EDITOR: ANTHONY BLACK

# TOWARDS

employment-intensive

# GROWTH



# Towards employment-intensive growth in South Africa

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**Editor: Anthony Black** 



Towards employment-intensive growth in South Africa

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#### **Contributors**

- **Haroon Bhorat** is Professor of Economics and Director of the Development Policy Research Unit (DPRU) at the University of Cape Town. His research interests cover labour economics, poverty and income distribution.
- Anthony Black is Professor in the School of Economics at the University of Cape Town and a former director of the School. He is a Research Associate of Policy Research in International Services and Manufacturing (PRISM) and of the Environmental Economics Policy Research Unit (EPRU). His main areas of interest are industrial development, trade and foreign direct investment.
- **Saturnino M. Borras** is Professor of Agrarian Studies at the International Institute of Social Studies (ISS), Erasmus University in The Hague, Adjunct Professor at CAU, Beijing, and a Fellow of the Transnational Institute (TNI) in Amsterdam.
- Justine Burns is Professor in the School of Economics at the University of Cape Town, and an associate of the Southern African Labour and Development Research Unit (SALDRU) and Research Unit in Behavioural and Neuroeconomics (RUBEN). She is a behavioural economist, with extensive experience in the field of experimental economics, applied labour, microeconomics and impact evaluation.
- **Beatrice Conradie** is Associate Professor in the School of Economics and the Director of the Social Surveys Unit in the Centre for Social Science Research at the University of Cape Town. Her main areas of interest are total factor productivity analysis, land-use change and human–wildlife conflict.
- **Andries du Toit** is Director of the Institute for Poverty, Land and Agrarian Studies (PLAAS) at the University of the Western Cape. His interests include the biopolitics of late-capitalist, post-agrarian landscapes.
- **Lawrence Edwards** is Professor in the School of Economics at the University of Cape Town and Director of the School. He is a Research Associate of the South African Labour and Development Research Unit (SALDRU) and Policy Research on International Services and Manufacturing (PRISM). His research interests focus on international trade, trade policy, firms and labour markets. He is the author (with Robert Lawrence) of *Rising Tide: Is Growth in Emerging Economies Good for the United States*.
- Frederick Fourie is Professor and Research Fellow, Department of Economics, University of the Free State, and a former Vice-Chancellor of that university. He is the Research Coordinator of the Research Project on Employment, Income Distribution and Inclusive Growth (REDI3×3), based at the University of Cape Town, and is editor of the online policy forum, Econ3×3.

- **Heinrich Gerwel** is a PhD student in the School of Economics, University of Cape Town. His main interests are development studies, economics of agricultural transformation, rural development and productivity analysis.
- **Reviva Hasson** is a Research Fellow at the Environmental Economics Policy Research Unit (EPRU) and lectures economics at the University of Cape Town. Her research interests span developmental, health and environmental topics.
- **Carol Hunsberger** is Assistant Professor of Geography at the University of Western Ontario in London, Canada. Her research focuses on energy justice and the political ecology of biofuels.
- **Brian Levy** is Academic Director of the Graduate School of Development Policy and Practice at the University of Cape Town. He also teaches at the School of Advanced International Studies, Johns Hopkins University. He worked for over 20 years at the World Bank, where he played a leading role in helping to integrate governance into development practice.
- Natasha Mayet studied at the University of Cape Town and Bates College in the USA. She joined the Development Policy Research Unit (DPRU) at the University of Cape Town as a researcher in 2009. Her research interests include labour economics and minimum wage enforcement.
- **Cecil Mlatsheni** is a Senior Lecturer at the School of Economics at the University of Cape Town. His main area of interest is labour economics, especially youth unemployment.
- **Mike Morris** is Emeritus Professor in the School of Economics and Director of Policy Research in International Services and Manufacturing (PRISM). His main areas of interest are globalisation, global value chains, industrialisation, industrial policy and the political economy of renewable energy.
- **Nicoli Nattrass** is Professor in the Centre for Social Science Research at the University of Cape Town. Her research interests include the political-economy of employment and health, and human-wildlife conflict.
- **David Neves** is a Senior Researcher at the Institute for Poverty, Land and Agrarian Studies (PLAAS) at the University of the Western Cape. Subsumed beneath a broad focus on poverty and inequality in South Africa, his research interests have focused on impoverished urban and rural livelihoods, informal-sector employment and social-welfare grants.
- Karl Pauw is Regional Coordinator of the Monitoring and Analysing Food and Agricultural Policies (MAFAP) programme of the United Nations Food and Agriculture Organization (FAO) based in Addis Ababa, Ethiopia. He holds a PhD in Economics from the University of Cape Town. His broad area of interest is development and agricultural policy analysis, with a specific focus on understanding the micro–macro interactions between policies and outcomes using economy-wide and micro-simulation modelling techniques.

- **Miquel Pellicer** is Senior Researcher at the German Institute of Global and Area Studies (GIGA), Hamburg, and affiliate at the Southern African Labour and Development Research Unit (SALDRU) at the University of Cape Town. His main research interests are inequality, education and political behaviour.
- **Kate Philip** is currently a Senior Technical Adviser to the economic development team in the Government Technical Advisory Centre (GTAC) in South Africa's National Treasury. She was involved in initiating the Community Work Programme as part of a strategy process for the Presidency. She holds a PhD from the University of the Witwatersrand.
- **Vimal Ranchhod** is Associate Professor at the Southern African Labour and Development Research Unit (SALDRU) in the School of Economics at the University of Cape Town. His main areas of interest are inequality, labour economics and the economics of education.
- **Jeremy Seekings** is Professor of Political Studies and Sociology at the University of Cape Town. His most recent book, written with Nicoli Nattrass, was *Policy, Politics and Poverty in South Africa* (2015).
- **Fiona Tregenna** holds the DST/NRF South African Research Chair in Industrial Development, and is a Professor of Economics at the University of Johannesburg. She has a PhD in Economics from the University of Cambridge and a Master's degree from the University of Massachusetts. Her primary area of research focuses on industrial development and structural change.
- **Rolph van der Hoeven** is Professor Emeritus at the International Institute of Social Studies (ISS), Erasmus University (EUR) in The Hague, and a member of the Committee on Development Cooperation of the Dutch Government. His work concentrates on issues of employment, inequality and economic reform
- **Chunyu Wang** is Associate Professor at the College of Humanities and Development Studies (COHD), China Agricultural University. Her research interests include rural transformation, county governance and planning, rural politics and land grabbing.

# **Acronyms and abbreviations**

ACB Agricultural Credit Board

AGOA Africa Growth and Opportunity Act
ARC Agricultural Research Council

AsgiSA Accelerated and Shared Growth Initiative for South Africa

BEE black economic empowerment

BRICS Brazil, Russia, India, China and South Africa
CASP Comprehensive Agricultural Support Programme

CCTC Cape Clothing and Textiles Cluster

CFS Committee on World Food Security (United Nations)
CID Center for International Development (Harvard)

CIP Critical Infrastructure Programme (DTI)
CODESA Convention for a Democratic South Africa
COSATU Confederation of South African Trade Unions

CSP Customised Sector Programme
CWP Community Work Programme
DCCS Duty Credit Certificate Scheme

DCoG Department of Co-operative Governance
DEPP Developmental Electricity Pricing Programme
DHET Department of Higher Education and Training

DST Department of Science and Technology
DTI Department of Trade and Industry
ECC Employment Conditions Commission
EITC Earned Income Tax Credit (United States)
EPWP Expanded Public Works Programme
FAO Food and Agriculture Organization

FDI foreign direct investment

GDFI gross domestic fixed investment GDP Graduate Development Programme

GDP gross domestic product

GEAR Growth, Employment and Redistribution

GEIS General Export Incentive Scheme
GET general education and training

GNI gross national income

HBI historically black institution
HEI higher education institution

HLPE High Level Panel of Experts on Food Security and Nutrition

(FAO)

HSRC Human Sciences Research Council

HWI historically white institution

IDC Industrial Development Corporation

IFPRI International Food Policy Research Institute

ILO International Labour Organization IMF International Monetary Fund

ISI import substitution industrialisation

ISP Industrial Strategy ProjectJOBS Jobs and Opportunities SeekersJPP Job Protection Programme

KZNCTC KwaZulu-Natal Clothing and Textile Cluster
LRAD Land Redistribution for Agricultural Development
MAFISA Micro-agricultural Finance Initiative of South Africa

MDGs Millennium Development Goals MERG Macro-Economic Research Group

MGNREGA Mahatma Gandhi National Rural Employment Guarantee Act

(India)

MIDC Motor Industries Development Council
MTSF Medium-Term Strategic Framework
NACI National Advisory Council on Innovation
NAIRU non-accelerating inflation rate of employment

NBC National Bargaining Council NDP National Development Plan

NEDLAC National Economic Development and Labour Council

NEETS not employed, in education or in training

NGOs non-governmental organisations NIDS National Income Dynamics Survey NSDS National Skills Development Strategy

NSF National Skills Fund

NSFAS National Student Financial Aid Scheme NYDA National Youth Development Agency

ODA official development assistance

OECD Organisation for Economic Co-operation and Development

PEP public employment programme

PREM Poverty Reduction and Economic Management Network

PSCBC Public Service Co-ordinating Bargaining Council

QLFS Quarterly Labour Force Survey (Stats SA)
RDP Reconstruction and Development Programme
RIDP Regional Industrial Development Programme
SACTWU South African Clothing and Textile Workers Union

SADC Southern African Development Commuity

SASSA South African Social Security Agency

SETA Sector Education and Training Authority

SEZ special economic zone SIP Strategic Industrial Projects

SMMEs small, medium and micro enterprises

SOAG state old-age grant

TCDC Textile and Clothing Development Council

TNCs transnational corporations
TSE total support estimates

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Programme

WFTC Working Families Tax Credit (United Kingdom)

WTO World Trade Organization YAC Youth Advisory Centre

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#### **Foreword**

Now that I am not working it is just like these hands of mine have been cut off and I am useless.

I cannot say anything about my future now because my heart is now 'dead' since I am not working.

My husband lost his job about five months ago ... Then two months ago I lost my job ... Now they've cut off the electricity and we're two months in arrears with rent ... When your children cry hunger crying, your heart wants to break ... What can one do?

Thirty years ago, these cries from the heart, gathered by researchers during the course of the second Carnegie Inquiry into poverty and development, reminded more fortunate South Africans of the harsh human reality behind the cold statistics of unemployment.

Since that time much has changed. A democratic government has come to power; social grants, (including those specifically for children) have been rolled out across the country and policies to generate jobs have been at the heart of state attempts to overcome poverty for more than 20 years. But the harsh reality remains. In 1993, the level of unemployment (including those who wanted work but were too discouraged to continue looking for it) for all South Africans averaged 33%, while for black African youth (aged 16–24 years) it was 65%. By 2014 the levels had not fallen. One-third of all South Africans who wanted work could not find it, while for young black people, the average was still nearly two-thirds. At the same time, while poverty has been slightly reduced, it remains widespread and the level of inequality has deepened.

