohorts varying from as much as 54 per cent in the case of the 25-29 year cohort to 17 per cent in the case of the 55-64 year age group.

In South Africa's case one can explain the variations in a ratio that one intuitively expects to be constant in terms of two forces

operating in the economy. The first is the influence that foreign migrants will have upon domestic masculinity ratios and the second, the effect of illegal migrants on census data.

In-migrants to South Africa from other African Territories, mainly Mozambique and Malawi, have entered South Africa in substantial numbers since 1936. Table A4. gives data on Foreign African in-migrants.

TABLE A4. FOREIGN AFRICAN IN-MIGRANTS TO SOUTH AFRICA -  
1936-1970.

Year	Males	Females	Total	Masculinity Ratio
1936	261 000	73 000	334 000	3,58
1946	445 000	111 000	556 000	4,01
1960	482 000	103 000	585 000	4,68
1970	443 000	49 000	492 000	9,04

SOURCE: Adapted from data given in J. L. Sadie, [174].

Foreign migrants are predominantly migrant workers and consequently fall largely into the adult male groups.

In 1970, 97 per cent of male foreign Bantu enumerated in the 1970 census were between 14 and 54 years and 56 per cent were aged between 20 and 35 years. Consequently with the high masculinity ratios coupled with the degree of concentration in the middle adult age groups, one would expect fluctuations in foreign

migrants to exert substantial influences on the behaviour of the masculinity ratios of Africans in South Africa.

The second influence in masculinity ratios recorded in the census is that exerted by the presence of illegal migrants in urban areas. Since 1948 the present South African government has tightened up progressively the controls on African labour movements from rural to urban areas in South Africa. As it has become more difficult to migrate through the legal channels, so the incentive to migrate illegally has increased. Similarly as the number of illegal migrants in the urban areas increases so the number of individuals who deliberately evade the census count also rises. If the proportion of illegal migrants grows faster than that of the legal migrants and the illegal migrants evade the census then one would expect the recorded masculinity ratios to be low.

Finally, a third reason that might account for the disparity is the fact that a larger proportion of African women live in rural areas and as the count of individuals in rural areas has been progressively more accurate with succeeding censuses the proportion of women undercounted has decreased.

As the estimate of the number of migrants requires a stable estimate of the masculinity ratios of the populations from which the migrants have come and it was apparent that this could not be obtained from the census data for the reasons outlined earlier, it was decided to use the masculinity ratios that resulted from Sadie's projections of the Bantu Population of South Africa from 1970 - 2020 [174]. These ratios are given in the final column of Table 2. In making these projections Sadie assumed

that the survival rates of coloured males were an adequate surrogate for the survival and fertility rates of the Bantu language speaking people of South Africa. This population still, however, exhibits masculinity ratios below those of normal populations. This difference in masculinity ratios will have the effect of biasing the estimates of the number of migrants downwards.

Another possible source of bias could come from differences in the actual and the de jure numbers of children in the areas. If, for example, urban families send their children out to the rural areas to their other relatives to be brought up away from city life, then the presence of these children in the rural areas would result in an overestimation of the numbers of migrants. A study of the female/child ratios in the population, 'all Africans and Africans in urban African areas' revealed, however, that, after due adjustment had been made for the migrants in the towns, the female/child ratio was in fact slightly higher in the towns than was the case in the rest of the country. This implies that once again the direction of the bias in this estimate of the numbers of migrants from South Africa's rural areas is likely to be downwards.<sup>A1</sup>

It appears from this discussion that this method of estimating the number of temporary migrants from a particular population at a specific moment of time is likely to yield too conservative an estimate. This is particularly true of the years such as 1970 in which it was apparent that the number of children was itself thought to represent a degree of underestimation. Sadie [176].

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A1. The female/child ratios of the two populations; the population 'All Africans' and that of 'Africans in Urban Bantu Areas' are given in Table A5.1.B at the foot of Table A5.1.

TABLE A5.1 ESTIMATE OF AFRICAN MALE MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA IN 1970.

Age Cohort	Female Child Ratio	Male Female Ratio	Male Population		Male Migrants	Age Specific Migration rate	Age Distribution	
			Estimated	Actual			Actual	Cumulative
					A	%	%	%
15-19	,13	1,0	628 000	500 000	128 000	20	12	12
20-24	,10	,99	478 000	267 000	211 000	44	20	32
25-29	,09	,98	426 000	214 000	212 000	50	21	53
30-34	,08	,98	379 000	194 000	185 000	49	18	71
35-39	,06	,98	284 000	177 000	107 000	38	10	81
40-44	,05	1,0	242 000	166 000	76 000	31	7	88
45-49	,04	,98	192 000	151 000	41 000	21	4	92
50-54	,04	,95	183 000	134 000	49 000	27	5	97
55-65	,05	,89	217 000	191 000	26 000	12	3	100
Total			3 029 000		1 035 000	34	100	

A : Estimated on the basis outlined in this Appendix. The standard population used here was the population "All Africans in South Africa" and the estimates were made from data contained in Table 1 of Report 02-02-02. Population Census 8 May 1970, Sample Tabulation Bantu-Age, Occupation, Industry, School Standard, Birthplace. Department of Statistics, Pretoria, 1973. [260]

TABLE A5.1.B THE FEMALE/CHILD RATIOS FOR THE TWO POPULATIONS FOR THE RESPECTIVE AGE COHORTS AS FOLLOWS.

Population	Age Cohorts						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
All African	,13	,10	,09	,08	,06	,05	,04
Africans in Urban Bantu Areas	,13	,13	,11	,09	,07	,06	,04

TABLE A5.2 ESTIMATE OF THE NUMBERS AND AGE CHARACTERISTICS OF AFRICAN FEMALE MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA IN 1970.

Age Cohort	Female Child Ratio	Female Population		Female Migrants	Age Specific Migration Rate	Age Distribution	
		Estimated	Actual			Actual	Cumulative
				A	%	%	%
15-19	,13	628 000	581 000	47 000	8	18	18
20-24	,10	483 000	428 000	55 000	11	21	39
25-29	,09	435 000	364 000	71 000	16	27	66
30-34	,08	387 000	324 000	63 000	16	24	90
35-39	,06	290 000	271 000	19 000	7	8	98
40-44	,05	* 242 000	234 000	5 000	2	2	100
45-49	,04	196 000	196 000	unreliable taken as zero			
50-54	,04	193 000	174 000				
55-65	,05	244 000	244 000				
Total		3 098 000		260 000	8	100	-

A : As in note A on Table A5.1. Note the migrants from the three oldest cohorts have been omitted as the distribution appears to show evidence of inaccurate age reporting by the women, and whereas the number of men migrants in all three cohorts is sufficiently large to be relatively insensitive to such inaccuracies, the number of female migrants is small enough to be highly sensitive.

TABLE A6.1 ESTIMATE OF THE NUMBER AND AGE CHARACTERISTICS OF AFRICAN MALE MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA IN 1960.

Age Cohort	Female Child Ratio	Male Female Ratio	Male Population		Male Migrants	Age Specific Migration Rate	Age Distribution	
			Estimated	Actual			Actual	Cumulative
15-19	,13	1,0	452 000	343 000	109 000	24	16	16
20-24	,11	,99	378 000	211 000	167 000	44	25	41
25-29	,09	,98	307 000	188 000	119 000	39	18	59
30-34	,08	,98	272 000	164 000	108 000	40	16	75
35-39	,07	,98	238 000	158 000	80 000	34	12	87
40-44	,06	1,0	208 000	149 000	59 000	28	9	96
45-49	,04	,98	136 000	135 000	1 000	)		
50-54	,04	,95	132 000	108 000	24 000	) 7	4	100
55-65	,05	,89	158 000	154 000	4 000	)		
Total			2 281 000		671 000	29	100	

A : as in note A on Table A5.1 - Estimates of the female/child ratios and the masculinity ratio were made from data contained in The Population Census Vol. 7, No. 1, Characteristics of the Population in each Magisterial District and Economic Region, Age, Marital Status and Home Language. Government Printer, Pretoria 1968. [258] Note the female/child ratio in the age cohort 15-19 was in fact ,11. However, since the 1960 census is known to be undercounted and this ratio is out of line with the data for similar populations given in Table A2, the ratio that was used in the calculation for this age cohort was ,13.

TABLE A6.2 ESTIMATE OF THE NUMBER AND AGE CHARACTERISTICS OF AFRICAN FEMALE MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA ON THE CENSUS DATE IN 1960.

Age Cohort	Female Child Ratio	Female Population		Female Migrants	Age Specific Rates	Age Distribution	
		Estimated	Actual			Actual	Cumulative
15-19	,13	452 000	B 383 000	A 36 000	% 8	% 17	% 17
20-24	,11	382 000	323 000	59 000	15	27	44
25-29	,09	313 000	279 000	33 000	11	15	59
30-34	,08	278 000	242 000	36 000	12	17	76
35-39	,07	243 000	205 000	38 000	16	18	94
40-44	,05	208 000	193 000	) 14 000 ) ) ) )	} 2	} 6	} 100
45-49	,04	139 000	145 000				
50-54	,04	139 000	128 000				
55-64	,05	178 000	179 000				
Total		2 332 000					

A : As in note A on Table A5.2.

B : The actual figures for the age cohort 15-19 years appear to be heavily undercounted yielding migrants in this age cohort of 69 000 giving an age specific migration rate for this age category of 24 per cent three times greater than that in 1970. It was therefore decided to use the age specific migration rate of 8 per cent to estimate the migrants in this category.

TABLE A7.1 ESTIMATE OF THE NUMBER AND AGE CHARACTERISTICS OF THE AFRICAN MALE MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA IN 1946.

Age Cohort	Female Child Ratio	Male Female Ratio	Male Population		Male Migrants	Age Specific Rates	Age Distribution	
			Estimated	Actual			Actual	Cumulative
15-19	,13	1,0	348 000	302 000	A 46 000	% 13	% 11	% 11
20-24	,11	,99	292 000	177 000	115 000	39	28	39
25-29	,10	,98	262 000	179 000	83 000	32	20	59
30-34	,09	,98	236 000	160 000	76 000	32	18	77
35-39	,07	,98	184 000	150 000	34 000	18	8	85
40-44	,06	1,0	164 000	136 000	28 000	17	7	92
45-49	,05	,98	131 000	122 000	9 000	7	2	94
50-54	,04	,95	101 000	87 000	14 000	14	4	98
55-65	,05	,89	127 000	117 000	10 000	8	2	100
Total			1 845 000		415 000	22	100	

A : As per note A on Table A5.1 - Estimates were based on data contained in Union of South Africa Seventh Census Vol II Ages of the European, Coloured, Asiatic and Native Population, 7th May 1946.  
U9.60/1950 Government Printer, Pretoria, 1950. [257]

TABLE A7.2 ESTIMATE OF THE NUMBER AND AGE CHARACTERISTICS OF THE AFRICAN FEMALE MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA ON THE CENSUS DATE IN 1946.

Age Cohort	Female Child Ratio	Female Population		Female Migrants	Age Specific Rates	Age Distribution	
		Estimated	Actual			Actual	Cumulative
15-19	,13	348 000	325 000	A 23 000	% 7	% 19	% 19
20-24	,11	295 000	261 000	34 000	12	28	47
25-29	,10	268 000	240 000	28 000	10	23	70
30-34	,09	241 000	220 000	21 000	9	17	87
35-39	,07	188 000	172 000	16 000	9	13	100
40-44	,06	164 000	165 000	) unrelia- ) ble taken ) as zero ) )			
45-49	,05	134 000	124 000				
50-54	,04	107 000	106 000				
55-65	,05	143 000	143 000				
Total		1 888 000			122 000		100

A : As per note A on Table A7.1.

TABLE A8.1 ESTIMATE OF NUMBERS AND AGE CHARACTERISTICS OF AFRICAN MALE MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA ON THE CENSUS DATE IN 1936.

Age Cohort	Female Child Ratio	Male Female Ratio	Male Population		Male Migrants A	Age Specific Rate %	Age Distribution	
			Estimated	Actual			Actual %	Cumulative %
15-19	,12	1,0	294 000	266 000	28 000	10	7	7
20-24	,11	,99	266 000	153 000	113 000	42	28	35
25-29	,09	,98	216 000	145 000	71 000	33	17	52
30-34	,09	,98	216 000	134 000	82 000	38	20	72
35-39	,07	,98	168 000	128 000	40 000	24	10	82
40-44	,06	1,0	147 000	110 000	37 000	25	9	91
45-49	,04	,98	97 000	92 000	5 000	) 1	9	100
50-54	,04	,95	93 000	75 000	18 000			
55-65	,05	,89	119 000	104 000	15 000			
Total			1 616 000		409 000	25	100	

A : As per note A on Table A5.1 apart from the fact that the standard population ratios used were those estimated from the 1936 figures contained in the Report referred to in Note A, Table 2.3.1. 4960/1950.  
[257]

TABLE A8.2 ESTIMATE OF THE NUMBER AND AGE CHARACTERISTICS OF THE AFRICAN FEMALE TEMPORARY MIGRANTS FROM THE RURAL AREAS OF SOUTH AFRICA ON THE CENSUS DATE IN 1936.