Clearly fundamental rethinking is needed as to how the South African economy—the oldest and largest industrial one on the continent—can renew itself to deal with these challenges. This book is the most serious attempt so far to do just that. Drawing on all that we have learnt, not least from failures since 1994, the contributors to this volume provide much food for thought as the country—government, business, trade unions and the universities—wrestle with finding solutions to a problem which causes untold misery and is also a serious threat to future stability.

Francis Wilson

#### **Preface**

There is little need to explain the motivation to work on strategies to raise employment in South Africa. The country's appalling unemployment figures are depressingly familiar and underpin high levels of poverty and social dislocation. A more personal motivation is the forlorn sight of young men, gathered at the roadside near to where I live south of Cape Town, waiting to be picked up to work for the day on a construction site or in a suburban garden. Mostly they do not get work and later in the day will head off disconsolately back to their shacks in Masiphumelele. It is a sight that is repeated in thousands of locations around South Africa, where some seven million people are without work. Unemployment on this scale is a telling indictment of a system that is simply not working.

Another motivation for the book is the need for different approaches and perspectives, both to understand the problem and to develop solutions. Much work on the employment problem is focused on raising growth rates or on fixing the labour market; but important as these are, anaemic growth and labour-market rigidities do not provide a complete explanation. A recurrent theme in this book is that policies are needed which will deliberately steer the economy onto a more employment-intensive growth path. These policies need to take greater account of the pernicious and enduring legacy of apartheid. It is hoped that this collection will contribute to taking this debate forward.

The book has been a long time in process. An initial project workshop was held in May 2012, at which a number of papers in various stages of completion were presented. Other contributors joined the project later. There are some gaps. For instance there is no chapter specifically on the informal sector. However a number of chapters do address the question of informality to some degree.

Anthony Black

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This book is dedicated to Bibi and Frances.



# Part | Overview





# Chapter 1

# Introduction: Employment-intensive growth

Anthony Black

Since the great triumph of South Africa's democratic transition there have been many achievements but also many disappointments. Without doubt, the greatest failing has been the lack of progress in addressing poverty and inequality. And the main culprit has, in turn, been massive (and growing) unemployment.

It is widely accepted that unemployment is South Africa's central problem. An unemployment rate of 25% makes South Africa a complete outlier compared to other middle-income countries. Indeed, the unemployment rate rises to 34% if a broader definition, which takes account of discouraged workers, is used. The employment rate, which can be defined as the percentage of the working age population in employment, is only 41% in South Africa, compared to 60% in developed countries and 65% in countries such as Brazil and Indonesia.

High unemployment underpins extreme poverty and inequality and is a major contributor to social dislocation. If it were not for increased social payments, poverty would have continued to increase since the advent of democracy in 1994. Unemployment also represents a huge cost to growth as unemployed human resources on this scale represent the most glaring 'inefficiency' afflicting the South African economy and result from both 'market' failure and 'government' failure.

In a country with substantial resources and a government which claims to be serious about addressing the issue, this lack of progress is not only troubling but puzzling. How could it be that so little progress has been made in addressing the appalling apartheid legacy? Neither the resources nor the will have been lacking. After all, South Africa is a middle-income country with significant fiscal capability. At least at the level of policy, government and all its agencies pay considerable attention to the problem of unemployment. Business, the trade union movement and other stakeholders are all concerned with addressing the problem. What has gone wrong and what can be done about it?

## Why is unemployment so high?

The first problem is to understand why unemployment is so high. Is economic policy so complicated that we have just got it all wrong? Or has government been

completely incompetent in implementing good policies? Is it a problem of vested interests blocking 'good' reform? Economic policy is complicated and we have got at least a few things wrong: implementation has been poor in many areas and government has to negotiate its way around all sorts of vested interests. But generally there has been economic and political stability, as well as concerted efforts to address poverty. Social grants, low-income housing, water and electricity have been rolled out on a considerable scale. There have been severe challenges in education and health provision but, given apartheid's baleful legacy, the starting point was so low that progress has been made. Physical infrastructure, especially the provision of electricity, has been a constraint in some areas, but is generally good for a middle-income country. Economic policy has generally been not only orthodox but cautious. Conservative monetary and fiscal policies have achieved a remarkable degree of financial stability. Other orthodox policies have included trade liberalisation and deregulation of, for instance, the agricultural sector. In some areas, government has been more interventionist, for example with regard to black economic empowerment (BEE), in industrial policy and policies regarding land redistribution. These have not been successful, but neither have they necessarily been particularly problematic for growth. The business sector has, until recently, remained reasonably well disposed towards government and while there has been no sustained investment boom, there has been no severe capital flight either. There has been some loss of skills to emigration but also gains from immigration. Growth has been modest but picked up nicely after 2000, although the global financial crisis resulted in a short but sharp recession. Since then growth has been mediocre but still positive. So the question remains — why have we done so badly in terms of poverty and unemployment? Comparisons with other countries make for sober reading. Brazil was once our competitor for the highest Gini coefficient. It has made significant progress in reducing inequality, not withstanding its current economic difficulties.

Exceptionally high unemployment is the result of many factors. In part, it reflects low average growth rates over a number of decades. But it also reflects the pattern of growth over this period and can be traced back to South Africa's history of segregation and apartheid. Ironically, it could be argued that the real legacy of colonialism, segregation and apartheid has not been given sufficient attention by policy-makers. The economic system under apartheid had some coherence—to be sure, it was based on massive inequalities and exploitation and was totally unsuited to the needs of an expanding, technologically sophisticated, global economy. But the question is whether we have thought through the implications of this legacy—not just in terms of analysis, but in terms of actual policy. Two examples can be used to illustrate this point.

The first concerns the rural sector, which is home to 38% of South Africa's population, but a much higher share of the poor. For well-known historical reasons, this sector is divided into a well-capitalised, large-scale farming sector and a small-scale sector which operates with limited land and resources, and earns very low incomes. The former combined modern methods with very high employment at low wages. Modernisation in this sector has entailed a reduction in price support and labour reform. The result has been consolidation into larger units, a rapid increase in exports and imports and the shedding of labour. Historically, the destruction of the peasantry via seizures of land and discriminatory land taxes, coupled with strong state support for large-scale, commercial agriculture, has limited the potential of small-scale agriculture to provide an income cushion for the poor. Efforts to rebuild this sector through land reform and support for small-scale farming have been stymied by the lack of management capacity to roll out services to small-scale farmers, as well as agricultural liberalisation which has placed enormous pressure on the sector as a whole (see Chapter 9).

Another pernicious long-term legacy of apartheid was in education. Deliberate underinvestment in black education was not only a problem for those who were directly disadvantaged, but fundamentally affects South Africa's ability to compete. It has created a long-term skill shortage and the resulting high cost of skilled labour is a major constraint on the competitiveness of many tradable sectors. So when trade was liberalised in the hope that manufacturing exports would take off, the result was disappointment.

# **Employment-intensive growth**

Employment creation is a key objective of government policy. All the major policy initiatives since 1994 emphasise this issue. But failures of policy and of implementation, including the unforeseen effects of reforms, have actually worsened the problem. Much of the debate has either been around how to raise economic growth rates or the implementation of palliative measures, such as social and basic income grants and public works projects. The data remain controversial, but even the more optimistic projections show that large-scale unemployment will remain an issue even under rapid growth scenarios. According to the Centre for Development and Enterprise (2013), the South African economy would have to grow at an average rate of 7% for about 15 years in order to reach the average global employment rate.

Policy statements have placed a major new emphasis on an *employment-intensive* growth path. These include the 2010–2012 budgets, the Department of Trade and Industry's (DTI's) various Industrial Policy Action Plans, the Department of Economic Development's New Growth Path strategy (RSA, 2010) and the National Planning Commission's (2012) National Development Plan.

The Congress of South African Trade Unions (COSATU) has released a number of documents on this issue and organised business has developed its own proposals. But much of the current debate is taking place on the basis of entrenched positions and there is a need for more innovative approaches. For instance, much of the ruling party discourse emphasises the centrality of the developmental state. But it is widely accepted that in some key areas, for example in many non-metropolitan local government municipalities, it is precisely the lack of state capacity that is the central stumbling block to development. COSATU places great store on fiscal policy and on industrial policy. Rural development and agriculture hardly receive a mention, in spite of the fact that the majority of the poor are living in rural areas. Neither the government nor the COSATU approaches are very explicit about how growth could become more employment intensive, in other words, how a given quantum of economic expansion could generate more employment than has hitherto been the case. The proposals from the business sector tend to focus on the flexibility of the labour market. While the labour market is clearly important to any employment strategy, it is by no means the whole answer. Where there is consensus is on the fact that unemployment is a critical problem and that South Africa's gaping levels of inequality are unacceptable and unsustainable.

The objective of this book is to contribute to this debate by providing an analysis of the unemployment problem, as well as pointers for policies to address this seemingly intractable issue. Its focus is on the *growth path* of the economy. The starting point is that while more rapid economic expansion is an important objective, at any given level of growth, the economy needs to become more labour absorbing. In fact, it is not only incremental growth that needs to become more employment intensive; the economy as a whole needs to become more labour absorbing. The central question posed, therefore, is how to bring about changes in the economic structure and pattern of development, which would lead to the attainment of this objective.

### An overview

The volume is organised as follows. PART I contains two further overview chapters. *Rolph van der Hoeven* examines employment-centred policy in international perspective. He analyses general, global, labour-market trends and country examples and argues that there is a dire need for more explicit policies for employment at national and international levels. The possibilities for giving employment more importance in development policies are briefly reviewed.

Chapter 3 by Frederick Fourie surveys the large literature on the South African unemployment debate. His analysis reveals that work by macroeconomists, labour economists and poverty/development analysts constitute three, quite

different, discourses signified by distinctive topics and approaches leading, in turn, to differing policy implications. He concludes by arguing that an integrated approach to the macroeconomic, labour market and developmental dimensions of unemployment is essential to inform consistent and coherent policy on unemployment, poverty and inequality.

PART II of the book examines the structure of the economy from an employment perspective. In Chapter 4 *Haroon Bhorat* and *Natasha Mayet* examine labour demand trends and the determinants of unemployment. The first section of the chapter presents an empirically detailed overview of employment, output and wages in post-apartheid South Africa from 1995 to 2009. The second section moves on to raise the key labour-market policy challenges facing South Africa.

Raising the employment intensity of the economy requires a better understanding of the major differentials across sectors. Chapter 5 by *Fiona Tregenna* provides an empirical overview of changes in the sectoral composition of employment over time. It then analyses employment multipliers at the subsectoral level, showing the combined direct and indirect employment intensity of each subsector. She argues that the positive externalities of employment are not factored into private decision-making and this, in turn, creates a case for public support for sectors with large employment multipliers.

South Africa is among the most unequal societies in the world. In Chapter 6, *Miquel Pellicer* and *Vimal Ranchhod* examine the impact of inequality on investment by focusing on the link to educational attainment. They argue that South Africa is caught in an inequality trap, where high inequality leads to low levels of skill accumulation, which in turn consolidates the high levels of inequality. The trap works particularly through tertiary education as it is at the tertiary level that access is limited and that returns to investment in education are high.