Age Cohort	Female Child Ratio	Female Population		Female Migrants A	Age Specific Rate %	Age Distribution	
		Estimated	Actual			Actual %	Cumulative %
15-19	,12	294 000	280 000	14 000	5	21	21
20-24	,11	269 000	241 000	28 000	10	42	63
25-29	,09	220 000	215 000	5 000	) 18 )	8	71
30-34	,09	220 000	207 000	13 000		19	90
35-39	,07	171 000	164 000	7 000	4	10	100
40-44	,06	147 000	147 000	-			
45-49	,04	99 000	99 000	-			
50-54	,04	98 000	99 000	-			
55-64	,05	134 000	134 000	-			
Total		1 652 000		67 000	4	100	

A : As per note on Table A8.1 but the estimations were based on the data in the 1936 census figures given in UG-60/1950. [257]

**TABLE A9** AN ESTIMATE OF AFRICAN MIGRANTS FROM NON-HOMELAND RURAL AREAS OF SOUTH AFRICA ON THE CENSUS DATE IN 1970.

Age Cohort	Migrants from All Rural Areas		Migrants from Homeland Rural Areas		Migrants from Non Homeland Rural Areas	
	Male	Female	Male	Female	Male	Female
	A	B	C	D	E	F
15-19	128 000	47 000	117 000	36 000	11 000	11 000
20-24	211 000	55 000	192 000	36 000	19 000	19 000
25-29	212 000	71 000	192 000	36 000	20 000	35 000
30-34	185 000	63 000	168 000	35 000	17 000	28 000
35-39	107 000	19 000	112 000	4 000		15 000
40-44	76 000	5 000	87 000			5 000
45-49	41 000		62 000			
50-54	49 000		50 000			
55-64	26 000		50 000			
Total	1 035 000	260 000	1 030 000	147 000	67 000	113 000

A from column A, Table A5.1 in this Appendix

B from column A, Table A5.2 in this Appendix

C from column H, Table A1 in this Appendix

D from column D, Table A1 in this Appendix

E = A-C so long as the answer is positive. In-migration to other rural areas by Homeland migrants has been excluded as the estimate made was for out-migration to the modern sector.

F = B-D subject to the note E.

TABLE A 10 ESTIMATION OF GEOGRAPHICAL DISTRIBUTION OF HOMELAND CITIZENS BY EDUCATIONAL LEVEL IN 1970.

School Standard Attained in 1970	Homelands				Rest of South Africa			
	Number with standard in 1970	Number in School in Homeland with Standard in 1970	Number out of School with Standard	Ratio C:B	Number with Standard in 1970	Number in School in 1970	Number out of School with Standard 1970	Ratio F:G
	A	B	C	D	E	F	G	H
3 years primary	220 000	136 000	84 000	,62	282 000	147 000	135 000	,92
More than 3 but less than 7	461 000	236 000	225 000	,95	784 000	278 000	506 000	1,85
Full Primary	95 000	27 000	69 000	2,56	198 000	27 000	171 000	6,33
Primary Plus 2 years	129 000	31 000	98 000	3,16	284 000	29 000	255 000	8,8
Primary plus 4 years	44 000	20 000	24 000	1,20	84 000	4 000	80 000	20,0

A : Number of African males in the Homelands on the 1970 census date who attained that level of education.

Report 02-02-02. 1970 census Report Bantu Age, Education and Occupation, Dept. of Statistics, Pretoria 1973. Table 2. [260]

B : Number of boys enrolled in the standard + 2 years in the Homelands in 1971 as a surrogate for the enrolments in 1969. Obtained from Department of Bantu Education Annual Report 1971. Part III : Table 381, Pretoria, 1973.[268]

C = A-B

D = C-B

E : Bantu males in White Areas with the education standard in 1970, from Report 02-02-02 in A. [260]

F : Number of Bantu children in standard + two years in 1971 in White Areas from the report quoted in B. The two years were added since in order to have attained Sub B in 1970 one would be enrolled in Sub A, so that by 1971 one would have progressed to standard 1.

G = E-F      H = G+F

TABLE A 11 ESTIMATE OF THE STABILISED WORK FORCE IN WHITE AREAS

Age Group	Males in White Areas	Migrants From Homelands all Areas (Males)	Foreign Male Migrants	Males Attending School in White Areas in Age Group	Stabilised Labour Force in White Areas	Age Distribution of	
						Total Labour Force	Stable Labour Force
	A	B	C	D	E	% F	% G
14-19	434 000	117 000	21 000	120 000	176 000	12	13
20-24	477 000	187 000	94 000	4 000	192 000	17	15
25-29	421 000	186 000	75 000		160 000	16	12
30-34	356 000	164 000	57 000		135 000	13	10
35-39	310 000	106 000	44 000		160 000	12	12
40-44	261 000	81 000	32 000		148 000	10	11
45-49	209 000	47 000	25 000		137 000	8	10
50-54	162 000	53 000	17 000		92 000	6	7
55-64	171 000	28 000	15 000		128 000	6	10
Total	2 801 000	969 000	380 000		1 328 000	100	100

A : All Males in White areas in the age category. Table 1 Report 02-02-02 Population Census 1970 Dept. of Statistics, Pretoria, 1973. [260]

B : Estimated male migrants from all Homeland areas not simply Rural Homeland Areas to take account of rural migrants settling in Urban Homeland areas. Report 02-02-02. [260]

C : Foreign males in White areas in age group less foreign females in age group to take account of permanent foreign workers. Report 02-02-02. [260]

D : School children in age group 14-19 years allocated between White and Bantu Areas on the basis of the percentage of total African school enrollment, that is enrollment in schools in White areas. This figure is then allocated between males and females on the basis of the overall masculinity rate among African school children, which is 50 per cent. Source: Department of Bantu Education Annual Report, 1971. RP 31/1973. Government Printer, Pretoria, 1973. [268]

F : A-D age cohort ÷ Total (A-D). G : Age cohort E ÷ total E.

TABLE A12 ESTIMATES AND CHARACTERISTICS OF THE MALE XHOSA  
MIGRANTS FROM HOMELAND RURAL AREAS IN 1970.

Age Cohort	Estimated Number of Migrants	Age Specific Migration Rate	Age Distribution of Migrants	Percentage in Cohort or Less
	A	%	%	%
15-19	33 000	26	10	10
20-24	58 000	60	19	29
25-29	57 000	67	18	47
30-34	48 000	63	15	62
35-39	40 000	61	13	75
40-44	33 000	58	11	86
45-49	22 000	47	7	93
50-54	12 000	33	4	97
55-65	10 000	19	3	
Total	313 000	49	100	100

A : Estimates have been made using the basis set out in this Appendix. The standard population female/child ratios used here were those calculated for the population "All Xhosa People in South Africa" from Table 1 in the Census Report 02-02-02. These ratios were ,13 ,10 ,09 ,08 ,07 ,06 ,05 ,04 and ,06 respectively for the age cohorts 15-19 through to 55-65. The masculinity ratios used were Sadie's estimates given in column 7 of Table A3.

Note that 98 per cent of the Xhosa people enumerated in the 1970 census in Homeland Rural areas were in rural areas in the Transkei or Ciskei.

TABLE A13 ESTIMATES AND CHARACTERISTICS OF THE MALE ZULU  
MIGRANTS FROM HOMELAND RURAL AREAS IN 1970.

Age Cohort	Estimated Number of Migrants	Age Specific Migration Rate	Age Distribution of Migrants	Percentage in Cohort or Less
	A	%	%	%
15-19	42 000	34	13	13
20-24	56 000	60	18	31
25-29	56 000	67	18	49
30-34	50 000	67	16	65
35-39	33 000	59	10	75
40-44	35 000	61	11	86
45-49	16 000	42	5	91
50-54	17 000	47	5	96
55-65	12 000	29	4	100
Total	317 000	52	100	

A : Estimated as shown in Table C1.1 in Appendix C.

Note that 96 per cent of all Zulus who were enumerated as resident in Homeland Rural areas in 1970 were in fact resident in the rural areas of KwaZulu.

TABLE A14 ESTIMATES AND CHARACTERISTICS OF PEDI MALE MIGRANTS FROM HOMELAND RURAL AREAS IN 1970.

Age Cohort	Estimated Number of Migrants	Age Specific Migration Rate	Age Distribution of Migrants	Percentage in Cohort or Less
	A	%	%	%
15-19	13 000	23	8	8
20-24	33 000	69	20	28
25-29	34 000	78	20	48
30-34	24 000	72	14	62
35-39	24 000	72	14	76
40-44	15 000	61	9	85
45-49	14 000	58	8	93
50-54	5 000	35	3	96
55-65	6 000	25	4	100
Total	168 000	56	100	

A : As in note A on Table A.12 but the standard population used here was "All Pedi in South Africa" and the relevant female/child ratios used were ,12 ,10 ,09 ,07 ,07 ,05 ,05 ,03 ,05 for the age cohorts 15-19 through to 55-65.

Note that 90 per cent of the Pedi resident in Homeland Rural areas on the census date were resident in the rural areas of Lebowa.

TABLE A15 ESTIMATE OF THE MALE TSWANA MIGRANTS FROM THE  
HOMELAND RURAL AREAS IN 1970.

Age Cohort	Estimated Number of Migrants	Age Specific Migration Rate	Age Distribution of Migrants	Percentage in Cohort or Less
	A	%	%	%
15-19	10 000	26	11	11
20-24	18 000	65	20	31
25-29	16 000	71	18	49
30-34	13 000	68	14	63
35-39	11 000	69	12	75
40-44	8 000	59	9	84
45-49	5 000	48	6	90
50-54	6 000	56	7	97
55-65	3 000	23	3	100
Total	90 000	52	100	

A : As note A on Table A12 but the standard population used here was "All Tswana in South Africa" and the relevant female/child ratios were ,13 ,10 ,08 ,07 ,06 ,05 ,04 ,04 ,05 for the age cohorts 15-19 through to 55-65.

Note that 98 per cent of the Tswana enumerated as resident in the Homeland Rural areas in the 1970 census were resident in the rural areas of Bophutatswana.

TABLE A16  $\chi^2$  TESTS ON TABLE 4.9 TESTING THE NULL HYPOTHESIS THAT THERE IS NO SIGNIFICANT DIFFERENCE BETWEEN JOB PATTERNS OF MIGRANTS FROM DIFFERENT REGIONS.

	Transkei	Ciskei	KwaZulu	Bophut- atswana	Lebowa	Foreign	All Republican Africans
Transkei		58,51	189,02	484,74	189,02	55,36	285,58
Ciskei	58,51		62,24	153,58	62,24	398,05	77,77
KwaZulu	189,02	62,24		147,57		6304,77	93,97
Bophut- atswana	484,74	153,58	147,57		147,57	500,33	39,68
Lebowa	189,02	62,24		147,57		6304,77	93,97
Foreign	55,36	398,05	6304,77	500,33	6304,77		868,15
All Repub- lican Africans	285,58	77,77	93,97	39,68	93,97	868,15	

$\chi^2$ , 01 9 df. = 20,090

$\chi^2$  TESTS ON THE DISTRIBUTION BETWEEN HIGH AND LOW WAGE SECTORS

Transkei		21,0	16,51	19,05	16,51	21,00	23,05
Ciskei	21,0		,35	,04	,35	70,59	,04
KwaZulu	16,51	,35		,16		60,94	,64
Bophut- atswana	19,05	,04	,16		,16	67,24	,16
Lebowa	16,51	,35		,16		60,94	,64
Foreign	21,00	70,59	60,94	67,24	60,94		225,76
All Repub- lican Africans	23,05	,04	,64	,16	,64	225,76	

$\chi^2$  .01 1 df. 6,635

$\chi^2$  .05 1 df. 3,841

TABLE A17 AN ESTIMATE OF THE SAVING IN SOCIAL INVESTMENT IN HOUSING THAT HAS RESULTED FROM THE PERPETUATION OF THE MIGRATORY LABOUR SYSTEM.

Year	Cost of Housing		Marginal Difference	Number of new Migrants	Cost of Housing New Migrants		Difference due to Single Migration
	Single Quarters	Married Quarters			Single	Family	
				E	R million		R million
1936	50 A	200 A	150	476 000	23 800	95 200	71 400
1946	240 B	960 B	720	61 000	14 640	58 560	43 920
1960	250 C	1 100 C	1 150	350 000	122 500	525 000	402 500
1970	500 D	2 000 D	1 500	408 000	204 000	816 000	612 000

A : In 1936 the average family rent paid by a sample of 170 households in Durban not housed in barracks was 4 shillings and 5 pence. If this is compounded at 5 per cent for 20 years it yields a present value of R189 and if compounded over 25 years - R214. R200 was therefore assumed to be a reasonable estimate. Single quarters were taken as  $\frac{1}{4}$  of married housing. Since the costs per bed in the hostels built in Durban in 1930 were R52 for the Bell Street Hostel, and R18 for the Dalton Road hostel, the assumption of R50 will be of the right order of magnitude. The data on costs were obtained from "The Durban Housing Survey", Department of Economics, University of Natal; University of Natal Press, 1952. [207]

- B : The average cost of providing a bed in the S.J. Smith Hostel built in Durban in 1949 has been taken as representative of the cost of providing single accommodation for migrants in 1946. Family cost housing has been estimated on the basis of the cost of a dwelling built in Chesterville in Durban over the period 1940-1946. The disparity in the dates will probably bias the estimate downwards. Data from the Durban Housing Survey quoted in A above p.337 and 334. [207]
- C : Has been estimated from the average cost of erecting a house in Meadowlands in 1960. The cost of the single quarters has been taken as approximately the same as 1946. Data from Native Resettlement Board Annual Report 1960/61. RP131/1962. Government Printer, Pretoria, 1961. [264]
- D : Estimate of the cost of a house in an African Township in 1975. Made by word of mouth by a township official and quoted in "From Shantytown to Township" Maasdorp and Pillay [123] Cost of single accommodation has been taken as twenty five per cent of the cost of family accommodation.
- E : The increase in rural migrants estimated from data in Table 4. For the purposes of this estimate it has been assumed that migration commenced in 1936.