This book has sought to pay specific attention to the rural sector, given the high levels of poverty and unemployment is these areas. Part III addresses this sector. Chapter 7 by *Wang Chunyu*, *Saturnino Borras* and *Carol Hunsberger* critically examines the impact of the growing international prevalence of large-scale land investments, questioning their contribution to rural development. Drawing on current literature and field research data, they argue that contemporary large-scale land investments take many forms but share the common characteristic of either expelling/saving labour, or, if labour is absorbed, it is incorporating it adversely. This has clear implications for South Africa's employment-creation agenda.

The prospects for employment within South Africa's rural areas have long been constrained and South Africa's rural poor have accordingly forged livelihoods from diverse activities. In Chapter 8 David Neves and Andries du

Toit present several case study vignettes from South Africa's former 'homeland' communal areas to identify the basis of rural income sources and the implications for employment-intensive growth. Against the backdrop of the concentration of poverty in rural areas and the fact that agricultural and rural development can be highly pro-poor, *Anthony Black, Beatrice Conradie* and *Heinrich Gerwel* examine the evidence on the quantity and efficiency of state support to both commercial and small-scale agriculture, and ask whether more support should be directed towards this languishing sector in Chapter 9.

Part IV examines policies which are specifically aimed at raising employment in a range of important areas. The vexed issue of youth unemployment is examined by *Cecil Mlatsheni*, who surveys policies implemented internationally and how they relate to South Africa. The emphasis is placed on those cases for which evaluations have been carried out and the chapter stresses the importance of early labour-market experience for youth, as well as the importance of maintaining attachment to the labour market for all unemployed workers.

There has been significant debate on the question of wage subsidies and government has introduced a series of proposals, which have been met with fierce opposition from labour unions. Drawing on the international evidence and an economy-wide, macro-micro analysis, Justine Burns, Karl Pauw and Lawrence Edwards argue, in Chapter 11, that although wage subsidies may be successful at creating jobs in South Africa, they should not be seen as the primary or dominant policy instrument for dealing with the broader unemployment problem. To enhance the effectiveness of wage subsidies, they should preferably be linked to structured workplace training, be targeted to industries where employment will be responsive to changes in labour costs, and be focused on the youth. An important public employment intervention that has received less publicity is South Africa's Community Work Programme (CWP). Public employment schemes are sometimes described as 'palliative' but Kate Philip, in Chapter 12, argues that the CWP has largely been an effective low-cost measure which has not only generated a large number of work opportunities at low cost, but also contributes to local economic development in ways that support the creation of more sustainable forms of employment.

Part V examines employment issues in the manufacturing sector from very different angles. In Chapter 13, *Anthony Black* and *Reviva Hasson* ask what should be different about industrial policy in the South African context of massive structural unemployment. Pre-1994, the weight of support was strongly in favour of capital and energy-intensive enterprises. With the advent of democracy, government set a multiplicity of objectives but *de facto* there was a surprising level of continuity in the ongoing assistance for heavy industry. This chapter

argues that the ongoing bias in favour of heavy industry has been damaging, not only for employment but also for growth.

The poor performance of labour-intensive manufacturing has contributed significantly to South Africa's employment problem and in Chapter 14, *Nicoli Nattrass* and *Jeremy Seekings* argue that in the clothing sector, centralised wage setting by bargaining councils has reduced inter-regional wage differentiation through large real increases in minimum wages in lower-wage regions. This has impacted negatively on employment in peripheral industrial areas, such as Newcastle. In Chapter 15, *Mike Morris* and *Brian Levy* also examine the role of institutions in the clothing sector, but, in this case, the efforts between 2003 and 2007 to foster cooperation among participants in South Africa's garment and textiles value chain. They argue that the quality of cooperation fell far short of 'good practice' due to broader political economy dynamics and they conclude that where distributional conflict is severe, win-win agreements are difficult to reach.

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# Chapter 2

# Employment-centred policies in an international context

Rolph van der Hoeven

#### Introduction

Employment, especially decent and productive employment, has recently become more topical in the world of development. An indication of this are the events related to the 'Arab Spring' of 2011. In the short space of only a few months, various Arab regimes were toppled by a population that demanded not only more democracy, as argued ad infinitum by the Western press, but also more importantly, good jobs and the prospects of advancement in life. Yet this turmoil took place in countries that scored well according to the much-hailed Millennium Development Goals (MDGs) (Table 2.1).

Table 2.1: MDG progress ranks and other indicators (selected countries)

Country	MDG progress rank 2010	Youth unemployment 2009	GDP pc US\$ 2008	GDP pc growth 1970–2008	Inequality (Gini ratio)
Egypt	6	24.7 (2007)	1 991	2.5	32.1
Tunisia	1	30.6 (2005)	3 903	3.1	40.8
Jordan	6	26.9	3 596	1.6	37.7

Source: Center for Global Development (CGD) (2011) and International Labour Organization (ILO) (2011)

Tunisia and Egypt, as well as Jordan, have been among the eight best performing countries in the world with respect to progress in the MDGs. Their leaders belonged to the Socialist International and many researchers have hailed the progress in human development in the Arab world.

After the change in regimes in various Arab countries in the spring of 2011, the leaders of the United Nations Development Programme (UNDP) and other development agencies quickly retorted that something should be done about employment.

In addition, voices, other than just those in the context of the events unravelling in the Arab world, became louder, demanding that employment had to become one of the major aims of development.

It should be recalled that employment issues were notably absent from the MDGs when these were formulated in 2000. Amsden (2011) argues that the neglect of employment issues resulted from too much focus on poverty alleviation. Mkandawire (2011) concurs that 'the social differentiation since independence of African countries and the accompanying ideological shifts have contributed to the shift in focus of state policies away from social and employment policies'.

However, five years after the formulation of the MDGs, the World Summit 2005 outcome document contains a reference (paragraph 47) to employment issues:

We strongly support fair globalization and resolve to make the goals of full and productive employment and decent work for all, including for women and young people, a central objective of our relevant national and international policies as well as our national development strategies, including poverty reduction strategies, as part of our efforts to achieve the Millennium Development Goals. These measures should also encompass the elimination of the worst forms of child labour, as defined in International Labour Organization Convention No. 182, and forced labour. We also resolve to ensure full respect for the fundamental principles and rights at work ...

This paragraph resulted in the inclusion of a new sub-goal under MDG1 in 2007: 'Achieve full and productive employment and decent work for all, including women and young people', with four indicators:

- 1. growth rate of GDP per person employed
- 2. employment-to-population ratio
- 3. proportion of employed people living below US\$1 (PPP) per day

<sup>&</sup>quot;To slay the dragon of poverty, deliberate and determined investments in jobs above starvation wages must play a central role, whether for self-employment or paid employment. The grassroots approach to solving poverty does not go far enough, because it aims at improving only the supply side of the labour market, making job seekers more capable, and not the demand side, making new jobs available for them. Employment generation is different from poverty alleviation because it has a concept behind it—'capital'. This means that the labour market is influenced by, and influences, all flows through the savings—investment nexus, including accumulation, distribution and innovation.' (Amsden, 2011)

4. proportion of own-account and contributing family workers in total employment.

This addition has been welcomed by organisations like the International Labour Organization (ILO), non-governmental organisations (NGOs), trade unions and various governments, as it could give these organisations a handle to bring employment issues more forcefully into the discussion of development, development goals and aid delivery. However, some criticise the inclusion of a goal for full employment, as it is not very easily measurable and thus deviates from the original intentions of the MDGs (Vandemoortele, 2011).<sup>2</sup>

But this leaves many questions about how to implement the goal. There has been a growing consensus that although the goal of full employment has now been established, too little coordinated effort has been undertaken. For example, a review of the MDGs (UNDG, 2010), five years after the inclusion of the subgoal of full employment, reports on the progress or regress in employment issues globally as well as in some countries by means of a number of employment indicators. It also gives 18 narratives of how certain development projects have contributed to more or better employment in individual countries. The variety of examples mentions successes of employment schemes, training schemes for entrepreneurs, training schemes for unemployed youth, improved collective bargaining, social security, etc.

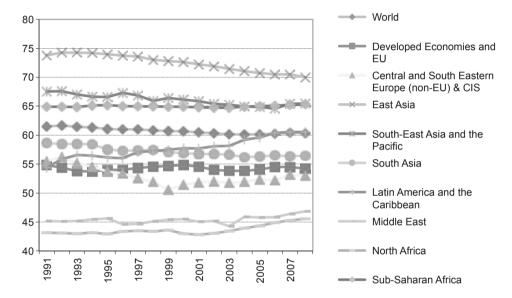
However most of the examples do not make use of any counterfactual analysis, or even mention whether other schemes *mutatis mutandis* have also been contributing to employment creation. Notably absent is macro analysis and its possible impact on employment; thus it remains difficult to distil from the 2010 outcome review how successful these development efforts have been in respect of creating more and better employment.

This reflects the somewhat ambivalent role the MDGs are playing, namely that originally the MDGs were designed to measure and set goals for important aspects of development, without proscribing a concomitant development trajectory. All countries could thus agree with the goals without being obliged to proscribe the same policy prescriptions (developing countries had become very wary of this since the imposition of structural adjustment policies). Yet, despite the intention of not having an underlying prescribing development theory, the MDGs have paradoxically led to a situation where those issues that were not explicitly mentioned in the MDGs, like employment, received consequently less attention in the international development discourse. So it is justifiable that full employment has been added as one of the (sub) goals of the MDGs.

## Employment trends<sup>3</sup>

This section provides, by delineating several trends, an overview of employment trends in developing countries.

First we notice a decline in the employment-to-population rate for most regions in the world. For the world as a whole, the employment-to-population ratio seems to have remained rather constant, but there are important regional differences. All three Asian regions and sub-Saharan Africa had the highest employment-to-population ratio at the beginning of the 1990s, but this has since declined by several percentage points.



**Figure 2.1:** Employment-to-working-age population ratio, 1991–2008; various regions of the world *Source*: ILO, Trends Econometric Models, July 2010

In contrast, the employment-to-population ratio increased slightly from much lower levels in the Middle East, North Africa and Latin America. The lower employment-to-population level in these regions can be explained by (very) low female labour force participation at the beginning of the 1990s. At the global level, we notice two opposite trends, namely an increased ratio for female labour force participants and a decline of male participation (Figure 2.2). The first trend can be ascribed to changes in customs and norms, and the second one more to changes in the structure of the economy.

<sup>3</sup> This section draws on Van der Hoeven (2010).

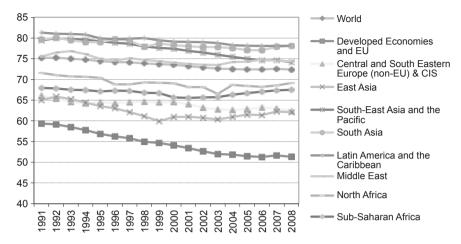


Figure 2.2: Male employment-to-working-age population ratio, 1991–2008; various regions of the world

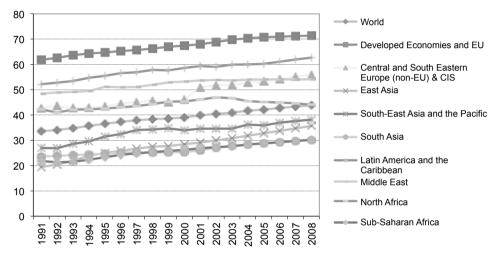
Source: ILO, Trends Econometric Models, July 2010

A second trend is the changing pattern in production. For the world as a whole, the percentage of employment in the service industry rose from 33.6% in 1991 to 43.8% in 2008. A high service sector share of employment was already prevalent in developed countries, the Middle East and North Africa, where we consequently see small increases of around 9.5, 2.5 and 2 percentage points, respectively. However, a massive increase in this share took place in East Asia, where it almost doubled from 19.5% to 35.7%, and in South Asia, where it increased from 23.6% to 30.1%.