TABLE A18    ESTIMATE OF THE LOSS OF PRODUCTIVITY IN THE MIGRANT  
LABOUR FORCE THAT COULD BE COMPENSATED BY THE  
INCREASED OUTPUT THAT HAS RESULTED FROM THE TRANSFER  
OF CAPITAL FROM SOCIAL CAPITAL TO PRODUCTIVE CAPITAL.

Gross Domestic Product in 1970 at 1973	<u>R 9212 million</u>
Gross Domestic Product attributable to migrants on the assumption that they are equally productive ,43 per cent of G.D.P. = $\frac{\text{migrant labour force} \times \text{G.D.P.}}{\text{total Bantu male labour force}}$	R 3961 million
<u>Less</u> Output generated from savings on housing from Table 4.9	<u>R 1117 million</u>
Gross Domestic Product generated by migrants whose lower productivity offsets the savings in housing	<u>R2844 million</u>
Percentage reduction in productivity of the migrant labour force that exactly offsets the gain from housing [1,117,000 ÷ 3,961,000]	<u>28 per cent</u>

Source: South African Statistics 1974 - Department of  
Statistics, Government Printer, Pretoria, 1975. [249]

A P P E N D I X    B

THE BASIS FOR THE ESTIMATES OF MIGRATION  
FROM KWAZULU FOR THE PERIOD 1936-1970

APPENDIX B

THE BASIS FOR THE ESTIMATES OF MIGRATION

FROM KWAZULU FOR THE PERIOD 1936-1970

The basic method utilised to estimate migrants from any given population was the same as that outlined in Appendix A. However, due to the lack of available census data covering the area required for 1960, 1946 and 1936, as the census was then taken in terms of Natal rural areas rather than KwaZulu rural areas or Homeland rural areas, certain other adjustments have had to be made to obtain time series data for KwaZulu's rural areas on a comparable basis. These adjustments are outlined in the following sections.

Migration from KwaZulu Rural Areas in 1970

1. It was assumed that all Zulu migrants from Homeland rural areas were in fact migrants from KwaZulu rural areas. According to the 1970 census 96 per cent of all Zulu males resident in Homeland rural areas were in fact resident in KwaZulu rural areas. (Calculated from data in Report O2-02-02, pp. 58-59.) This being so, the use of the population 'Zulus in Homeland rural areas' in Report O2-02-02 seems a reasonable surrogate for Zulus in KwaZulu rural areas and one that is unlikely to compound the calculation errors unduly.
2. Having obtained a surrogate population for 'Rural Homeland Zulus', migrants from the areas were estimated using the basis outlined in Appendix A, making use of Sadie's estimated masculinity rates and the ratio of children 0-14 years to the women in the age cohorts that existed in the population 'All Zulus in South Africa', which were

calculated from the 1970 population census data.

3. Detailed estimates of the number of male and female migrants from the area on the 1970 census data are given in Tables Bl.1 and Bl.2 respectively which are found at the end of this Appendix.

Migration from KwaZulu Rural Areas in 1960, 1946 and 1936

1. 1960 posed an additional estimation problem, as indeed did all the estimates prior to that for 1970, since the census data pertaining to the KwaZulu rural areas was not given separately but was included in the data for Natal rural areas. Consequently, it became necessary to obtain a basis for dividing the population into those resident in the areas that were later incorporated into KwaZulu and those resident in Natal proper. According to the 1970 population census, 76 per cent of Africans living in rural areas in Natal were in fact resident in KwaZulu rural areas. It was felt, however, that the use of this percentage for the earlier periods would be incorrect since there were substantial population movements in these areas during the period 1960-1970 as the 'Black Spots' removals took place. The growth of rural townships in KwaZulu over the period 1960-1970 was substantial and accounted for nearly 3 per cent of the 76 per cent referred to earlier. It was, therefore, decided to reduce the percentage from 76 per cent to 72 per cent for the years 1960, 1946 and 1936. All population estimates for the rural areas now KwaZulu for 1960, 1946 and 1936 have, therefore, been obtained by taking 72 per cent of the populations resident in the Natal rural areas on those dates as being resident in the areas now KwaZulu rural areas.

2. As far as the estimates of the migrants are concerned, yet another complication arises once there is no reason to assume that the propensity to migrate is the same from the Natal rural areas as it is from KwaZulu. Estimates of Zulu migrants from all rural areas in South Africa were made for 1970 and are presented in Table B5 and Table B6. From these estimates the percentage of all Zulu migrants from rural areas that were from Homeland rural areas for 1970 by age cohort was obtained. Following on from this for the earlier estimates for KwaZulu, it was assumed that these percentages would remain stable through time. In other words, it was assumed that the relative propensities to migrate in the age groups in the Homelands and in the non-Homeland areas would remain stable relative to one another although the absolute magnitudes could vary. This is not an ideal surrogate but in the absence of any further information was the only one available for the estimation.

3. Detailed estimates of the number of migrants from the KwaZulu rural areas for 1960, 1946 and 1936 by age cohort are presented in the following tables B2.1, B2.2, B3.1, B3.2, B4.1 and B4.2.

4. The age cohort estimates for the female migrants for these periods do not seem to be reliable as they exhibit inconsistencies between age cohorts through time. This is probably due to two factors: firstly, women are notoriously poor at revealing their ages accurately on census returns! Secondly, in the early years of census taking in South Africa the rural counts were not as accurate as they should have been with respect to the number of women in the rural areas. Sadie [176].

TABLE B1.1. AN ESTIMATE OF THE NUMBER OF ZULU MALE MIGRANTS FROM THE HOMELAND RURAL AREAS FOR 1970

Age Cohort	Female Child Ratio	Male Female Ratio	Male Population		Male Migrants from the Area
			Estimated	Actual	
	A	B	C	D	E
15-19	0,13	1,00	124 000	82 000	42 000
20-24	0,10	0,99	94 000	38 000	56 000
25-29	0,09	0,98	84 000	28 000	56 000
30-34	0,08	0,98	75 000	24 000	50 000
35-39	0,06	0,98	56 000	23 000	33 000
40-44	0,06	1,00	57 000	22 000	35 000
45-49	0,04	0,98	37 000	22 000	16 000
50-54	0,04	0,95	36 000	19 000	17 000
55-65	0,05	0,89	42 000	30 000	12 000
Total			605 000		317 000

A : Ratio of children in the age cohort 0-14 in the standard population which in this case was the population 'All Zulus in South Africa' estimated from data in Table 1 in the 1970 Population Census Report 02-02-02, Department of Statistics, Pretoria, 1973.

B : Masculinity ratios estimated from data contained in J.L. Sadie, Projections of the South African Population, 1970-2020, Industrial Development Corporation, Johannesburg. [173]

C : Estimated by the following procedure:

$$\frac{\text{number of children (Zulu)}}{\text{0-14 years in the Homeland}} \times \frac{\text{female/child ratio}}{\text{ratio}} \times \frac{\text{masculinity ratio}}{\text{ratio}}$$

D : Actual number of males in the cohort in the Homeland rural areas on the census date in 1970 as per report 02-02-02 above. [260]

E : C - D.

TABLE B1.2      ESTIMATE OF THE NUMBER OF ZULU FEMALE MIGRANTS  
FROM THE RURAL AREAS OF THE BANTU HOMELANDS FOR 1970

Age Cohort	Female Child Ratio	Female Population		Female Migrants from Area
		Estimated	Actual	
	A	C	D	E
15-19	0,13	124 000	116 000	8 000
20-24	0,10	95 000	86 000	9 000
25-29	0,09	86 000	73 000	13 000
30-34	0,08	76 000	64 000	12 000
35-39	0,06	57 000	55 000	2 000
40-44	0,06	57 000	48 000	9 000
45-49	0,04	38 000	39 000	-
50-54	0,04	38 000	35 000	-
55-65	0,05	48 000	50 000	-
Total		619 000		53 000

A : As in A in Table B1.1.

C : Estimated by the following procedure:

children 0-14 in area x female/child ratio

estimated from data in Report 02-02-02 of the Department of Statistics, Pretoria, 1973. [260]

D : Actual females in the area on the census date in 1970. Report 02-02-02 above. [260]

E : C - D.

TABLE B2.1

ESTIMATE OF THE NUMBER OF MALE MIGRANTS FROM THE HOMELAND RURAL AREAS IN 1960  
FOR KWAZULU

Age Cohort	Female Child Ratio	Male Female Ratio	Estimated Population in Cohort Males	Actual Males in Cohort in Natal Rural Areas	Male Migrants from Natal Rural Areas	Percentage that are in Homeland	Estimate of Number of Migrants from Homeland Rural Areas
	A	B	C	D	E	F	G
15-19	0,12	1,00	98 000	82 000	16 000	89	14 000
20-24	0,11	0,99	89 000	50 000	39 000	86	34 000
25-29	0,09	0,98	72 000	44 000	28 000	87	24 000
30-34	0,08	0,98	64 000	35 000	29 000	89	26 000
35-39	0,07	0,98	56 000	35 000	21 000	92	19 000
40-44	0,06	1,00	49 000	32 000	17 000	90	15 000
45-49	0,04	0,98	32 000	29 000	3 000	100	3 000
50-54	0,04	0,95	31 000	25 000	6 000	89	5 000
55-65	0,05	0,89	41 000	36 000	5 000	86	4 000
Total			532 000		164 000	89	144 000

A : Female/child ratio of standard population taken here to be the population 'All Africans in South Africa' and estimated from the data in the 1960 census, Vol. 7 No. 1, Bureau of Statistics, Pretoria, 1968. [258]

B : Masculinity Ratios from Sadie, Projections of the South African Population 1970-2020, Industrial Development Corporation, Johannesburg. [174]

/...

TABLE B2.1 (CONTD.)

C : Children 14 years and under in Natal rural areas estimated from the 1960 census Vol. 7 No. 1 were 820 583. Males were estimated by applying the ratio in column A to the children under 14 years and then applying the relevant masculinity ratio to the result.

D : Actual males in Natal rural areas from the 1960 Population Census, Vol. 7 No. 1, Bureau of Statistics, Pretoria, 1968. [258]

E : C - D.

F : From column H in Table B6. This means that these estimates have been made on the assumption that the ratio of male migrants from KwaZulu rural areas to male migrants from all Natal rural areas that existed in 1970 has been assumed to hold constant back through time.

G : E x F.

TABLE B2.2

## ESTIMATE OF THE NUMBER OF FEMALE MIGRANTS FROM THE RURAL AREAS OF KWAZULU FOR 1960

Age Group	Female Child Ratio	Estimated Female Population	Actual Female Population	Migrants from Cohort	Percentage in Homeland	Migrants from Homeland Rural Areas
	A	C	D	E	F	G
15-19	0,12	98 000	96 000	2 000	80	1 500
20-24	0,11	90 000	81 000	9 000	82	7 500
25-29	0,09	74 000	70 000	4 000	62	2 500
30-34	0,08	66 000	58 000	8 000	67	5 500
35-39	0,07	57 000	51 000	6 000	40	2 500
40-44	0,06	49 000	46 000	3 000	64	2 000
45-49	0,04	34 000	34 000	-	-	-
50-54	0,04	33 000	33 000	-	-	-
55-65	0,05	46 000	46 000	-	-	-
Total				32 000	64	21 500

A : As in Table C2.1.

C : Number of children 14 years and under in the areas on the census date in 1960, namely 820 583 multiplied by the ratio in column A.

D : Female population in age cohort in the Natal rural areas as per the 1960 Population Census, Vol. 7 No. 1, Bureau of Statistics, Pretoria, 1968. [258]

/...

TABLE B2.2 (CONTD.)

E : C - D.

F : From Table B6, column G this assumes that the ratio of female homeland migrants to female migrants from the other Natal rural areas that existed in 1970 also held in 1960.

G : Estimates have been adjusted to the nearest 500.

TABLE B3.1      ESTIMATE OF THE NUMBER OF MALE MIGRANTS FROM THE AREAS THAT ARE NOW RURAL KWAZULU  
FOR 1946

Age Cohort	Female Child Ratio	Male Female Ratio	Estimated Population in Cohort Males	Actual Males in Cohort in Natal Rural Areas	Male Migrants from Natal Rural Areas	Percentage from KwaZulu	Estimate of Male Migrants from KwaZulu Rural Areas
	A	B	C.H	D	E	F	G
15-19	0,13	1,00	86 000	74 000	12 000	89	11 000
20-24	0,11	0,99	72 000	43 000	29 000	86	25 000
25-29	0,10	0,98	65 000	39 000	26 000	87	23 000
30-34	0,09	0,98	58 000	33 000	25 000	89	22 000
35-39	0,07	0,98	45 000	31 000	14 000	92	13 000
40-44	0,06	1,00	44 000	31 000	13 000	90	12 000
45-49	0,05	0,98	34 000	28 000	6 000	100	6 000
50-54	0,04	0,95	27 000	21 000	6 000	89	5 000
55-65	0,05	0,89	35 000	30 000	5 000	86	4 000
Total			466 000		136 000	89	121 000

A : Female/child ratio in the standard population taken here to be the population 'All Africans in South Africa' and calculated from data in Table 23 of Population Census, 7th May 1946, Vol. II, Ages. UG.60/1950. [257]

B : Standard male/female ratios estimated by Sadie in Projections of the South African Population 1970-2020, Industrial Development Corporation, Johannesburg. [174]

/...

TABLE B3.1 (CONTD.)

C : Males estimated by applying the ratio in A to the total number of African children in the Natal rural areas that were 14 years or under on the census date, namely 653 034 which was adjusted upwards by 10 000 to 663 034 to allow for an obvious underenumeration in the age group 5-9 years in the census. See note H below. Once the estimated number of females had been obtained the masculinity ratio in column B was applied to obtain column C.

$$C = \begin{array}{l} \text{adjusted children} \\ \text{0-14 years} \end{array} \times \begin{array}{l} \text{female child ratio} \\ \text{in age cohort} \end{array} \times \begin{array}{l} \text{masculinity ratio} \\ \text{in cohort} \end{array} \times \begin{array}{l} \text{estimated male popula-} \\ \text{tion in cohort} \end{array}$$

D : Actual from Census 1946, Table 23, UG 60/1950. [257]

E : C - D.

F : From Table B6 , Column H.

G : F x E.

H : The growth ratio of children in the three age cohorts in the two census 1936 and 1946 are given below:

0- 4 years	4,3 per cent
5- 9 years	-
10-14 years	4,0 per cent

The inconsistency in the age 5-9 years indicates that this category has probably been undercounted in the 1946 census. Consequently the number of children in this category was adjusted to make the growth rate 4 per cent as well, which increased the number of children in the age category from 221 672 to 231 6 00, an increase of 4 per cent.

**TABLE B3.2** ESTIMATE OF THE NUMBER OF FEMALE MIGRANTS FROM THE RURAL AREAS OF NATAL THAT ARE NOW THE RURAL AREAS OF KWAZULU FOR 1946

Age Group	Female Child Ratio	Female Population		Migrants from Area	Percentage in Homelands	Migrants from Homelands Rural Areas
		Estimated	Actual			
	A	C	D	E	F	G. H
15-19	0,13	86 000	85 000	1 000	80	1 000
20-24	0,11	73 000	67 000	6 000	82	5 000
25-29	0,10	66 000	57 000	9 000	62	5 500
30-34	0,09	60 000	50 000	10 000	67	6 500
35-39	0,07	46 000	42 000	4 000	40	1 500
40-44	0,06	40 000	44 000	-	64	-
45-49	0,05	33 000	34 000	1 000	0	-
50-54	0,04	27 000	29 000	-	0	-
55-65	0,05	33 000	40 000	-	0	-
Total				22 000		19 500

A : As in Table C3.1.

C : Number of children 14 years and under in the Natal rural areas on the census date in 1946 adjusted as per note C in Table B3.1.

D : Actual women in the Natal rural areas on the census date in 1946 from Table 23, Population Census Report on Ages of the European, Coloured, Asiatic and Native Population, UG 60/1950. [257]

E : C - D.

F : From Table C6, column G on the assumption that the percentage remained constant between 1945 and 1970.

TABLE B4.1

ESTIMATE OF THE NUMBER OF MALE MIGRANTS FROM THE RURAL AREAS OF NATAL THAT ARE NOW  
KWAZULU FOR 1936

Age Cohort	Female Child Ratio	Male Female Ratio	Estimated Male Population	Actual Male Population	Male Migrants from Natal Rural Areas	Percentage Estimated to be in Homeland	Estimate of Male Migrants from KwaZulu Rural Areas
	A	B	C	D	E	F	G
15-19	0,12	1,00	76 000	68 000	8 000	89	7 000
20-24	0, 11	0,99	69 000	40 000	29 000	86	25 000
25-29	0,10	0,98	62 000	37 000	25 000	87	22 000
30-34	0,09	0,98	56 000	34 000	22 000	89	20 000
35-39	0,07	0,98	44 000	33 000	11 000	92	10 000
40-44	0,06	1,00	40 000	29 000	11 000	90	10 000
45-49	0,04	0,98	28 000	25 000	3 000	100	3 000
50-54	0,04	0,95	24 000	19 000	5 000	89	4 000
55-65	0,06	0,89	34 000	27 000	7 000	86	6 000
Total					109 000		107 000

A : Standard population here taken to be 'All Africans in South Africa'. Estimates of female child ratios made from 1936 Population estimates given in Table 23 of UG 60/1950. [257]

TABLE B4.1 (CONTD.)

- B : Masculinity ratios from Sadie, Projections of the South African Population 1970-2020, Industrial Development Corporation, Johannesburg. [174]
- C : Number of children under 14 years in the rural areas of Natal in the 1936 census, namely 635 219 children  $\times A \times B$ .
- D : From Table 23, Actual Males in Rural Areas of Natal in 1936, UG 60/1950 [257].
- E : C - D.
- F : From Table B6, i.e., assuming that the ratio of migrants from rural areas not homeland/migrants from homelands in 1970 was constant through time.
- G : E  $\times$  F.

TABLE B4.2 ESTIMATE OF THE NUMBER OF FEMALE MIGRANTS FROM THE NATAL RURAL AREAS THAT ARE NOW KWAZULU RURAL AREAS ON THE CENSUS DATE FOR 1936

Age Cohort	Female Child Ratio	Female Population		Female Migrants	Percentage from Homeland	Migrants from Homeland Rural Areas		
		Estimated	Actual			G	H	
	A	B	C	D	E	F	G	H
15-19	0,12	76 000	75 000	1 000	80		1 000	
20-24	0,11	70 000	59 000	11 000	82		9 000	
25-29	0,10	64 000	52 000	12 000	62		7 500	
30-34	0,09	57 000	54 000	3 000	67		2 000	
35-39	0,07	44 000	45 000	-	0		-	
40-44	0,06	38 000	40 000	-	0		-	
45-49	0,04	25 000	28 000	-	0		-	
50-54	0,04	25 000	26 000	-	0		-	
55-65	0,06	38 000	39 000	-	0		-	
Total				27 000	64		19 500	

A : From Table B4.1, column A.

C : Number of children 14 years and less in the Natal rural areas on the census date in 1936, namely 635 219 multiplied by the ratio in column A, UG.60/1950. [257]

D : Actual female population in Natal rural areas on the census date in 1936 from Table 23 of the 7th Census of the Population of the Union of South Africa, Vol. II, Ages, UG.60/1950. [257]

E : C - D.

F : From Table B6, column G on the assumption that the percentage remains constant.

TABLE B5

ESTIMATION OF THE NUMBER OF ZULU MIGRANTS FROM ALL RURAL AREAS IN SOUTH AFRICA  
FOR 1970

Age Cohort	Ratio of Women to Children in Cohort	Male Female Ratio	Estimated Population in Cohort		Actual Population in Cohort		Estimated Migrants from Cohort		Total Number of Migrants
			Females	Males	Females	Males	Females	Males	
	A	B	C	D	E <sub>1</sub>	E <sub>2</sub>	F	G	H
15-19	0,13	1,00	176 000	176 000	166 000	129 000	10 000	47 000	57 000
20-24	0,10	0,99	135 000	134 000	124 000	69 000	11 000	65 000	76 000
25-29	0,09	0,98	122 000	119 000	101 000	55 000	21 000	64 000	85 000
30-34	0,08	0,98	108 000	106 000	90 000	50 000	18 000	56 000	74 000
35-39	0,06	0,98	81 000	80 000	76 000	44 000	5 000	36 000	41 000
40-44	0,06	1,00	81 000	81 000	67 000	42 000	14 000	39 000	53 000
45-49	0,04	0,98	54 000	53 000	53 000	37 000	1 000	16 000	17 000
50-54	0,04	0,95	54 000	51 000	47 000	32 000	7 000	19 000	26 000
55-65	0,05	0,89	68 000	60 000	66 000	46 000	2 000	14 000	16 000
Total							89 000	356 000	445 000

A : Ratio of children 0-14 years to women in the age cohort in the standard population here taken to be the population 'All Zulus in South Africa'.

/...

TABLE B5 (CONTD.)

- B : Estimated Bantu masculinity ratios from J.L. Sadie, Projections on the South African Population 1970-2020, Industrial Development Corporation, Johannesburg.[174]
- C : Number of children 0-14 years of age in 1970 in the population 'Zulus in all rural areas in South Africa' was 1 352 500 as estimated from Table 1 in the Report 02-02-02 on the Population Census, 1970, Department of Statistics, Pretoria, 1973. This number was then multiplied by the age cohort ratios in column A to obtain column C.
- D : Is obtained by multiplying the estimated number of women in column C by the masculinity ratio for the age cohort in column B.
- E<sub>1</sub> and E<sub>2</sub> : From the 1970 Population Census, Table 1, Report 02-02-02, Department of Statistics, Pretoria, 1973. [260]
- F : Is obtained by  $C - E_1$ .
- G : Is obtained by  $D - E_2$ .
- H :  $F + G$ .

TABLE B6

ESTIMATE OF THE NUMBER OF ZULU MIGRANTS FROM RURAL AREAS THAT ARE NOT FROM  
HOMELAND RURAL AREAS FOR 1970

Age Cohort	Migrants from Rural Areas		Migrants from Homeland Rural Areas		Migrants from Rural Areas not Homelands		Percentage of Migrants from Rural Areas not from Homelands	
	Females	Males	Females	Males	Females	Males	Females	Males
	A	B	C	D	E	F	G	H
15-19	10 000	47 000	8 000	42 000	2 000	5 000	20	11
20-24	11 000	65 000	9 000	56 000	2 000	9 000	18	14
25-29	21 000	64 000	13 000	56 000	8 000	8 000	38	13
30-34	18 000	56 000	12 000	50 000	6 000	6 000	33	11
35-39	5 000	36 000	2 000	33 000	3 000	3 000	60	8
40-44	14 000	39 000	9 000	35 000	5 000	4 000	36	10
45-49	1 000	16 000	1 000	16 000	2 000	-	200	-
50-54	7 000	19 000	3 000	17 000	4 000	2 000	57	11
55-65	2 000	14 000	3 000	12 000	5 000	2 000	100	14
Total	89 000	356 000	52 000	317 000	37 000	39 000	44	11

A : From Table C5, column F.

B : From Table C5, column G.

C : From Table C1, column F.

D : From Table C1, column G.

E : A - C.

F : B - D.

G :  $\frac{E}{A}$ H :  $\frac{F}{B}$

A P P E N D I X   C

THE BASIS OF THE ESTIMATE OF THE TOTAL EARNINGS  
OF AND REMITTANCES BY MIGRANT MEN FROM KWAZULU  
RURAL AREAS FOR 1936, 1946, AND 1960-1972

APPENDIX C

THE BASIS OF THE ESTIMATE OF THE TOTAL EARNINGS  
OF AND REMITTANCES BY MIGRANT MEN FROM KWAZULU  
RURAL AREAS FOR 1936, 1946 AND 1960-1972

To obtain an adequate estimate of migrants' earnings and remittances one would ideally draw upon data obtained by a questionnaire survey of a representative random sample of out-migrant men from the KwaZulu rural areas. Unfortunately very little data of this nature exists and it was felt that none was entirely suitable to form a basis for an estimate of this nature.

In 1972 the Bureau of Market Research undertook a survey of the income and expenditure patterns of single Bantu households in Durban [210] and one estimate of the likely size of the earnings and remittances of migrants from KwaZulu was made on the basis of data included in their report and given in Table 5.7 . It was felt, however, that since the bureau's sample was restricted to Durban and also included single householders who were not migrants, an estimate of earnings based on their data was likely to be biased in an upward direction and should be used as a comparative standard rather than as a basis for the main estimates.

The estimates contained in this Appendix are therefore based on the assumption that the following relationships hold.

$$Y_M = f(M, W_H, D_H, W_L, D_L) \quad \dots\dots (1)$$

where  $Y_M$  is the total income earned by the migrants  
 $M$  is the total number of migrants from the rural areas  
 $W_H$  is the average wage in the high wage sector  
 $D_H$  is the proportion of migrants employed in the high wage sector  
 $W_L$  is the average wage in the low wage sector  
 $D_L$  is the proportion of migrants employed in the low wage sector

$D_L + D_H = 1$ , i.e., it is assumed that all the migrants are employed in one or other of the two sectors.