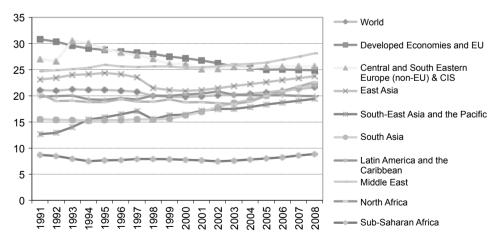
Some analysts interpret the increase of the employment in the service industry as an indication of a post-industrial society and as an important indicator of progress in development. But this interpretation fails to recognise that the service industry encompasses a wide range of activities, from hawking and peddling in the street to sophisticated financial services. Therefore, a better indicator of development for developing countries is the size of the manufacturing sector. Here we notice a different trend over the last two decades. At the global level, the share of employment in manufacturing hardly changed between 1991 and 2008, remaining at 21.5%. But there are again important regional differences. The most dramatic increase is in South-East Asia and the Pacific, where employment in manufacturing increased from 12.7% in 1991 to 19.4% in 2000, and in South Asia where it increased, over the same period, from 15.4% to 22.4%, thereby almost reaching the levels in East Asia, which have remained more or less constant over the period (around 23.5, with a dip of 3 to 4 percentage points around 1998, due to the Asian crisis). Noticeable are the very low and stagnant levels of employment

in manufacturing in sub-Saharan Africa (at around 8.5%) and in Latin America and the Caribbean.

However, it should be noted that the share of employment in industry could underestimate the level of progress in industry. As Rada and Taylor (2006) notice, industry often has high productivity (or a low employment-value-added elasticity). An important issue is, therefore, not only the size of employment in industry but also how the surplus generated in the industrial sector is used for reinvestment and how it is distributed in the rest of the economy.



**Figure 2.3**: Percentage employment services, 1991–2008; various regions of the world *Source*: ILO, Trends Econometric Models, July 2010



**Figure 2.4:** Percentage employment in manufacturing, 1991–2008; various regions of the world *Source*: ILO, Trends Econometric Models, July 2010

A third noticeable trend over the past 20 years is the 'precarisation' (casualisation) of labour or the increase of non-standard forms of employment. Contrary to what has been argued by some, this is not only the case for workers in developing countries, but applies equally for workers in developed countries. Precarisation of workers in developed countries is manifested by changes in employment status, replacing traditional labour contracts by outsourcing contracts, more flexible work arrangements, an increase in part-time work, etc. In developing countries, the precariousness is most clearly manifested in the existence of a pervasive 'informal sector' in the economy or the 'informal economy'. This phenomenon is not restricted to poor developing countries (ILO, 2009).

The existence of the informal economy is partly related to the changes in the structure of employment: especially for the poorer regions, the increase of employment in the service sector reflects an increase in the share of workers engaged in informal activities. For instance, despite increases in per capita income in Latin America and especially in South-East Asia, the size of the informal sector has not declined, but rather increased.

There are, however, contradictory explanations of the pervasiveness of the informal sector. Some authors (for example Maloney, 2004) argue that the size of the informal sector is determined by the degree of labour-market inflexibility and other complexities of labour-market regulations, as well as by various administrative regulations. According to them, the more inflexible the labour market is, the greater the level of avoidance of operating within the formal sector by both employers and workers. Others (for example Kucera & Roncolato, 2008) argue that the major cause of the informal sector activities is the lack of formal jobs. This interpretation has gained ground within the ILO, the Organisation for Economic Co-operation and Development (OECD) and other United Nations (UN) organisations.

There is evidence of a clear link between the increase in non-standard work and income inequality (Rani, 2008), mainly due to widening wage differentials between standard and non-standard jobs. Some would explain this by the low education levels of those engaged in the informal sector. But it is most likely the type of job rather than the educational attainment, which drives inequality. In the absence of newly created formal jobs, an increase in education levels will result in better-educated workers in the informal economy, without a major decline in wage inequality.

It has become common to speak about the 'informal economy' rather than the 'informal sector' as, increasingly, informal activities take place within established enterprises. It would thus be a misnomer to continue to speak about the informal sector.

A fourth trend, which is partly related to changing sectoral patterns and informalisation of employment, is the declining wage share and growing wage inequality which one notices in several regions in the world.

The ILO (2008) reports that, during the period 1995 to 2007, the wage share declined in two-thirds of the developing countries, including the major ones. The only exception was the Latin American region, where some countries witnessed an increasing wage share. The ILO report attributes the declining wage share to increasing trade and globalisation. It confirms earlier research findings (see Diwan, 2001; Harrison, 2002) that, contrary to the conventional wisdom, which sees the labour share in GDP as relatively constant, the proportion of GDP that goes into wages and other labour income is variable over time. Using a data set from 1960 to 1997, Harrison (2002) splits her sample (of over 100 countries) into two, even groups (based on 1985 GDP per capita). Her data show that, in the group of poorer countries, labour's share in national income fell on average by 0.1 percentage point per year from 1960 to 1993. The decline in the labour share accelerated after 1993, to an average decline of 0.3 percentage points per year. In the richer sub-group, the labour share grew by 0.2 percentage points prior to 1993, but then fell by 0.4 percentage points per year in the latter period. Thus there was a trend reversal for richer countries post-1993, and an acceleration of an already downward trend for the poorer sub-group.

Harrison (2002) tested for factors that could explain changes in labour shares, combining detailed national accounts data from the UN with measures of trade openness, capital account restrictions and capital flows. Overall, the results suggest that changes in factor shares are primarily linked with changes in capital/ labour ratios. However, measures of globalisation (such as capital controls or direct investment flows) also play a role. Harrison found that exchange-rate crises lead to declining labour shares, suggesting that labour pays a disproportionately high price when there are large swings in exchange rates (that is, wages are more severely affected than GDP). Capital controls are associated with an increase in the labour share, an effect that Harrison attributes to the weaker bargaining position of capital vis-à-vis labour, if the cost of relocating production increases with capital controls. Foreign investment inflows are also associated with a fall in the labour share. The weak bargaining position of labour under open capital accounts is also a causal mechanism explored by Lee and Jayadev (2005). They find that financial openness exerts downward pressure on the labour share, both in developed and developing countries for the period from 1973 to 1995. Harrison also finds that increasing trade is associated with a fall in the labour share. This result is robust across specifications. These results point to a systematic negative relationship between various measures of globalisation and labour's share in GDP. Globalisation thus calls for specific national and international policies to

arrest the trend of increasing inequality between the labour and the capital share in national income.

Diwan (2001) reports, based on a large sample of countries, an average drop in the labour share of GDP per crisis of 5.0 percentage points, and a modest catch-up thereafter. In the three years after the crisis, labour shares were still 2.6 percentage points below their pre-crisis average. Given the fact that most countries have undergone more than one crisis, the cumulative drop in the wage share over the last 30 years is estimated at 4.1% of GDP, and is especially large for Latin America, where the share dropped by 6.7% between the 1970s and the 1990s. The overall decline in the labour share is partly explained by what some call the ratchet effect: after an economic shock or a financial crisis, the labour share in gross national income decreases (Van der Hoeven & Saget, 2004).

However, not only has the inequality between wages and other components of GDP increased, but the distribution among wage earners has also worsened. The ratio of the average wage of the top 10% of wage earners in relation to the bottom 10% is found to have increased in 70% of the countries. Moreover, one notices similar regional differences — an almost uniform pattern for most regions, but a mixed pattern for Latin America.

A fifth noticeable trend of the last two decades has been the internationalisation of the production process. Today there are some 82 000 transnational corporations (TNCs) with 810 000 affiliates in the world. These companies play a major role in the world economy. For instance, exports from foreign affiliates of TNCs are estimated to have grown from about a quarter of total world exports of goods and services in 1982 to one-third in 2007. And the number of people employed by these corporations has increased fourfold since 1982, standing at about 77 million in 2008, implying a much faster rate of growth than that of the labour force. These TNCs are dominated by a small number of large firms. The largest 100 TNCs account for 11% of all employment in TNCs and for about 4% of world GDP. Over the last 15 years, the largest TNCs have undergone a rapid process of internationalisation. There has also been a progressive increase in the proportion of companies operating in the service sector and of firms based in developing countries (UNCTAD, 2009: 17–18).

A sixth noticeable trend is that of international migration. Global figures for migration do not show a substantial change: in 1960 the stock of total migrants in the world population was 2.7% and in 2005, and also in 2015 this percentage had not changed.<sup>5</sup> This has led some commentators to argue that globalisation is characterised by increased capital flows and increased trade and services flows,

This figure excludes the former Soviet Union because after the independence of the former Soviet republics, remaining Soviet citizens are counted as migrants.

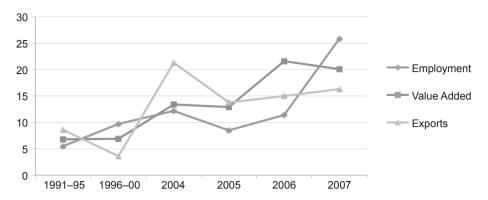
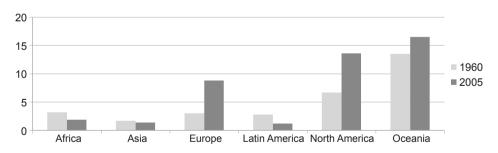


Figure 2.5: Annual growth of employment, value added and exports, transnational enterprises, 1986–2007

Source: Figures drawn from UNCTAD (2009) Table 1.6

but not increased labour flows. However this characterisation is misleading. If one looks at more disaggregated (by region) figures, one clearly sees a growing trend in some regions. In Europe, the stock of migrants as part of the population increased from 3% in 1960 to 8.8% in 2005, and to slightly over 10% in 2015. The same ratio increased from 6.7% to 13.6% and to 15.0% in North America, from 13.5% to 16.4% and to 21.0% in Oceania, and from 4.9% to 37.1% and to over 50% in the Gulf states. By contrast, the ratio of the stock of migrants to the local population declined in Africa, Asia and Latin America, as a whole. The increase in the share of migrants in the local population in developed countries is quite substantial, despite the severe restrictions most of these countries have put on inward migration.



**Figure 2.6**: Migrants as a percentage of the population *Source*: UNDP (2009), Statistical Annex, Table 1

<sup>6</sup> Source for 2015, United Nations (2016).