In order to estimate  $Y_M$  at particular moments of time, the following specific function was assumed to hold.

$$Y_{M_t} = M_t D_{H_t} W_{H_t} + M_t (1 - D_{H_t}) W_{L_t} \dots\dots (2)$$

In other words, it was assumed that the total earnings of the migrants were a function of the number of migrants from the area, the percentage distribution of the migrants between the high and the low wage sectors and the average wage rates in these two sectors.

Following on from this the remittances from the migrants were estimated from the following assumed relationship:

$$R_{M_t} = M_t D_{H_t} W_{H_t} R_{H_t} + M_t (1 - D_{H_t}) W_{L_t} R_{L_t} \dots\dots (3)$$

where  $R_{H_t}$  is the average remittance rate per migrants employed in the high wage sector, and

$R_{L_t}$  is the remittance rate from wages earned in the low wage sector.

#### The Estimation of $M_t$

$M_t$  was estimated on the basis outlined in Appendix A for the years 1936, 1946, 1960 and 1970 and the details of these calculations are contained in Tables B1.1, B2.1, B3.1 and B4.1 in Appendix B. The population used to make these estimates was the population in the rural areas now KwaZulu or a suitable surrogate for this population. The rural population was used because since many migrants move to KwaZulu urban areas and then commute to the modern sector to work and it was felt that had the estimates of  $M_t$  been based on the total population of KwaZulu, in time  $t$ , the estimate of the number of migrant workers, would have been understated.

The estimates of migrants for the years 1961 through 1969 have been obtained by compounding the number of migrants on the census date in 1960 at the annual compound growth rate of migration that existed between the estimates of migrants in 1960 and the number of migrants in 1970, namely 8.2 per cent.

#### The Estimation of $D_{H_t}$

Unfortunately insufficient data exists to allow any accurate estimation of the job distribution of migrants in 1936, 1946 and 1960 to 1969. Consequently a suitable surrogate had to be found and it was decided to use the ratio of employment of Africans in

manufacturing to the employment of Africans in mining. This ratio was chosen mainly on the grounds of its accessibility. In addition, however, it was felt that the use of employment in agriculture rather than mining as a substitute for the employment of migrants in the low wage sector would have been even more unsatisfactory since agricultural employment figures include a degree of underemployment and this underemployment was unlikely to exist to the same extent throughout the low wage sector of the modern economy. The estimates used were as follows:

1. The estimate of  $D_{H_t}$  when  $t = 1936$  was 0,28 and was based on data on employment obtained from Van der Horst [216] pp. 216 and 263.
2. The estimates of  $D_{H_t}$  where  $t = 1946$  or 1960 were obtained from employment data for 1946 and 1960 included in the Statistical Year Books for 1964 and 1972. [247] [248] and were 0,30 and 0,38 in magnitude respectively.
3. The estimate of  $D_{H_t}$  when  $t = 1970$  was based on the job distribution of the Bapedi migrants in 1970 which was obtained from data given in the Annual Report of the Department of Bantu Administration and Development [267]. No similar data for KwaZulu migrants could be obtained and it was decided to use the data on the Pedi migrants since the job distributions of the Bapedi and the Zulus in the 1970 census data did not differ significantly.<sup>(C1)</sup> It was felt therefore,

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(C1)  $\chi^2$  tests on the data on the jobs distributions of the Bapedi and the Zulus in Table 5 of Report 02-02-02 gave the following results  $\chi^2 = 6.81$  (8d.f.) which is not significant.

that it would be reasonable to assume that the job distribution amongst the migrants from the two groups would exhibit similar characteristics. The job classifications were aggregated into high and low wage sectors on the assumption that the high wage sector would comprise manufacturing, commerce and the public sector. On this basis the estimate of  $D_{H_t}$  when  $t = 1970$  was found to be 0,48.

For the years 1961 through 1969 the estimate of  $D_{H_t}$  was escalated from  $D_{H_t = 1960} = 0,38$  to  $D_{H_t = 1970} = 0,48$  at the rate of 0,01 per year.

The Magnitudes of  $W_{H_t}$  and  $W_{L_t}$

In all the estimations it was assumed that the average annual money wage paid to African men in the manufacturing sector was representative of the wage rate paid to migrants employed in the high wage sector. The estimate for 1936 was obtained from Van der Horst [216] p.263 and the subsequent data from the Statistical Year Books 1964 and 1972. [247] [248]

The low wage sector wage rate was taken to be 48 per cent of the high wage sector wage rate. The Marais Commission [265] produced certain evidence to show that the wage rate typically paid in agriculture in 1966, after adjustment for payments in kind, was R216 which was approximately 43 per cent of the average wage paid in the manufacturing sector over the same period of time. Since wage rates in agriculture are likely to be lower than those in the other industries included in the low wage sector such as mining and the

service sector in general, possibly apart from domestic service, this percentage was increased by 5 per cent from 43 per cent to 48 per cent for the purpose of these estimations.

The Estimate of  $R_{H_t}$  and  $R_{L_t}$

Once again the accuracy of the estimate of  $R_{H_t}$  was hampered by a lack of sufficient statistical data on which to base such an estimate. There is not a great deal of data on remittance rates by migrants in South Africa and of what there is, very little differentiates between the behaviour of high wage earning migrants and those in the low wage sector. In fact, Leistner [112] argues that the length of the stay in the urban areas is probably more significant in determining the remittance rate than the income level, since he found that recent arrivals remitted on average 58 per cent of their cash wage, whereas those who had been in Pretoria long enough to regard it as their home remitted on average only 10 per cent.

Similarly, the Bureau of Market Research data [210] also shows no really significant relationship between income levels and remittance rates, taken here as 'payments by single Bantu Households in support of relatives'. In the absence of any conclusive data, magnitudes of 0,2 and 0,17 were assumed for the variables  $R_{H_t}$  and  $R_{L_t}$  and it was further assumed that these magnitudes would remain constant over the thirty-four year period.

Making estimates that are based on assumptions of this nature is not an ideal practice, but it was felt that it was unavoidable in

this case. The data in Table C1 shows the magnitude of these assumptions in terms of the overall picture of remittance rates that one can obtain from the statistical data that is available. Four surveys are included in Table C1 and, from the evidence that they present, it would seem that the assumed remittance rates for the purpose of this estimate are on the low side.

Despite the apparent downward bias of these estimates vis-à-vis the survey data, the assumed rates do not differ significantly from the average remittance rates that are used by the Department of Statistics in their estimates of the National Income of KwaZulu [250] nor from the magnitudes used by Lombard, [121] Leistner, [112] and Van der Merwe. [219]

It was felt in selecting these magnitudes that, since a further estimate was to be made on the basis of the Bureau of Market Research data which was likely to be biased upwards, this estimate should, if anything, be biased towards the low side so that the two taken together would give some idea of the magnitude of the range within which an accurate estimate of earnings and remittances was likely to lie.

TABLE C1                      A COMPARISON OF THE VARIOUS ESTIMATES OF  
REMITTANCE RATES OF MIGRANT WORKERS

Year	Source of Estimate	Remittance Rate			Basis of Estimate
		Average %	High Wage %	Low Wage %	
1946	University of Natal, Department of Economics [206]	29	-	-	Survey
1962	Leistner Pretoria [112]	19	17	58	Survey
1962	- do - Foreign [113] (A)	18	-	23	Assumption
1966	Estimates from data of P.J. van der Merwe [219]	19	-	-	National Accounts Estimates
1968	Lombard [121]	20	-	-	Assumption
1972	Bureau of Market Research [212]	23	24	18	Survey
1972	Bureau of Market Research adjusted for commodity transfer [210]	31	-	-	Table 5.8
1973	McDowell [129]	66	-	-	Survey
1974	Department of Statistics [250]	19	-	-	Assumption
1975	Present estimate	19	20	17	Assumption

A : Leistner [113] p. 45 gives a similar table cites different studies which give average cash remittance rates for foreign migrants ranging from 8 per cent to 44 per cent with a mean rate of 27 per cent.

The Overall Magnitudes Assumed for the Variables

Table C2 gives a summary of the magnitudes that were assigned to the variables in the different time periods.

TABLE C2      SUMMARY OF THE MAGNITUDES ASSIGNED TO THE VARIABLES  
IN THE INCOME AND REMITTANCE ESTIMATES

Year	$M_t$	$D_{H_t}$	$W_{H_t}$	$W_{L_t}$	$R_{H_t}$	$R_{L_t}$
t = 1936	107 000	0,28	88	42	0,20	0,17
t = 1946	120 000	0,30	198	95	0,20	0,17
t = 1960	144 000	0,38	346	166	0,20	0,17
t = 1961	155 000	0,39	371	178	0,20	0,17
t = 1962	167 000	0,40	395	190	0,20	0,17
t = 1963	180 000	0,41	397	191	0,20	0,17
t = 1964	195 000	0,42	410	197	0,20	0,17
t = 1965	211 000	0,43	446	214	0,20	0,17
t = 1966	229 000	0,44	496	238	0,20	0,17
t = 1967	248 000	0,45	508	244	0,20	0,17
t = 1968	269 000	0,46	544	261	0,20	0,17
t = 1969	291 000	0,47	550	264	0,20	0,17
t = 1970	317 000	0,48	572	275	0,20	0,17
t = 1971	341 000	0,48	627	301	0,20	0,17
t = 1972	366 000	0,48	685	329	0,20	0,17

Table C3 gives details of the estimates of the total earnings of and remittances by migrant men from the rural areas that are now KwaZulu rural areas for the years 1936, 1946, 1960-1972. These magnitudes are based on the estimates of the number of migrants from those areas in the relevant years, which are taken from Appendix B, and on the magnitudes of the variables  $D_{H_t}$ ,  $W_{H_t}$ ,  $W_{L_t}$ ,  $R_{H_t}$  and  $R_{L_t}$  contained in Table C2.

TABLE C.3

ESTIMATES OF EARNINGS AND REMITTANCES OF MALE MIGRANTS FROM KWAZULU RURAL AREAS IN 1936,  
1946, 1960-1970

Year	Modern, High Wage Sector				Low Wage Sector				All Migrants	
	Wage Per Man	Number of Migrants in Sector	Migrants		Wage Per Man	Number of Migrants	Migrants		Total Earnings	Remittances
			Total Earnings	Remittances to KwaZulu			Total Earnings	Remittances		
	A	B	C	D	E	F	G	H	I	J
1936	88	30 000	2 636 000	527 000	42	77 000	3 234 000	550 000	5 879 000	1 077 000
1946	198	36 000	7 128 000	1 425 000	95	85 000	8 001 000	1 373 000	15 129 000	2 798 000
1960	346	55 000	19 030 000	3 806 000	166	89 000	14 774 000	2 512 000	33 804 000	6 318 000
1961	371	60 000	22 260 000	4 452 000	178	95 000	16 910 000	2 875 000	39 170 000	7 327 000
1962	395	66 000	26 070 000	5 214 000	190	101 000	19 190 000	3 262 000	45 260 000	8 476 000
1963	397	73 000	28 981 000	5 796 000	191	107 000	20 437 000	3 475 000	49 418 000	9 271 000
1964	410	81 000	33 210 000	6 642 000	197	114 000	22 458 000	3 818 000	55 668 000	10 460 000
1965	446	90 000	44 014 000	8 028 000	214	121 000	25 894 000	4 402 000	69 908 000	12 430 000
1966	496	100 000	49 600 000	9 920 000	238	129 000	30 702 000	5 219 000	80 302 000	15 139 000
1967	508	111 000	56 388 000	11 278 000	244	137 000	33 428 000	5 683 000	89 816 000	16 961 000
1968	544	123 000	66 912 000	13 382 000	261	146 000	38 106 000	6 478 000	105 018 000	19 860 000
1969	550	136 000	74 800 000	14 960 000	264	155 000	40 920 000	6 956 000	115 720 000	21 916 000
1970	572	152 000	86 944 000	17 389 000	275	165 000	45 375 000	7 714 000	132 319 000	25 103 000
1971	627	165 000	103 455 000	20 691 000	301	176 000	52 976 000	9 006 000	156 431 000	29 697 000
1972	685	179 000	122 615 000	24 523 000	329	187 000	61 523 000	10 459 000	184 138 000	34 982 000

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TABLE C.3 (CONTD.)

- A : Wages per man in the high wage sector are taken as the equivalent of the average wage per man in the manufacturing sector. 1936 wages in manufacturing were taken from S.T. van der Horst, Native Labour in South Africa, [216] p. 263. Wages for 1946 and 1960-1970 were taken from Statistical Year Book 1964 [247] and South African Statistics 1972 [248] and were obtained by dividing the total wage payments to Bantu males for the year by the number of Bantu men employed in manufacturing in the year.
- B : The total number of male migrants in 1936, 1946, 1960 and 1970 were taken from Tables B1.1, B2.1, B3.1 and B4.1 in Appendix B. These migrants were then allocated between the high and the low wage sectors on the following basis:
- (1) 1936, 1946 and 1960 on the basis of the ratio of Bantu employed in mining to those employed in manufacturing. These ratios were estimated from data in the Statistical Year Books 1964 and 1966 for the years 1946, 1960 and 1970 and were 28 per cent, 30 per cent and 38 per cent respectively. For the years 1960-1970 the ratio was escalated from 38 to 48 per cent at 1 per cent per annum. The 1936 ratio was obtained from van der Horst [216]
  - (2) 1970 migrants were allocated between the high and low wage sectors on the basis of the job allocation of the Pedi migrants taken from the Annual Report of the Department of Bantu Administration and Development, 1971. See note C on Table 4.9 for further justification of the use of the Bapedi as a surrogate for the Zulu migrants in 1970.
  - (3) Estimates of migration and of the distribution of migrants between the high and low wage sectors for the years 1961-1969 and 1971 and 1972 have been obtained by escalating the migrants in the high wage sector from 1960-1969 at the rate of 10,7 per cent and similarly for 1972 and 1973. 1970 from Table B1.1 in the Appendix B. Low wage sector migrants were escalated at the annual rate of 6,37 per cent, the overall compound rates of growth of the migrants in the two sectors between the census dates 1960 and 1970 being 10,7 and 6,37 respectively.
- C :  $A \times B$ .
- D :  $C \times 20$  per cent. Other estimates of the percentage earnings remitted by migrants Leistner [113] 18 per cent plus kind for foreign bantu migrants. Leistner [111] 19,3 per cent of the mean wage. University of Natal [206] 20 per cent of the mean wage. Williams [229] 19 per cent. Lombard [121] 20 per cent.

TABLE C.3(CONTD.)

E : Taken as being 48 per cent of the wage in the high wage sectors. The 2nd Report of the Commission of Enquiry into Agriculture (Marais Commission) gave data for agricultural wages for 1960 and 1966 which were 43 per cent of the wage in manufacturing. This percentage was increased to 48 per cent on the grounds that wages in agriculture are likely to be the lowest of the low wage sector wage rates. The relationship was then assumed to have held constant over the period 1936-1970.

F : The total number of migrants in the year less those in the high wage sector.

G :  $F \times E$ .

H :  $F \times E \times 17$  per cent. Leistner [113] gives estimates of remittances for foreign bantu in agriculture which are of the order of 17 per cent of earnings and the data considered by Williams [229] and P.J. van der Merwe [219] also substantiates a remittance rate of 17 per cent from the low wage sector.

I :  $C + G$ .

J :  $D + H$ .

A P P E N D I X    D

OTHER SUPPORTING TABLES  
FOR CHAPTER ONE.

TABLE D1

INDICATORS OF INVESTMENT IN THE RURAL AREAS OF KWAZULU<sup>(1)</sup>

Year	Cattle Units (000)	Woolled Sheep (000)	Ploughs	Cultivators	Wagons and Trolleys	Children in School	Migrants' Remittances R'000
	A	A	B	B	B	A	C
1936	3 628	3 023	47 834	-	1 588	351 908	1 077
1946	3 695	3 100	62 995	7 181	1 708	648 540	2 798
1960	3 767	3 046	74 728	14 454	2 014	1 587 084	6 318
1970	3 391	3 490	61 978	12 893	1 130	2 748 650	25 103
Rate of growth % per year compound	-0,2	0,43	0,76	2,47	-1,00	6,22	9,70

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(1) Data has been obtained from the following sources: 1936 and 1946 - The Handbook of Agricultural Statistics [251] ; 1960 and 1970 - South African Statistics 1974 [249]; All years are three year averages apart from 1970 which is a two year average. Children in school were taken from Official Year Book 1948 and South African Statistics 1974. [246] [249].

TABLE D1 (CONTD.)

- A : Data applies to all Bantu Reserve areas in the Republic of South Africa and so will only be a reasonable surrogate for the rural areas of KwaZulu as long as the patterns in the different reserve areas do not show marked deviations from one another.
- B : Natal Bantu Reserve areas.
- C : From Table 3.6, column 3.

TABLE D.2                      OUTPUT OF MAIZE IN AFRICAN RESERVE AREAS OVER  
THE PERIOD 1936-1970

Year	Maize Output		Maize Output per Head
	Tons	Index	Index
	A		
1936	214 800	100	100
1946	277 500	129	110
1960	270 571	126	92
1970	328 460	153	83
Growth rate per annum %		1,26	-0,56

A : Maize output in Bantu Reserve Areas, 1970 and 1960 from South African Statistics 1974 [250] 1946 and 1936 from The Handbook of Agricultural Statistics [251].

TABLE D.3

AN ESTIMATE OF THE OPPORTUNITY COST OF THE MIGRANT LABOUR SYSTEM TO KWAZULU IN TERMS OF LOST EMPLOYMENT OPPORTUNITIES OVER THE PERIOD 1936-1970.

Year	Annual Migrants' Earnings R'000	Ratio of Wages to Profits	Profits Generated by Migrants R'000	Annual Savings out of Profits R'000	Cost per Job	Employment Opportunities Created during the Year	Employment created over this period in Modern Sector
	A	B	C	D	E	F	G
1936-1946	5 879	1,03	6 055	1 211	948	1 277	24 064
1946-1960	15 129	0,72	10 893	2 178	1 568	1 389	26 674
1960-1965	33 804	0,79	26 705	5 341	2 849	1 875	15 256
1965-1970	132 319	0,76	100 562	20 112	3 500	5 746	46 818
Total							112 812

A : From Table 5.6.

B : Taken from South African Statistics 1974 [249] , p. 21.4.

C :  $A \times B$ .

D :  $C \times 0,2$  on the assumption that the average propensity to save out of profits is 20 per cent.

E : 1970 estimated cost of job creation in KwaZulu explained in Chapter 4, footnote (20) deflated by the wholesale price index from South African Statistics 1974 [249] , p.8.4.

F :  $D \div E$ .

G : F compounded as an annuity on the assumption that in the first year the jobs become available at the end of the year and thereafter on a monthly basis. The rate of interest used was 20 per cent to allow for an accelerator link between demand created by employment and the further creation of employment.

APPENDIX E

A Paper on Economic Growth and Social Change  
Presented to a Workshop on Economic Growth  
and Change Held at the University of Natal in  
July 1974-

'ECONOMIC DEVELOPMENT AND SOCIAL AND POLITICAL  
CHANGE - A SUGGESTED THEORETICAL FRAMEWORK'

APPENDIX E

Alternative Economic Development Paths  
and Social and Political Change<sup>(1)</sup>

E.1 Introduction

This paper makes a preliminary attempt to explore the relationships between economic growth and social and political change. In the first part of the paper existing, well known development models are outlined and the level of social and political changes implied by the models is discussed. It is then argued that the conscious introduction of social change into an economic growth environment can in fact provide a link between these models, at present treated as direct alternatives. Finally an attempt is made to provide a framework within which it may be possible to analyse the South African development path on an empirical basis.

E.2 Economic Development Models and Social and Political Change

The basic axiom on which the arguments developed in this paper rest is *that although political and social change may be*

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(1) My thanks are due to my colleague Michael McGrath for the comments that he made on this paper, and to the post graduate students, on whom I initially sounded out the ideas presented here. I am, of course, solely responsible for any errors that may remain and for the opinions expressed in the paper.

*independent of economic growth, sustained economic growth is not independent of social and political change.*

The successful attainment of any particular growth path is dependent upon the existence of a social and political climate that is favourable for that path. Furthermore, continued economic growth implies changes in the balance of economic forces in the economy.<sup>(2)</sup> Consequently it is argued that any particular growth path will only be maintained if the social and political structures evolve sufficiently to satisfy the demands of the groups of individuals that are gaining increased economic power as a result of the development process. If such change is not forthcoming then the economic activity of these groups can be sufficient to cause the economy to deviate to another growth path. The nature of the changes and the rate at which they are required to take place, if the existing pattern of economic growth is to be maintained, is a function of the nature of growth path itself, and consequently differs with different economic growth patterns and with different rates of growth.

#### E2.1 The Nature of Economic Growth Paths

Since the purpose of this paper is to attempt to provide a theoretical framework within which one might successfully analyse

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(2) Apart from the theoretical bench mark namely the path of steady state growth with output-augmenting technical progress.

South Africa's economic development, the growth alternatives discussed in this section are limited to those applicable to a competitive market economy. This economy comprises two classes; capitalists, defined for the purpose of this argument to be those individuals who make the necessary decisions as to the level and nature of the investment undertaken in the economy, and workers, who participate in the process of production, but who have no control over investment decisions. The savings necessary to finance the desired level of investment are the result of decisions of either or both capitalists and workers.<sup>(3)</sup>

Traditionally development paths can be classified broadly in terms of whether they are dealing with an economy enjoying full employment throughout the development phase, or whether development commences with unemployed, or surplus labour.

These two classifications can then be further sub-categorized in terms of their estimated course of future evolution, i.e. in terms of whether it is considered likely that continued development in the same mode will maintain or generate full employment or, on the other hand, increasing levels of unemployment.

The initial growth path attained in any market economy is deter-

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(3) Although the terminology used in this paper has been borrowed from the 'Cambridge Schools' approach to economic growth, the models analysed postulate behaviour suited to the Neo Classical, Labour Surplus and Marxian Development models.

mined by the relative stocks of, and the distribution of the ownership of the productive resources of the economy, together with the patterns of economic behaviour of the groups of individuals who handle these resources. The evolution of the growth path therefore, will be a function of the changes in both the distribution of assets and the economic behaviour of the major groups controlling their use.

#### E2.2 Development from Full Employment

This path might be seen as development in the ideal situation.<sup>(4)</sup> In a developing country consisting of the juxtaposition of a modern, capital-using sector and an agricultural sector dependent upon subsistence agriculture, all available labour at any one moment of time is productively employed. Development in this type of world, therefore, requires the emerging modern sector of a dual economy to compete with the traditional sector for the available labour supply. The wage rate<sup>(5)</sup> is determined by the productivity of labour and the intersectoral allocation of labour by the relative attractiveness of the employment opportunities in the two sectors.

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(4) The best known neoclassical development model is that of Dale Jorgenson. [99]

(5) All mentions of wages and profits in this paper refer to real wages and profits and not simply to their money values.

As the dual economy evolves over time the size of the labour force in the traditional sector decreases in relative terms. Development is capital intensive, rather than labour intensive, as the relative shortage of labour encourages increased specialization in both sectors from an early stage in the development process.

Throughout the development phase labour is becoming increasingly more productive and competition ensures that wage rates are rising. Conversely, as capital accumulates the productivity of capital declines, profit rates, therefore, also decline except insofar as these falls are successfully offset by technological advances. In this type of situation the benefits gained from economic development do not accrue solely to the capitalists but are shared quite rapidly with labour.

Providing the growth process does not generate changes in the behaviour patterns of the groups making the economic decisions all further growth will be at full employment levels and labour will continue to benefit on an increasing scale.

### E2.3 Development with Unemployment - the Development-Development Path<sup>(6)</sup>

In the unemployment case, in the early stages of development the

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(6) This path has been called the Development-Development Path to distinguish it from the Development Underdevelopment Path discussed in Section E2.4.

traditional sector houses more individuals than can be productively employed.<sup>(7)</sup> The modern sector can, therefore draw labour away by offering a wage that is only marginally higher than existing traditional sector living standards. Lewis [115] Fei and Ranis [52].

In this unemployment situation the initial growth phase is one that leads to increased employment rather than to increased wage rates. Labour migrates from the low wage, backward, frequently overpopulated area, to the modern, growing, labour-hungry sector. As the process gathers momentum, wage rates in the low wage sector start to increase. As migrants leave so they reduce the population pressures on existing resources, leaving more available for those who remain behind.

In the modern, high wage sector the migrants are put to work, output increases, profits rise, investment increases and so more labour can be absorbed from the low wage sector. This process will continue, all being well, until standards of living in the two sectors become equalised and the low wage peasant sector has been totally absorbed into the high wage, advanced, modern economy. On this growth path one would expect modern sector wage rates to increase, once the traditional sector's living standards have

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(7) This situation is conventionally known as one in which "surplus labour" exists. Surplus labour being defined as labour which is paid a wage in excess of its marginal product; irrespective of the value of the marginal product. Thirlwall [195]

risen to the point where life in the sector can offer the would-be modern sector migrant a real alternative. Once this happens further labour can only be obtained by increasing modern sector wage rates. It is only when this institutional wage is forced up that continued development starts to redistribute income in relative terms to wage earners, through lower profit rates.<sup>(8)</sup>

As long as the growth of the modern sector is sufficient to ensure that the rate of labour migration and absorption into the sector is greater than the rate of growth of the labour supply in the traditional sector, continued migration will eventually result in the elimination of the inter-sectoral wage differential. Once the differential has disappeared, the situation that was labour surplus has evolved into one labour limited and the growth path will, once again, be that described in the preceding section; namely development from a full employment situation.

Again this path of economic evolution presupposes that the growth process will not affect the size or direction of the forces driving continued economic development.

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(8) At this stage the relative gap between the rewards of profit earners and wage earners starts to close however, the gap in absolute terms will continue to increase for some time longer.

E2.4 Development with Unemployment - The Development Underdevelopment Path.