This increased level of migration is leading to tensions in countries of destination, but is providing an increasing source of foreign exchange for the sending countries. For many developing countries remittances represent a much larger flow than development assistance; for example, in East Asia and the Pacific in 2007, in per capita terms remittances stood at US\$34 per capita, compared with US\$5 official development assistance (ODA) flow—analogous figures for Latin America and the Caribbean are US\$114 and US\$10 and for South Asia US\$33 and US\$6. Only in sub-Saharan Africa was the per capita inflow of remittances (US\$26) lower than that of ODA (\$39), however with substantial cross-country variations. In some sub-Saharan African countries, remittances are higher than ODA.<sup>7</sup>

Using a broad definition, the World Bank estimates that remittances to developing countries amounted to US\$166.9 billion in 2005, compared to US\$85.6 billion in 2000 and US\$31.2 billion in 1990 (World Bank, 2005a: 88). Remittances are not only a rapidly growing source of external finance, but they are generally steady across years and not prone to sudden reversals of direction (Ratha, 2005). They tend to be countercyclical to crises in developing countries (that is, migrants send more money home to support their families) and hence help to smooth consumption volatility. However, the financial and economic crisis engendered by the sub-prime mortgage crisis in the United States is leading to greater job losses than ever, in particular in industries such as construction that have a disproportionate share of migrant workers, creating the possibility of an adverse impact on remittances.

The six labour market trends that we have described above are:

- 1. declining employment population ratio
- 2. the increase in service employment
- 3. the continuing high share of workers in the informal economy
- 4. the declining wage share and greater income inequality
- 5. growing importance of multinational enterprises
- 6. the growing number of migrant workers in industrialised countries.

These give a general picture of increased 'precarisation' of many workers and their families, resulting in part from the ongoing process of globalisation.

Also, in comparison with aid flows, official figures of remittances are severely underestimated, often by a factor of 2:1. Actual remittances flows are possibly larger than ODA in many sub-Saharan African countries (World Bank & AfDB, 2011).

### **Policies for employment creation**

After reviewing some major trends in employment, we discuss briefly which national policies as well as which types of enabling international environment are conducive for employment creation.

In discussing (national) policies for employment creation, it is important to distinguish between short-term (macroeconomic) policies and longer-term structural policies. The first basically strive for full capacity utilisation so that all productive forces, including labour, can be fully engaged in the production process, while the second strive for growth to expand capacity and to increase the employment content of growth (to the extent that increasing the employment content of growth does not jeopardise growth itself by creating unproductive jobs).

It should be noted that this distinction between the short-term and long-term policies for growth and employment creation was very much on the mind of the original architects of the Bretton Woods system in 1945—to the extent that the IMF and emergency funds of the UN were responsible for assisting and guiding shorter-term policies and the World Bank and the specialised agencies of the UN for longer-term policies. However, since the debt crisis of the 1980s and the ensuing structural adjustment policies (now labelled Poverty Reduction Strategies), the picture has become unnecessarily more complex. In order to get a clear picture of how different elements of development aid could better contribute to employment creation, it is in the first instance better to keep the analytical distinction between the short term and long term.

Because the question of the relation between development aid and employment was phrased in terms of employment, it is also important to qualify the term 'employment'.

When assessing any success of employment policy, it is necessary to consider not only the *quantity* of employment but also the *quality* of employment. In poorer countries most people cannot afford to be unemployed. They have to be engaged in whatever survival activities are available and have very vulnerable jobs.<sup>8</sup> Statistics show that people in higher-income classes have higher unemployment rates than people in poorer-income classes (Ghose et al., 2008). Hence we have to introduce some quality elements of employment. Often quality of employment is measured either by a certain income level for the self-employed or wage level for those employed, or by a minimum level of secondary benefits such as social security or access to legally binding employment contracts. A combination of

Vulnerable employment differs substantially in the various regions in the world. The share of vulnerable employment in 2008 was 75.5% in South Africa and 79.6% in South Asia, compared to 53.2% in East Asia and 31% in Latin America and the Caribbean; see Sparreboom and Albee (2011: 61).

these two measurements is also often applied. Terms used in this respect are good jobs, decent work or whether a worker or self-employed person belongs to the working poor or not.

So it is necessary to consider both employment creation and the degree of poverty alleviation when assessing how development aid contributes to employment creation.

## **Shorter-term policies for employment creation: Some illustrative examples**

In developed countries, policy debates on employment over the last 30 years have been dominated by the so-called non-accelerating inflation rate of unemployment (NAIRU), which led many governments to emphasise controlling inflation as the most important instrument of short-term macroeconomic policy. A major problem with the NAIRU was, and is, that it varies substantially, between 3% and 7% in the United States, and another is that the NAIRU is subject to hysteresis: after a period of (financial) crisis, the NAIRU is estimated to be higher than before the crisis (Ball, 2009). This has led, in many developed countries, to too slow and too few reactions to increasing unemployment.

The influence of the NAIRU and the dominance of inflation corrections rather than employment creation, as the principle aim of macroeconomic policy, have also taken hold in policy prescriptions to many developing countries (Freeman, 2007). Therefore, in this section we will argue, by means of numerous examples, that such a policy stance is not necessary and that greater concern for employment creation can be good macroeconomic policy.

The first example of short-term policies for employment creation is in the realm of macroeconomic policy. The World Bank has, over the last five years, become more concerned with growing inequality and has devoted various research publications to this. One example is entitled *Analyzing the Distributional Impacts of Reform: A Practitioner's Guide* (Conway, 2005), which deals with monetary and exchange-rate reforms. It opens with a reference to the so-called 'policy trilemma' of international economic policies (see Cohen, 1993; Mundell, 1963; Obstfeld et al., 2004). This states that national economic policy space is circumscribed by the impossibility of pursuing the following three policies simultaneously: open capital account, fixed exchange rates and independent monetary policy. The trilemma posits that only two out of these three policies can be combined. For example, under a system of an open capital account and fixed exchange rates, countries cannot pursue an independent monetary policy, for example to stimulate employment growth, since interest rates are determined by world interest rate levels. Conversely, if countries need to undertake an

independent monetary policy, they have either to revert to flexible exchange rates or opt for a closed capital account.

The policy restrictions posed by this trilemma do hamper policies for full employment. However, more recent research argues that the policy trilemma, which has guided policy-makers for several decades and is still guiding a majority of macroeconomists, can be relaxed by avoiding the rigid corner solutions referred to above, for example by looking beyond the traditional opposite alternatives of fixed versus flexible exchange rates, or open versus closed capital accounts, to adopt intermediate options in these three policy domains—like capital account management through the selective application of capital controls, or a managed real exchange rate (see Bradford, 2004).9

Although capital controls have, much like any other policy instrument, not always been fully effective in reaching their stated objectives, they have contributed to regaining greater policy autonomy in several cases. In Chile, for example, controls imposed on inflows have helped to reduce their level and to change the composition of inflows towards longer maturities, thereby increasing the autonomy of monetary policy (Gallego et al., 1999; see also De Gregorio et al., 2000). The more controversial issue is controls on outflows, but Edison and Reinhart (2001) argue that such controls enabled Malaysia to stabilise exchange rates and interest rates during the East Asian crisis and to gain more policy autonomy. Kaplan and Rodrik (2001) conclude that the Malaysian approach has led to a faster economic recovery and to a smaller decline in real wages and employment than IMF policies would have done.

How could a system of a managed real exchange rate, the second element mentioned earlier, stimulate employment? Rodrik (2003) and Frenkel (2004) provide three channels:

- 1. Active management of the real exchange rate would allow for higher capacity utilisation in times of unemployment, if applied in combination with the appropriate mix of macroeconomic and fiscal policies.
- 2. It would also stimulate output growth and hence employment, if combined with appropriate industrial policies, as the experience in various Asian countries has shown.

For example, in the case of China, research from the IMF argues that making the quasi-fixed exchange rate more flexible would allow the country to pursue a more independent monetary policy. The same paper also argues for a cautious approach to capital account liberalisation, given the institutional weaknesses of China's financial system (see Prasad et al., 2005). The argument could be extended to many other developing countries. Rather than abandoning capital controls altogether, they should remain a policy tool that can be used selectively.

It could shift the sectoral composition of exports towards more labourintensive goods and hence increase the employment elasticity of the economy as a whole.

Employing a policy mix with intermediate options, such as a managed capital account or a managed real exchange rate, requires fine-tuning and coherence in policies rather than relying on rule-of-thumb policy interventions. This therefore necessitates national institutions with explicit mandates for employment and decent work to achieve this.

Another possible, supplementary element to relax the policy trilemma is to include one or two additional policy instruments to complement the fiscal and monetary tools (see also Tinbergen, 1970 [1952]). Bradford (2004) suggests, for example, social pacts or coordinated wage bargaining to hold down inflation and so 'free up' other policies aimed at growth and employment creation. Also, a greater concern for inequity and a reduction of national inequalities could contribute to reducing inflationary pressure and could be added, either as part of a social pact or as a stand-alone policy instrument (see Van der Hoeven & Saget, 2004). It is thus important to have employment creation and equitable distribution as explicit policy objectives for macroeconomic policies.

A second example of employment-conscious, short-term policies is that of considering central banks as agents of development, as suggested by Epstein (2007). He argues that an employment-targeting approach to central bank policy may seem quite alien to those schooled in the orthodox tradition of inflation targeting and financial liberalisation, but that, in fact, this has been quite common historically in both currently developed and developing countries. Over the years, central banks have been seen as agents of economic development, not just agents of economic stabilisation. And while sometimes central banks have failed quite spectacularly in this mission, there have been other important success stories, including important periods in the United States, United Kingdom, France, Germany, Japan, South Korea and India, to name just a few examples.

As for developing countries, Amsden (2001, 2007) describes the key role that investment banks played in the industrialisation success stories in countries such as South Korea, Taiwan, Malaysia, Brazil, Argentina and others, in mobilising and directing savings to key industrial sectors and, in particular, to those specialising in exports. Epstein (2007) recalls that in many of these cases, central banks were a key part of the government apparatus that played a supporting role by maintaining low interest rates, maintaining capital controls to help stabilise exchange rates at competitive levels, and sometimes engaging in direct lending for preferred purposes. Engaging in these developmental roles, using a wide variety of instruments was widely seen as a key part of the central bank's mission. After the Second World War, there was a major transformation of central banking in

the developing world. In many respects, these changes paralleled those in the developed world. Epstein deplores the resilience of inflation targeting and argues that it is far from benign as it creates in central banks, a *culture* of inflation focus, or even inflation obsession.<sup>10</sup> An explicit employment target as well as an inflation target could change the mind-set of traditional economists.

A third example of shorter-term policies stimulating employment and decent work is that of minimum wage setting. Several ILO studies (Saget, 2001, 2008) have observed that, as a consequence of structural adjustment and liberalisation policies and a breaking down of trade unions and labour market institutions, the minimum wage in a sizeable number of countries is so low that it does not contribute to reducing inequalities or poverty reduction and has, in effect, become meaningless. In a second set of countries, the minimum wages appears to fulfil its objective of reducing poverty without hampering employment creation.<sup>11</sup> But there is also a set of countries in which the minimum wage is very high: too high, in fact, to be considered as a genuine minimum wage, putting at risk economic growth and thus longer-term employment creation. This is the so-called 'maxi-minimum wage' (Saget, 2008). In this situation, minimum wage policies amount more to average wage fixation than to fixing minimum wages. Poorly developed collective bargaining is often a driving factor behind the emergence of such 'maxi-minimum wages'; minimum wage consultations are the only forum in which trade unions can make their demands known, with the danger that the resulting minimum wage is not a genuine threshold, but rather the actual wage earned by most formal workers. In such a process, social groups in countries are actually trying to pursue multiple goals with a single policy instrument, as the minimum wage policy consultation is used as a reference to fix wages and incomes policies, to get a grip on inflation and to promote social dialogue.

<sup>&#</sup>x27;Millions of dollars are spent studying every aspect of inflation, but few aspects of unemployment; thousands of hours of the time of highly scarce, skilled economists are spent pouring over complex models designed to show how to get inflation down from 8 to 4%, but not on how to create more and better jobs; and if other government officials or those in civil society ask the central bank to do something about employment creation, the central banks can respond, "that's not our job". More than anything else, the cost of inflation-focused monetary regimes is to divert the attention of some of the most highly trained and skilled economists and policy makers in developing countries away from the tasks that previous generations of central bankers took for granted as being their main job: to help their countries develop, to create jobs, and to foster socially productive economic growth.' (Epstein, 2007)

It has been argued that the existence of minimum wages results in greater informal employment. The ILO (1997) shows, however, that minimum wages up to two-thirds of the level of wages of unskilled workers will not produce substantial increases in informality.

As is known from macroeconomic policy, one can have only as many policy instruments as policy goals: the minimum wage-setting machinery is expected to respond to too many policy goals (Saget, 2008) and becomes an obstacle rather than an instrument for employment creation and decent work. The interesting and policy-relevant conclusion is that both too low and too high minimum wages are an indication of malfunctioning employment and labour-market policies.

### Longer-term policies for employment creation

Having reviewed some of the short-term policies for employment creation, we now turn to the long-term policies.

A first observation is that misconceived (short-term) macroeconomic policies can prevent economies from achieving sustained growth and employment. Taylor (2009) gives various examples of how stability in interest rates and foreign exchange can contribute to steady growth, but that, with increasing financial openness, pro-cyclical macroeconomic policies, especially for medium-sized and smaller economies, have become the rule rather than the exception, affecting sustained growth.

Secondly, a general opinion among many development economists is that, although economic growth depends on many factors, one factor contributing to growth is structural change, a process in which economic activity is increasingly taking place in sectors with high value added, with diversification and sophistication of production. Although this process of structural change necessitates labour allocation, and can thus generate (frictional) unemployment, the higher value added created in the growth process results in higher incomes from wages and capital, which together with increased demand from abroad, will then lead to higher growth and employment. This virtuous picture can, however, be disturbed when structural change and expanded production and productivity increases in some sectors are not leading to higher national productivity. McMillan and Rodrik (2011), for example, argue that structural change in Asia has led to higher national productivity and growth, but that in Africa and Latin America, until recently, structural change was based on capturing comparative advantages in primary products, leading to lower labour productivity and lower growth, with negative consequences for employment and wages. Asian countries had, and have, an industrialisation process in which industrial policies have been applied successfully, in contrast to Africa, where industrial policies were mainly absent, and in Latin America where, at least until recently, these policies, constrained by the legacy of the Washington Consensus, were not robust enough to be effective. The current debate is therefore not whether public policies for industrialisation are useful or not, but which type of public policies will work best under which circumstances. The former chief economist of the World Bank, Justin Lin, argues,

for example, for a 'new structuralist approach', which would favour industrial policies and attention to infrastructure, especially in the poorer countries, such as those in Africa. This need not to be in variance with the observations of failed structural change in Africa by McMillan and Rodrik, who demonstrated that the structural change in Africa was, in many countries, dominated by emphasising mineral extraction and primary commodity production rather than manufacturing and high-quality services.

It is thus important to consider appropriate policies for structural change and well thought-out industrial policies in a meaningful debate on poverty alleviation, the principal aim of many Western donor agencies.

Melamed et al. (2011), based on the work of Khan (2007) and others, surveyed the literature on findings on the relation between growth, poverty and sectoral employment. In 24 growth episodes, detailed information on growth and employment was available and, out of these, in 18 episodes poverty decreased with rising employment in services and manufacturing in most of them (see Table 2.2). The six cases in which poverty increased or remained stable were mostly characterised by the absence of increases in employment in all sectors. This analysis thus gives support for a link between growth, employment and poverty reduction. However, the link is far from robust, especially as the case of rising employment in a specific sector is most prevalent in the service sector. As has been shown earlier, and in Van der Hoeven (2010), the service sector in most developing countries, especially the poorest countries, harbours a large amount of informal sector service activities, which are often of low productivity and may contribute to the phenomenon of what is called the 'working poor'.

Table 2.2: Growth, employment and poverty: a summary of evidence

Number of episodes	Rising agricultural employment	Rising industrial employment	Rising services employment
Growth episodes associated with falling poverty rates			
18	6	10	15
Growth episodes associated with no fall in poverty rates			
6	2	3	1

Source: Melamed et al. (2011)

Policies for employment therefore do need to take into account the quantity of employment and the quality of employment or, as Khan (2006) has phrased, in terms of more stringent economic analysis—policies for employment need to be concerned with the quantity of employment, the factor productivity of employment and the factor remuneration of employment.

Ernst and Berg (2009) have conceptualised these policy concerns in what they call the 'virtuous circle of links between growth, employment and poverty reduction', namely economic growth, productive capacity, employment with rising productivity, higher incomes of the poor, greater investments in health, education and infrastructure, leading to an empowering of the poor, all contributing again to economic growth. However, there are many obstacles for such a virtuous circle to become effective in practice. Policy interventions are needed to overcome these obstacles and to stimulate employment creation and poverty reduction.

Khan (2007) gives a useful overview of such policies. He distinguishes between the following five policy areas. The poor can escape working poverty when policies arrive at one of the following:

- 1. an increase in wage employment
- 2. an increase in the real wage
- 3. an increase in self-employment
- 4. an increase in productivity in self-employment
- 5. an increase in the terms of exchange of the output of self-employment.

However, the poor face various constraints. One of the major constraints in the current context of globalisation is a low output elasticity of demand for labour and capital intensity of growth. Furthermore, economic growth, often in combination with exports to advanced markets, often leads to a rate of growth in employment for which the poor do not possess the necessary skills. Furthermore, the employment impact of high growth in some sectors is, often in the context of economic reform programmes, offset by a countervailing contraction of employment in other sectors, such as public administration and public companies. Another important factor is that growth might also fail to reduce poverty if the distribution of scarce productive resources is, and remains, highly concentrated.

In order to deal with these challenges, various longer-term employment policies are suggested. These include:

- 1. rapid labour-absorbing growth providing the poor with productive and remunerated employment
- conversion of the poor into productive entrepreneurs engaged in selfemployment, and policies to increase productivity of poor workers, both in wage and self-employment
- 3. labour market policies that improve the skills of the poor
- 4. macroeconomic policies that result in appropriate terms of exchange of the produce of the poor
- 5. in some countries, an orderly rather than a disorderly and sudden dismantling of past systems of inefficient excess employment

**6**. a set of economic and social policies that incorporate specially designed programmes for labour-disadvantaged households.

The effect of growth on employment is sometimes measured by the concept of the employment elasticity of growth; that is to say, the percentage increase in employment, as the consequence of a 1% increase in growth. Although various international reports use this concept, the concept is not without problems. Firstly, in many developing countries people cannot afford to be unemployed or to withdraw themselves from the labour force, therefore the employment elasticity of growth measures labour force participation and does not give an indication of the quality of employment, because all activities performed by the poor are taken into account in the measurement of employment. Secondly, high employment elasticity in itself does not convey success of an employment policy. For example, a country with a high employment elasticity close to one, whose GDP grows slowly, say at 1% a year, is clearly worse off than a country with an employment elasticity of 0.5 but whose GDP grows at 7% per annum.

So when the concept of employment elasticity is used it should be in conjunction with figures on growth and on the quality of the jobs created in different sectors, but never as a single macroeconomic figure in itself.

### **Conclusion**

This chapter has argued that the process of globalisation has led to a precarisation of labour, which is especially manifest in the unstable working conditions of many workers, and in growing inequality between the labour share and the capital share in national income, in more than 75% of the countries in the world, as well as in growing income inequality and wage inequality in many regions in the world. The exceptions have been some Latin American countries, where inequality declined from high initial levels at the beginning of the century, and some countries in sub-Saharan Africa and South-East Asia. The neglect of concern for employment and inequality in the formulation of the MDGs in 2000 and their consequences is noted; moreover, the addition of a goal for full employment in a reformulation of the MDGs in 2005 did not lead to a substantial change in the policies of international agencies and national aid donors. This chapter argues that if the growing concern for employment and inequality is taken seriously, a refocus of national and international development efforts is necessary, combining a greater share of development aid for employment and productivity-enhancing activities, with a change in national and international economic and financial policies, so as to make employment creation (together with poverty reduction) an overarching national and international goal.

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### Chapter 3

## The South African unemployment debate: A basis for consistent policy on employment?

Frederick C v N Fourie

### Introduction

It is regularly stated, especially by policy-makers, that unemployment, together with poverty and inequality—the terrible trinity—are the most critical problems facing South Africa and are obstacles to the creation of a society that is socially, economically and politically sustainable. Despite relatively high GDP growth rates after 1994, and especially from 2000 to 2007, the official unemployment rate, which is narrowly defined, has hovered at approximately 25% while the broad unemployment rate tends to be around 35%. Youth unemployment is much higher, at around 50%. Poverty rates have declined slightly but remain high, especially in rural areas; inequality has increased since 1994.

Much research has been published, involving prestigious universities and institutes, as well as international organisations like the World Bank, the International Labour Organization (ILO) and the International Monetary Fund (IMF). Research activity regarding poverty, unemployment and inequality received a boost over the past decade due to the availability of much better data from household and labour force surveys. Several major policy initiatives have been launched since 1994, all directly or indirectly intended to address the problem of unemployment and its relation to poverty and inequality. Concepts such as 'employment-intensive growth' or 'inclusive growth' reflect the intense concern with employment creation (and poverty and inequality).

Yet it is common cause that meaningful inroads into unemployment have not been made. The question that is addressed here is whether the findings and analytical frameworks of the various research initiatives constitute a sound basis for formulating consistent and successful policies to address unemployment — and for giving content to strategies geared towards labour- or employment-intensive growth, inclusive growth, and so forth.

As will be shown later, a key feature of the South African unemployment debate is that the research debate — and resultant findings and recommendations — is

fragmented into at least three different conversations or 'discourses'.¹ This fragmentation feeds into the policy field. Different interest groups and policy-makers tend to consult, or rely on, favoured research results or experts and they are not well informed about research findings from 'other' sources.

It is likely that these factors contribute to inconsistent and narrowly informed policy proposals from different parties, such as business, labour unions, non-governmental organisations (NGOs) and different government departments. Ideological differences also play a role. Employment and unemployment are at the very heart of the deepest and most emotive ideological divisions in twentieth-and twenty-first-century society. These topics are well-worn battle grounds for intense debates, often reflecting a recurring market-versus-state tension.