The two views of development described in the above sections might be classified as representing the "orthodox" view of development, which sees the process as an ongoing one in which both sectors of the economy benefit or at least neither becomes worse off as a result of development. These views have been seriously challenged by writers in the Marxian Tradition, Arrighi [6] dos Santos [45], who argue that the growth process will alter the values of the growth parameters themselves and that, as a result, the economy must deviate from the growth path on which it was travelling. This deviation results from their belief that where two regions or countries are linked economically, the development of one region, if it is achieved by the capitalist mode, requires and generates underdevelopment and poverty in the other region.

The underdevelopment of one region is achieved by the expropriation of the surplus of the region and its appropriation by the capitalist owners of the means of production in the modern sector or the developing region. The expropriation of this surplus is achieved by a combination of economic and political methods; the latter being used, either to reinforce the former, or where the former are inadequate.

As the surplus in the one region is expropriated and appropriated by the capitalists in the other region for investment there, the

growth paths of the two economies alter; the rate of capital accumulation increases in the developing sector and declines in the other. There is no tendency to stability and as standards of living drop in the traditional sector, perhaps to as low as subsistence levels, the inhabitants of the region become totally dependent upon the growing sector.

Growth with this type of evolution results in very rapid growth of the modern sector with increasing poverty in the dependent sector.<sup>(9)</sup> Modern sector wage rates will not rise and may even fall and the gains from development accrue almost exclusively to capital in the initial stages.

If the economy continues to grow, unhindered by its uneven development, the modern sector must eventually run against a labour bottleneck and the economy will revert to the development-development path; wages will start to increase, despite the underdevelopment of the traditional sector and capitalists will be forced to share the fruits of economic growth, if they wish to ensure that further economic development takes place.

Writers in this school believe however, that the problems of the process of capitalist accumulation such as; the growing concentration of ownership of the means of production, the lack of

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(9) Subject to some subsistence floor to wage levels in the sector.

mobility of capital and the growing inflexibility of the price system will affect the growth of the economy and push it towards economic stagnation rather than to the development-development path. Arrighi [6] Frank [55].

### E3.1 Simple Economic Growth Paths and Social and Political Change in a Capitalist Society

Development from a traditional peasant or tribal society by the capitalist mode implies that, in the initial stages of development, one has a highly organized capitalist system facing virtually unorganised labour, who are likely to be both economically and politically naive.

In the early development phase, therefore, effective political and economic power is virtually certain to be in the hands of the capitalist class. The model that follows postulates that this will indeed be so and, furthermore, that the capitalist class will not relinquish their political power until they are forced to choose between continued economic growth and maintaining their political dominance. At this point it is assumed that they will choose to continue accumulating in the traditional capitalistic manner and so will share the political control increasingly with labour.

In terms of this postulated mode of behaviour by the capitalist class, progression along any one of the three growth paths outlined earlier, implies a certain rate of social and political

change. The rate and direction of change will depend upon the rate of growth of the economic bargaining power of labour. Since the growth of labour's economic power is reflected in growing real wage rates, one can argue that the rate of social and political change is likely to be positively correlated with the rate of change of real wage rates experienced on the three growth paths.

Development by means of underdevelopment is a growth path on which the increase in the economic power of labour is so insignificant that there is virtually no growth in wage rates. Consequently, using the hypothesis concerning capitalists behaviour patterns stated earlier, on this path one would anticipate no substantial changes in the political and social systems within which the economic development is taking place. On the contrary, capitalists may continue to use both their economic and political power to entrench themselves more securely and by doing so succeed in weakening the economic position of labour even further.

The conventional labour surplus development path, the development-development path referred to earlier, has implicit in it a different picture of the development process. Social and political change is possible on this path but the rate of change is very low. However, labour gradually becomes more and more significant on the economic scene and once the supply of labour becomes limited the bargaining power of labour increases substantially.

On the other hand development from full employment presents a

different picture. Continued development, or initial development from labour limited situation implies the existence of a bargaining situation,<sup>(10)</sup> since labour rapidly becomes a significant economic force. Continued development in this situation results in changes on the social political and economic fronts. Social and political change is likely, as the workers are in a position to force such changes, as their price for continued co-operation on the economic scene.

The balance of economic forces will alter in this situation, since development with rising wage rates implies a relative redistribution of income to labour, savings must be made out of wages if the required level of economic development is to be maintained. By saving workers will gradually acquire ownership of increasing quantities of the means of production in the economy and so class distinctions based upon relative access to the means of production will become continuously less significant.

#### E4.1 The Evolution of a Developing Economy

When one considers the relationship of the three growth paths to one another it becomes tempting to postulate, at the theoretical level, a "stages of economic growth thesis" for developing countries. Fei and Ranis [54] suggest that the three stages in an

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(10) It does not follow that formal collective bargaining normally takes place although labour's economic position is undoubtedly stronger when labour is organised than when it is not.

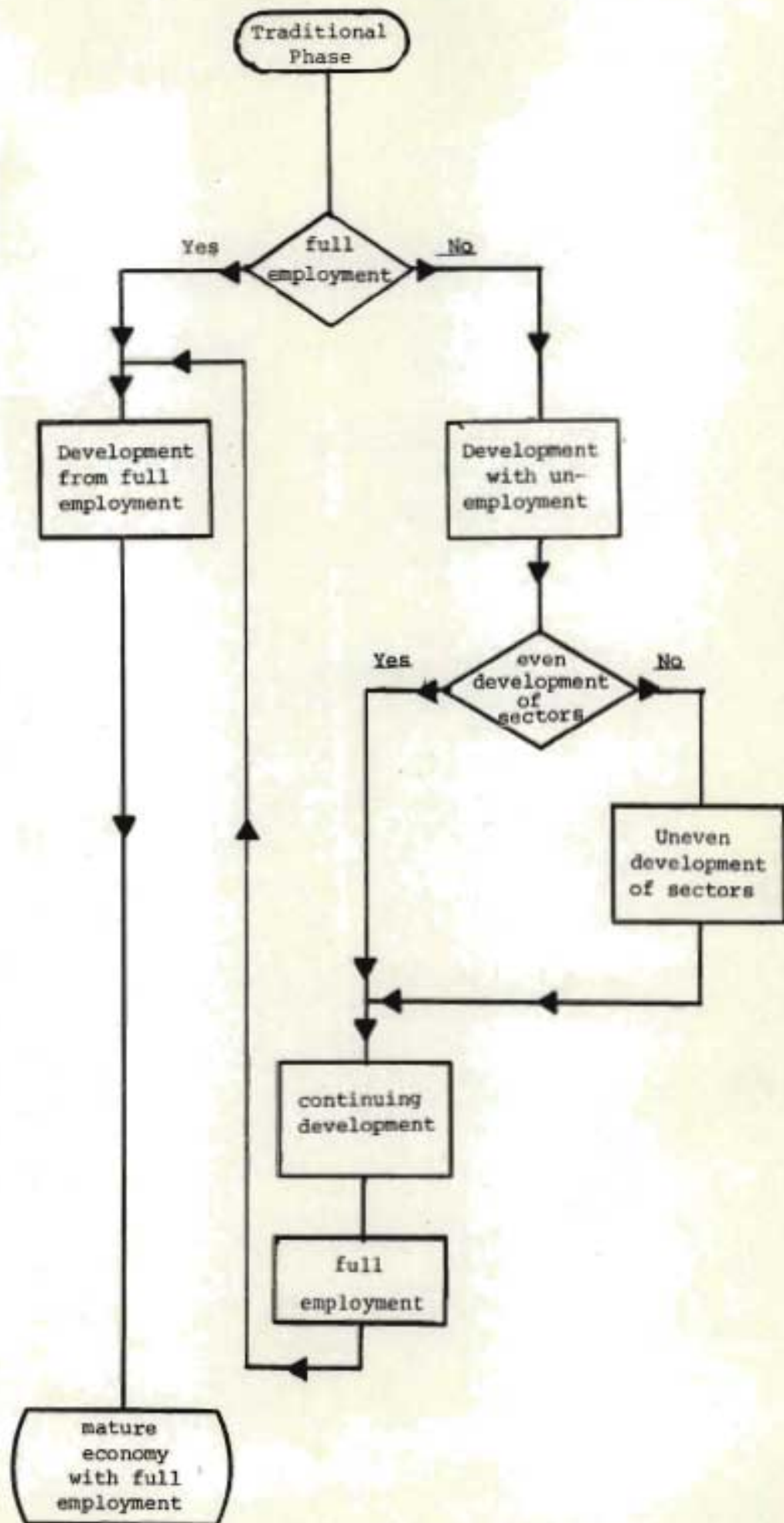
economy's life cycle are agrarianism, duallism and economic maturity. Flow Chart 1 shows one possible view of the growth paths followed as the economy proceeds through these stages of development.

The path of social and political change implied by this course of economic evolution is similar to that postulated by O'Dowd [143]. In the early stages capital is the limited resource and capitalists have effective control over the market however, as growth continues, so labour gradually becomes absorbed and labour's bargaining strength grows, enabling it to secure increasing social and political concessions from the capitalists. It should be stressed however, that there is nothing in the system to force social and political change, but that progression along this path is only possible if the required social and political change takes place.

This view of economic development and its concomittant social and political development seems too simplistic since it rests upon two assumptions that may or may not hold, namely:

1. That the growth rate of productive employment,  $\frac{\Delta L}{L}$  is greater than the rate of growth of population,  $\frac{\Delta P}{P}$  throughout the life cycle of the economy.
2. That development in any one period generates the correct group behaviour for continued development in subsequent periods.

Flow Chart 1.



A less limited representation of the relationships between the three major types of growth path is shown in Flow Chart II. In this chart there is no unique route through the life cycle of an economy, the actual path followed at any moment of time being determined by the relative strengths of the growth parameters.

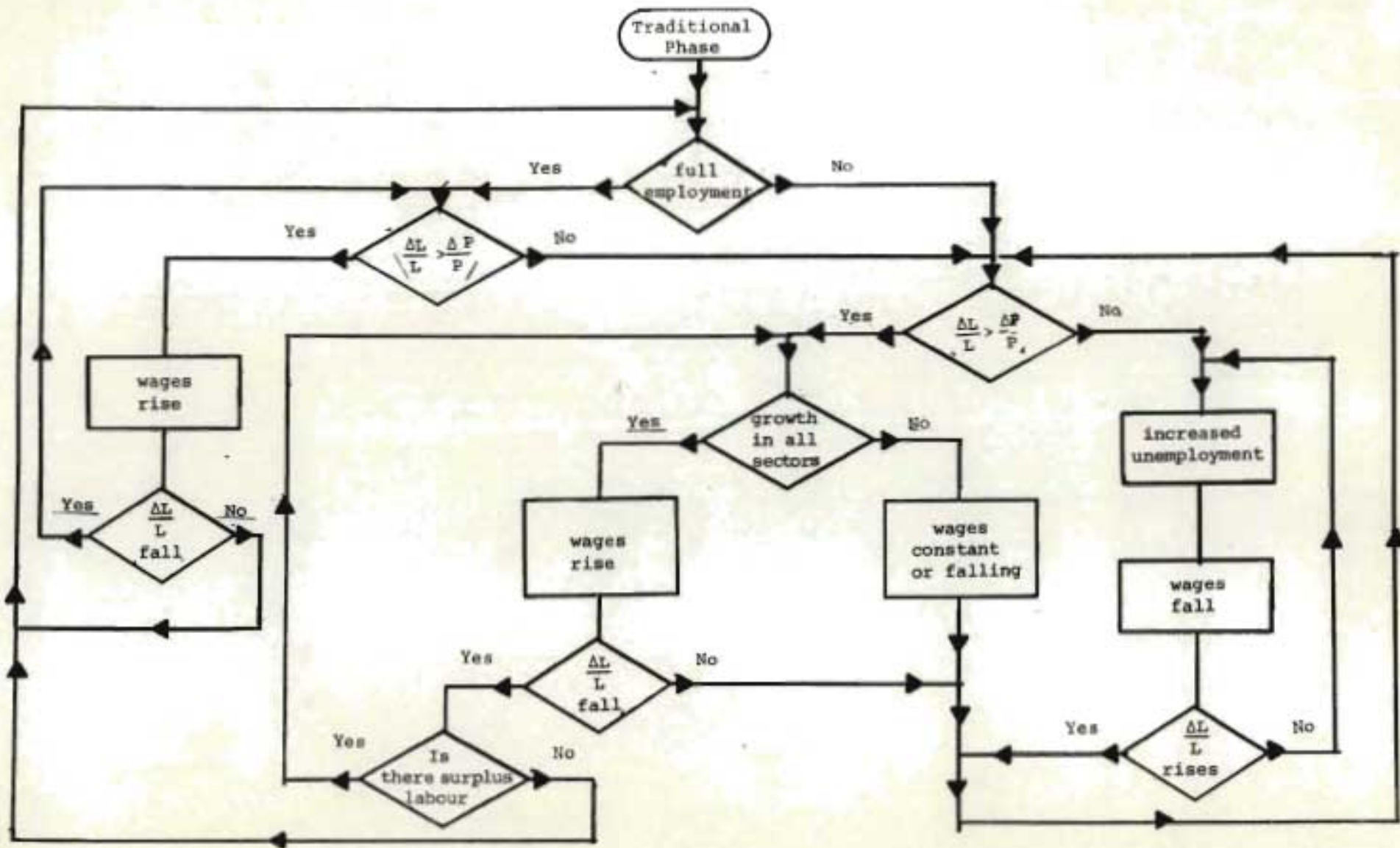
Flow Chart 2 illustrates the two major types of economic development: development from full employment and from a labour surplus situation, subdivided in terms of the relative strengths of the initial growth parameters i.e. in terms of whether growth commences with the rate of growth of employment greater or smaller than that of population.