This chapter argues that, despite the fragmentation and divisions, many important lessons for employment-oriented policy are to be gleaned from the unemployment debate *if* one is willing to use insights from all the discourses. This is likely to lead to better-informed policies towards unemployment and employment. The chapter distils key findings relevant to employment-oriented policy and employment-intensive growth from the different discourses on unemployment. It also alerts the reader and the policy-maker to the differences between the discourses (and related pitfalls).

'The unemployment discourse landscape' summarises relevant parts of a recent meta-analytical survey of research findings relating to unemployment (Fourie, 2011), also highlighting elements that relate to the question of employment intensity. 'The existence of three discourses: What does this mean?' analyses the main analytical gaps in the discourses, argues for an integrated, cross-discourse approach to unemployment and employment, and notes elements of a coherent picture that can be generated by simultaneously considering the different discourses.<sup>2</sup> The last section concludes with an illustrative list of policy

<sup>1</sup> The term 'discourse' is used in the straightforward sense of 'a conversation among the interested on topics shared' and not in the strict linguistic sense of 'discourse analysis'. In this chapter the unemployment discourses are characterised in terms of their focus, topical content, paradigm, analytical style, terminology and so forth. Of course, these characterisations could be the beginning of a proper discourse analysis relating to economics.

It is not argued that there are no integrated approaches at all. Work in the historical and institutionalist (political–economic) traditions may be regarded as an integrated approach in the sense of integrating political, institutional and economic factors and forces. A South African example is Seekings and Nattrass (2005). However, such an approach does not specifically integrate across the three, largely sub-discipline-determined discourses identified in this paper — although ideology does play a role in the three discourses (see Fourie, 2011). This chapter is about a different kind of integrated approach.

implications, as well as implications for policy concepts such as shared growth, employment-intensive growth or inclusive growth.

### The unemployment discourse landscape<sup>3</sup>

A recent critical survey and meta-analysis by Fourie (2011) of academic research done on South African unemployment in the past 15–20 years reveals that the work, though impressive, is split into at least three discourses that occur within three clusters of work:

- 1. a labour market analysis cluster
- 2. a poverty and development cluster, and
- 3. a macroeconomic/macro-sectoral cluster.

Often these clusters seem to inhabit separate worlds. By and large, each group tends to focus on its own theoretical models and empirical research, and rarely uses results from another cluster. Institutional, ideological, methodological, technical—theoretical and data issues serve to divide. As a consequence, disparate and even conflicting findings abound. A comprehensive, coherent and consistent picture of the unemployment problem—and possible solutions to it—is not generated by these three discourses. Many analytical gaps remain.

Yet important lessons can be learnt if one is willing to integrate understanding from all three sub-debates. Indeed, the gaps suggest important new avenues for looking for remedies. A short overview of each cluster serves to extract the most pertinent points in this large literature at the time of writing (2012).

### The labour market discourse (cluster 1)

A first cluster of research comprises labour market analysis and also involves a consideration of the informal sector. (A brief summary of the findings is provided at the end of this section.)

### 1. On segmentation and categories of unemployed

Typical, and seminal, findings come from Kingdon and Knight (2000; 2006a; 2006b; 2008). They use empirical analysis to do three things. First they assess the position, within the unemployed group, of the non-searching unemployed (discouraged workers) vis-á-vis the searching unemployed. Then they assess the position of all the unemployed against those working in the informal sector. Lastly they assess the position of those working in the informal sector against those working in the formal sector.

Fourie (2011) also provides a diagrammatical representation of the unemployment discourse landscape.

As far as discouraged workers are concerned, Kingdon and Knight find that their lack of job search is not a preference or 'taste'—they are less happy and more deprived than the searching unemployed. Their position is the outcome of constraints: they face greater discouragement regarding the prospects of finding jobs (2000: 6). The main discouragement factors include a low likelihood of finding a job (high local unemployment, long duration of unemployment), poverty (access to water, etc.), limited access to transport and facilities, the high cost of job search, etc. (2000: 4–5).

A next step is to analyse the unemployed (both searching and non-searching) in comparison to those working in the informal sector. They conclude that the unemployed are substantially poorer and living in worse conditions, that they can gain substantially from informal employment, and are less happy than the informally employed or self-employed. Long periods of unemployment—reportedly more than 12 months for 68% of the unemployed—suggest that it is not a 'voluntarily chosen job-search strategy', that job search is inhibited by poverty, and that they face substantial barriers to entry into the informal sector (2004: 395–403). Only 25% of the unemployed have quit voluntarily.

Thus the non-searching unemployed face more deprivation and barriers than the searching unemployed, and both types of unemployed face more deprivation and barriers than those working in the informal sector. Neither of the two states of unemployment is voluntary.

Comparing workers in the informal and formal sectors, Kingdon and Knight find significant differences in earnings: the formal–informal earnings ratio is approximately 3.5:1. After controlling for different personal characteristics, the ratio is still approximately 1.75:1 (2008: 305). This indicates substantive segmentation between the formal and informal labour markets.<sup>4</sup>

They also register, with some alarm, the small size of the informal sector in South Africa—it absorbed only 24% of the broad labour force in 2000, declining to 19% in 2002 (2004: 395). The precise size of the informal sector has been disputed and/or revised to approximately 30% by Kingdon and Knight and

<sup>4</sup> Their conceptual model is that of a segmented labour market, as modelled by Layard et al. (1991: 41–44), which comes from a longer tradition of dual markets or insideroutsider models, dating back to Piore (1973). Kingdon and Knight adopt the Layard model and interpret the primary and secondary sectors in the South African context as being the formal and informal sectors. This means that the formal-sector labour market is rationed (and thus non-clearing) due to efficiency wage setting or union-bargained wage setting, that is, by actors with discretionary power. Thus the presence of sticky, non-clearing wages is also characteristic of this approach. The informal sector is taken as competitive and market clearing. This assumption is not explained.

other researchers (see Fourie, 2011: 14), but the basic finding of a small informal sector stands.<sup>5</sup>

Indications of segmentation have been confirmed by other researchers, for example Heintz and Posel (2008). Using more recent data they confirm formal-informal segmentation. They also find evidence of the existence of subsectors (that is, labour market segmentation) within the informal sector—substantive earnings differentials exist between subsectors of the informal sector. This supports the hypothesis of entry and mobility barriers—informal-sector employment thus is not an easy source of employment with negligible barriers to entry. These barriers may, indeed, be important contributing factors explaining the high rates of open unemployment.

## 2. On transitions between employment states and between the informal and formal sectors

Further insight into job search and constraints faced by the unemployed is provided by Banerjee, Galiani, Levinsohn and Woolard (2006). They quantitatively analyse transitions from unemployment to employment (and vice versa). For example:

- Of the searching unemployed, 19% became employed (in either the formal or informal sectors) within six months while 50% were still searching.
- Of the non-searching unemployed (discouraged workers), 14% got a job, 29% had started searching for work, while 36% were still non-searching after six months.

For a five-year period, job-finding percentages were higher than six months: approximately 45% for the searching unemployed and 35% for non-searchers (Dinkelman, 2004).

These results show that entry into employment (in either the formal or informal sectors) is not easy, even in a five-year period. Job search and job finding is difficult and subject to many constraints, for example long distances from labour markets, high physical costs of job search, possible racial prejudice against Africans, etc.

Another salient point is the importance of that first job. Individuals who have never before held a job are 35 percentage points more likely to be unemployed than workers that have worked before (Banerjee et al., 2006: 33–39).

There are also interesting results regarding transitions between the informal and formal sectors. Only 12% of those who are initially working in the informal

Yu's evidence (2010) suggests that the South African informal sector is in the midrange of developing countries. Some scholars, for example Fields (2011a; 2011b), argue that the concept of informality is too ambiguous and unspecific to be useful at all.

sector make a transition to the formal sector within six months; 52% remain in informal-sector employment; 21% become unemployed and 12% drop out of the labour force (Banerjee et al., 2006: 36). Earlier work by Cichello, Fields and Leibbrandt (2005) over a five-year interval shows that a somewhat higher percentage (17%) make the transition from informal to formal, but it is hardly dramatic. Also, a high percentage (41%) of informal-sector workers end up being non-employed.<sup>6</sup>

The informal sector serves as a step towards formal-sector employment, but its enabling impact is limited. The overwhelming majority do not succeed in making the transition. And the informal sector itself is an unstable employment environment over time (Altman, 2008b: 35).

## 3. On constraints on job search and labour-force participation, especially in poor and rural areas

Another set of evidence relates to the barriers faced by prospective workers in poor and rural areas. Work by Wittenberg (1999: 42) suggests that the rural unemployed do not face a level playing field with regard to efficient search strategies. The key transmitters of employment information are networks that stem from people who are in formal employment. In rural areas, the number of unemployed persons with no access to such labour-market networks (that is, contact with employed persons) is far higher. The rural unemployed are thus disadvantaged in terms of access to labour-market information.

Using employment probability and earnings functions, Bhorat and Leibbrandt (2001) find an asymmetry to finding jobs: urban work-seekers could take rural jobs but, on average, rural work-seekers do not have the characteristics to compete in the urban job market (2001: 127)—even if migration is possible and good labour-market information is available. This suggests spatial rigidities and segmentation, implying barriers to entering urban labour markets.

Specific factors hinder participation. Participation is lower in more rural provinces/areas, for females (and especially for those with a greater number of children and fewer adult women around), for those without secondary education, and if there are more male adults in the household.

Dinkelman and Perouz (2002) find that unemployed men and women are more likely to be searching when living in an urban area, and in an area with lower unemployment rates (2002: 884). Being in rural areas and in areas with high unemployment contributes to a decision to be non-searching. 'Unfavourable

<sup>6</sup> But the formal sector is not much better: 24% of formal-sector workers in 1993 also ended up as non-employed five years later. (Note: Cichello et al. (2005) use the term 'non-employed' to include both unemployment and non-participation.)

labour market characteristics and lack of access to information about employment opportunities make it hard for the most needy rural unemployed to compete in the labour market' (Leibbrandt et al., 2001: 84). Both the decision to search and finding a job are debilitated by poverty. In this way poverty contributes to, or causes, unemployment.<sup>7</sup>

Dinkelman (2004) highlights that household-related factors may be as important as demographic factors in influencing the success of job search (also Cichello et al., 2005: 147). A novelty is her consideration of the household as a shaper of search culture and capacity—as an institutional context within which particular views regarding work ethic, search ethic, know-how and motivation, but also literacy, language skills and access to transport can influence search effort and search success. However, these variables are difficult to measure.

### 4. On the effects of pensions and grants on labour supply

An important theme is the labour-market effects of old-age pensions (and other grants) due to pension sharing within the household. The key question is whether pension and grant receipts act as a *disincentive* to labour-force participation and job search of other family members, or whether they *capacitate and enable* job search and, ultimately, employment.

Findings include negative effects (Bertrand et al., 2003; Klasen & Woolard, 2005),<sup>8</sup> no effects (Posel et al., 2006; Sienaert, 2008) and significant positive effects (Ardington et al., 2009). The type of data appears to have a significant impact on the analysis and findings.

Interesting gender effects surface—relating to both the pensioner and the potential worker. For the latter, Dinkelman (2004) finds that having a larger proportion of pensioners (men *and* women) in a household dramatically reduces the probability of working-age men searching successfully for a job. Bertrand et al. (2003) concurs and finds this effect to be even stronger for the eldest son.