The linkages between the economic variables on the growth paths shown in the flow chart highlight two things;

1. There is no unique path through the life cycle; underdevelopment of one sector, or complete economic stagnation in both sectors can occur on any one of the four growth paths illustrated and at any stage in the economy's life cycle.
2. That the critical determinant of the growth path followed in subsequent periods is the relationship between the rate of growth of employment and the rate of growth of the labour supply.

Employment growth rates are dependent upon the rate of growth of investment and upon the type of production techniques chosen. A change in the economic behaviour patterns of the capitalist class,

Chart 2



such as a general increase in their consumption levels, or a continuing emphasis on the use of more capital intensive methods of production, could be sufficient to divert an economy, well established on the development-development path, away from that path and down a path of development and underdevelopment, or of economic stagnation. The crucial economic variables in a development situation are, firstly the relationship between wage rate movements and changes in investment behaviour<sup>(11)</sup> and, secondly, the relationship between changes in investment and changes in employment. Adverse relationships between these variables alone could be sufficient to generate a labour surplus situation from one that was initially labour short. In certain circumstances a strong capitalist class may well be able to make use of a combination of the political and economic processes to change the conditions governing the labour supply to achieve the same ends.<sup>(12)</sup>

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(11) The effect that rising wage rates will have on investment will depend upon how investors view the future yields of their investments in terms of these higher wage rates. Where the size of the market is a decisive factor, increased wage rates may well lead to increased investment, as unit costs may fall with larger output levels. On the other hand, increased wages may reduce profit rates and cut investment in a situation where costs of production cannot be reduced and the goods are sold on a competitive market.

(12) Francis Wilson argues along similar lines in his paper in this collection when he says that the cry of a 'labour shortage' is not a new one on the South African scene, but is one that has been overcome in the past by various political moves.

E4.2 The Implications of this View of Economic Development  
for Social and Political Change

This picture of development is essentially one that postulates the existence of a situation in which, in the early stages of development, capitalists may face a choice between accepting the growing strength of labour in terms of existing market conditions, or of using the political machine to change market conditions to undermine labour's bargaining power. Capitalists may, in other words, have the political power to force early growth onto the development underdevelopment path. If they do exercise this power, this path can be maintained for as long as there is surplus labour in the economy, or, for as long as it is possible to change the economic parameters sufficiently to regenerate this surplus labour. The use of increasingly capital intensive methods of production may further extend the period of time that can elapse before the requirements of continuing economic growth force social and political change.

Once the supply of surplus labour is finally absorbed capitalists face a different choice namely; that between continued growth accompanied by the social and political change required by labour as their price for continuing to contribute to the growth process and the alternative, economic stagnation.

The relationship between economic development and social and political change in this type of economy will be dependent upon whether or not economic development absorbs or generates surplus

labour. When labour is absorbed one would expect rapid change in the social and political spectrum to accompany economic growth. If however development generates surplus labour, the growth rate can be maintained and may even accelerate without any concomitant social and political change.

Following on this argument, it seems that anyone interested in the relationship between economic growth and social and political change in an economy would be unwise to postulate a stages of growth theory based on the level of economic development, since this level may have been achieved by anyone of four different paths, or by a combination of some or all of these paths.

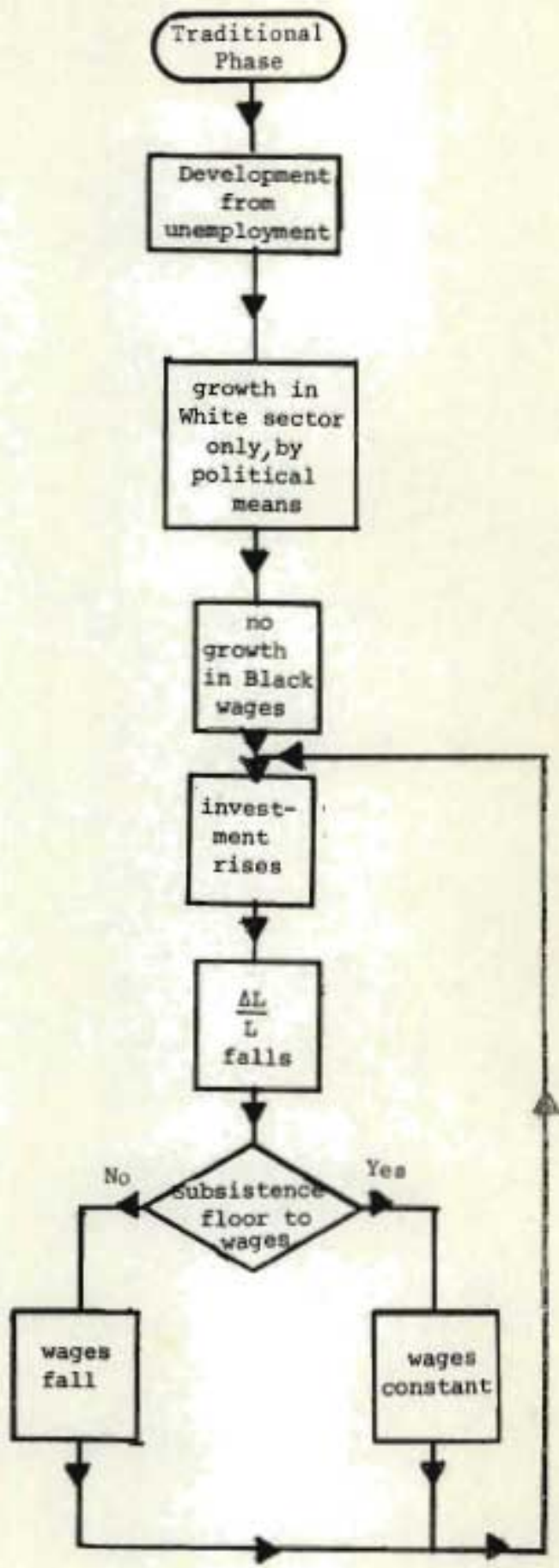
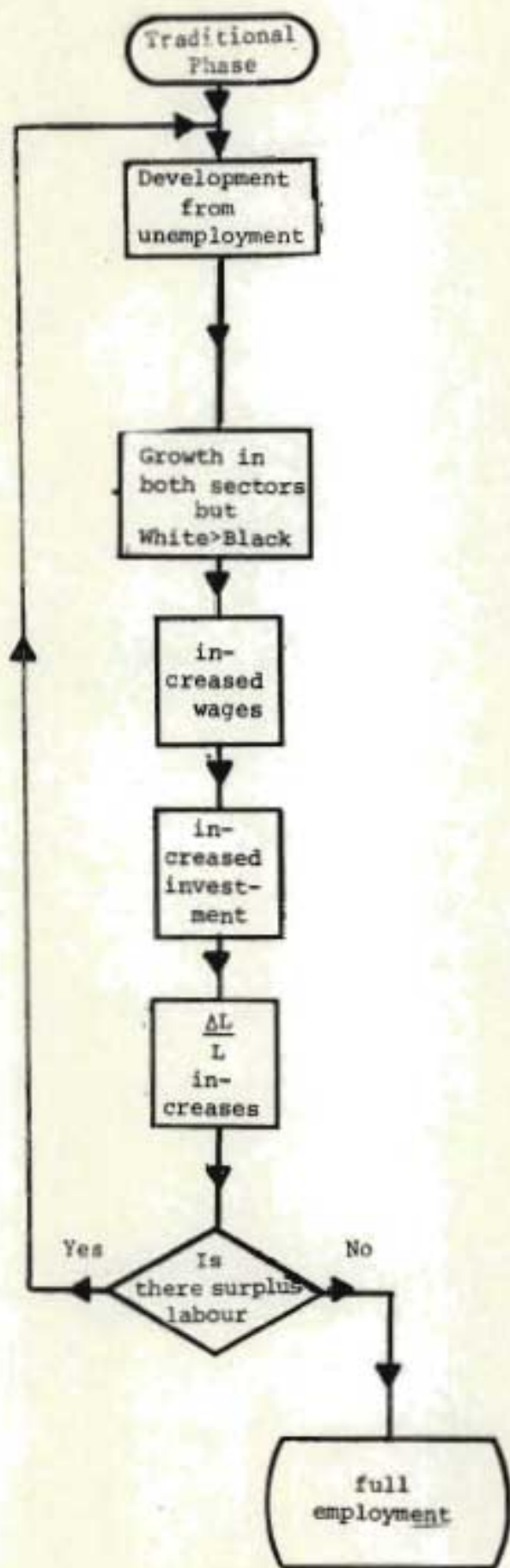
#### E5 The Recent Debate upon South Africa's Development Path

Although, as was argued above, it may be unwise to generalise the relationship between economic development and social and political change, any one particular country can, ex poste, be identified as having followed a particular path of evolution. In this context, the differing viewpoints on the relationship between economic growth and social change in South Africa, O'Dowd [143] Trapido [205], may be viewed in terms of their respective concepts of the growth path currently being followed and the most likely future course of economic evolution in South Africa.

Flow Chart 3 shows a diagrammatic representation of the growth paths implied by the orthodox and the revisionist views of South Africa's economic development path. Path 1 is analogous to the

The Orthodox View

The Revisionist View



development-development path of Lewis [115] and Fei and Ranis [52]. Since it leads eventually to full employment and a more egalitarian income distribution, this path implies that the substantial social and political change, that is required for its attainment, will take place in South Africa.

The second path which is very similar to the development under-development path of Frank [55] and Arrighi [6] shows growth patterns based on political and economic power, but since the proponents of this view argue that economic growth will not bring change, and what is more, since change is required for the continuance of economic growth, one has no link out of this phase, other than that of exogenous revolution. If one rejects revolution, the outcome of this path is eventual economic stagnation.

In terms of the argument advanced in Section E4, that these development paths are not simply direct alternatives but that it is possible and indeed probable that an economy will proceed from path to path in no particular predetermined pattern, these views appear too simplistic. The "leave it all to economic growth thesis" has the following problems:

1. It ignores the difficulties created by groups whose status is dependent upon maintaining a situation of no change.
2. It overlooks the time scale involved. Since South Africa has been growing in a highly uneven manner for more than a century there may be no reason to expect rapid change through the workings of the market mechanism alone.

3. It overlooks, or assumes away, the problems of continued accumulation by the capitalistic mode of development.

The proponents of the pure underdevelopment or the slave economy point of view of South Africa's development, arguing as they do that economic growth will not bring change, give no role to the possible evolution of capitalism. There seems no justification for simply asserting that a system will not evolve as growth itself is a situation implying change.

Whether or not the growth process will bring with it evolutionary social and political change depends directly on the changes that occur in the behaviour patterns of the major economic role players. It would seem that the most fruitful approach, to an attempt to predict the most likely future changes in the South African economy, would be to concentrate on the patterns of economic behaviour of the groups controlling the critical growth variable; namely the rate of growth of black employment.

In order to do this, one would need to establish some consensus as to South Africa's present position on the growth path and to elaborate on the nature of that growth path, i.e. is it one, still in the development underdevelopment stage, or has South Africa, in fact, progressed to the development-development phase? It would also be essential to review the prospects for continued economic development. One would need to question whether the economic variables themselves were sufficiently strong to continue growing. One should ask whether the social and political

changes required to sustain that level of growth are likely to be forthcoming or does the more likely course of action appear to be that individuals, who have vested interests in maintaining the status quo, are likely to drive the economy towards stagnation.

Such an enquiry necessitates research directed towards answering the following more limited questions;

1. Is the economy approaching full employment? If not, what are the major factors impeding economic growth?
2. What are the determinants of investment?
3. Is there any substantial movement towards the adoption of more capital intensive techniques?
4. Which group of individuals, who have an economic role to play, whether direct or indirect, have a vested interest in maintaining their existing status, how are they likely to behave, and how much influence do they in fact exert over the major policy making groups in the economy. In this respect one would like to know whether White labour as a group still feels sufficiently "threatened" by Black labour to oppose actively capitalists' moves to increase Black productivity and how much power the White farming community continues to exercise through its influence on the governing party's political base?
5. To what extent is it possible for the capitalist class to create additional supplies of labour either by further use

of the political or economic machines, or by means of extending the field from which labour is drawn?

6. If the supply of labour is drying up, then to what extent will the growth process result in the emergence of groups that will accelerate change. In this connection the emergence and attitudes of African Trade Unions are of prime importance.

Having established a sound empirical basis for answering these questions one is in a far better position to speculate on whether or not continued economic growth in South Africa will bring with it evolutionary social and political change. Indeed it is submitted that without such investigations, predictions such as the conflicting views of the 'conventionalists' and the 'revisionists' come down to being pure expressions of faith.

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