The presence of women pensioners appears to have a stronger overall negative effect than male pensioners (Bertrand et al., 2003; Sienaert, 2008), perhaps because male pensioners keep more of the pension to themselves and share less with the household.

<sup>7</sup> Here the broad definition of unemployment is intended, that is, to include the non-searching unemployed. However, the statement would also be true for the narrow definition of unemployment (although then the negative impact of poverty on labour-participation decisions would be differently assessed with regard to unemployment).

Klasen and Woolard (2005) provide locational and poverty-related evidence on how old-age pensions cause the relocation of adult children to rural areas and away from job opportunities. However, Sienaert (2008: 9, 40) finds no significant evidence in this regard.

Dinkelman (2004) also finds that having male pensioners in the household particularly reduces female search success — perhaps due to the need to care for these men. However, having a female pensioner in the household increases female search success hugely — it appears to release working-age women from household duties (2004: 513).

There appears to be consensus that the presence of pensioners in a household encourages individuals to start doing migrant work (Posel, et al., 2006; Sienaert, 2008). This is especially so for women workers when there is a female pensioner able to handle household chores and care-giving.

On the whole it appears that having more pensioners in a household may have important negative labour-supply effects, though with several gender nuances. For many individuals without jobs, the household may function more as a safety net than as a source of finances for successful search activities (Dinkelman, 2004; Sienaert, 2008). But this issue is far from settled, inter alia due to gender, age or generational and household dimensions (including migrant workers), which need to be differentiated.

Whatever the case may be, these results cannot be interpreted as implying that the old-age pension should be reduced or eliminated to increase the labour-force participation and job search of working-age individuals. The rationale for such a pension has nothing to do with labour supply. That sharing in a meagre pension may be more attractive to working-age individuals than searching for a job, rather points to the levels of discouragement and the presence of significant barriers to job search and labour market entry. (Similar remarks apply to labour-supply effects of the child grant — although here non-distortive grant design may be more important.)<sup>9</sup>

### 5. On the impact of 'too high' reservation wages

A standard market analysis of high unemployment would immediately consider excessive reservation wages — below which unemployed individuals would choose not to work — a likely cause. Yet there is no consistent labour-market evidence that unemployed people have unrealistic job and wage aspirations (Kingdon & Knight, 2001: 93; 2004: 403). Nattrass and Walker (2005) report on a metropolitan survey specifically designed to determine whether the unemployed are pricing

The recently expanded system of child support grants brought the total number of individuals receiving social grants to more than 15 million in the 2011/12 financial year. The value of the child grant is about a quarter of the old-age pension. Early work of Bengtsson (2010) indicates a negative impact on adult labour supply, while Eyal and Woolard (2011) report an opposite effect for a group of black mothers. The jury is still out on this issue.

themselves out of employment. They do not find evidence that relatively high reservation wages are a cause of unemployment.

According to Heintz and Posel (2008: 29), national level data on reservation wages are not conclusive (at their time of writing), but the empirical evidence that does exist suggests it is unlikely that 'unrealistic wage expectations' adequately account for the levels and persistence of unemployment.

Banerjee et al. (2006: 54) report pooled results from several LFS waves on apparent reasons for not working. For unemployed persons aged 20–50 years, more than half reported being unable to find *any* work, irrespective of the wage/salary. The authors conclude that 'reservation wages do not seem to be an important part of the story' (also see Klasen & Woolard, 2008: 39).

# **6.** On the impact of education on unemployment and on employment prospects In the public debate, bad schooling and skills shortages feature prominently as 'obvious' causes of unemployment. However, the link between education and unemployment is complex. Both labour supply (employability) and labour

unemployment is complex. Both labour supply (employability) and labour demand (opportunities and shortages) need to be considered carefully, as well as the relevant flows and stocks of labour. This may not always be done explicitly enough.

As far as overall demand for labour is concerned, several studies show how changes in production methods have led to a shift towards demand for more skilled labour—and negative effects for unskilled workers—since 1970 and continuing up to the present (Banerjee et al., 2006; Bhorat & Hodge, 1999; Dias & Posel, 2007: 3, 19; Rodrik, 2006). There has been a structural change away from the lowest skills-intensive sectors. On the labour supply side, the following can be summarised:

- Labour-force participation is lower for those without secondary education and increases with education level (Bhorat & Leibbrandt, 2001: 113; Kingdon & Knight, 2005: 5). Poor initial education impedes labour-market access (Klasen & Woolard, 2005). Better-educated individuals have a higher propensity to search for jobs (Dias & Posel, 2007: 9; Wittenberg, 1999: 31).
- Unemployment rates are lower for those with higher educational attainment: 'education protects (the individual) against unemployment' (Dias & Posel, 2007: 9). However, this protection is not uncapped. After 1995 (up to 2003) unemployment increased most among both those with some secondary education and those with matric. (Those with tertiary education continued to be protected against unemployment, though.)
- The benefits of education in securing employment only really 'kick in' when labour-force participants have at least matric education (Wittenberg,

1999, 2002).<sup>10</sup> Matric is a potent signal of ability for employers sorting job applicants. Completing secondary school appears to have a substantial effect on successfully finding a job after leaving school—and soon, in the first four years (Lam, et al., 2008: 16–18).

The positive impact of education levels on employability masks a more complex overall demand effect. What is true for the individual is not true for the crowd. Those with higher education levels may simply replace less-educated workers, without any overall increase in employment numbers (that is, the stock of jobs). The capped (and decreasing) protection offered by education may indicate similar stock (or saturation) effects with regard to pre-tertiary education levels.

Of course, net employment-increasing effects due to better education levels can occur insofar as there is actual excess demand for (that is, shortages of, or vacancies for) skilled workers. Perhaps surprisingly, Dias and Posel (2007: 21–23) found little evidence that skills shortages are a major factor in constraining employment expansion by firms. Less than 10% of all the unemployed in the 2003 LFS attributed their joblessness to a lack of skills or qualifications for jobs that were available. In two surveys, firms noted skills shortages as a constraint, but put this only fifth or sixth on the list (Dias & Posel 2007: 23; Devey et al., 2005: 55; 70; also see Lewis, 2002). Lack of work experience apparently is a much more important factor, indicating a need for workplace know-how which cannot be acquired via formal education.

### Box 3.1 The labour market cluster: A summary

From labour economists come repeated findings that the labour market is characterised by segmentation and dualism, such as between homeland and non-homeland areas, between rural and urban areas, between the informal sector and the formal sector, and within the informal sector. Various factors create structural barriers for unemployed people to enter labour markets, whether formal or informal. There are many constraints on job search. Transitions into secure employment are not easy.

The impacts of social policy elements are complex. The presence of old-age pensioners may discourage poor, working-age, household members to search for a job but enable some others to do the same. Education (matric in particular) encourages labour-force participation and job search and increases employment prospects. However, better education cannot increase employment without limit—higher levels of education for all is no simple cure for high unemployment.

Also see Dias and Posel (2007: 11); Dinkelman and Perouz (2002) and Ardington et al. (2009: 28–29).

### The poverty and development discourse (cluster 2)

In the second main cluster, two sub-discourses can be distinguished. (A brief summary of the findings is provided at the end of this section.)

### Poverty and inequality dynamics — and unemployment

This group of contributions is about measuring, understanding, explaining and addressing inequality and poverty. Nevertheless, it contains important insights regarding unemployment and access to labour markets.

Leibbrandt, Woolard and Bhorat (2001) quantify the extent to which unemployment is a major cause of poverty and inequality. Data for 1995 reveal how dominant household wage income is in determining the poverty status of households: 66% of income comes from wage income and 16% from self-employment income (Leibbrandt et al., 2001: 30–31). The limited role of other sources of income to the majority of people means that 'access to wage income is central to determining which households are able to avoid poverty and even the depth to which poor households sink below the poverty line' (2001: 34).

The unemployed are found predominantly in households with no access to wage income. Having at least one member of the household in wage employment almost halved the probability of that household being in deep poverty (Leibbrandt et al., 2001: 80). As a result, a family member losing a job is the main event causing a move into poverty (Klasen & Woolard, 2005).

This confirms that unemployment is a major cause of poverty—implying a bi-directional causality between unemployment and poverty (compare section 'On constraints on job search and labour force participation, especially in poor and rural areas' on page 38). This linkage manifests vividly in the existence of poverty traps—and their negative impact on the likelihood of getting employment (and thereby finding a way out of poverty). Indeed, getting employed from a state of poverty may be very difficult.

Klasen and Woolard (2005) identify four types of poverty traps, that is, initial conditions that impede efforts of households to improve their incomes. These are: large initial household size; poor initial education; poor initial asset endowment; and poor initial employment access (that is, links to the labour market). Thus 'households with few initially employed members and large numbers of unemployed are finding it more difficult to improve their incomes subsequently' (Klasen & Woolard, 2005: 884). This poverty trap, associated with the labour market, suggests 'significant segmentation and disadvantages for those from households with little labour market experience' (2005: 884).

Survival strategies can also trap working-age persons in unemployment. Klasen and Woolard (2008) find that many of the unemployed survive by attaching themselves to a household with some form of income — mostly old-age

pensions. This pertains, in particular, to unemployed adult children who either stay with their parents or move to stay with other family (2008: 25–27). This often keeps them in, or takes them into, more remote rural areas — taking them further away from areas with employment opportunities, also discouraging job search from there (2008: 31). The net effect of these survivalist strategies is the creation of regional immobility and locational rigidities in the labour market (2005: 4, 28).

### Unsustainable livelihoods and marginalisation — and unemployment

Adjacent but identifiably different is the study of poverty in the context of the lack of sustainable livelihoods. This often occurs in the context of dualism between the informal and formal sectors, or rural and urban areas, or the first and second economies — or simply in the phenomenon of economic marginalisation.

Whereas the research in the previous section embeds unemployment in an inequality-poverty nexus, here the entire unemployment-inequality-poverty nexus is embedded in a rich context of social networks, power relationships and systemic historical and political–economic forces. It brings together both quantitative and qualitative research.

The place of unemployment in this discourse is different from those encountered thus far. The focus is on the structural dimensions of chronic poverty and the livelihood strategies of the poor, which includes employment strategies from that condition (Du Toit, 2005: 1). Therefore, the explanation of unemployment is much more complex.

### 1. On deprivation, social dynamics and labour market marginalisation

Household surveys in this cluster explore a range of livelihood components and indicators of deprivation — for example, human capital, household assets, day-to-day household reserves, access to services, debt vulnerability, health issues, geo-social integration, informal and formal networks, broader social networks and local political and economic dynamics and forces.

This produces a rich and multi-faceted picture of deprivation. Du Toit (2005) found, for example, that 70–83% of households report going hungry in the previous year. In some sites, up to 64% of households 'often went without sufficient food'; or up to 45% of households 'often went without sufficient fuel'; and up to 55% of households 'often went without sufficient shelter' (Du Toit, 2005: 6–8). A high degree of cash dependency is prevalent, as is poorly paid and insecure employment, once gained (Du Toit, 2005: 7–8).

In addition, poor people frequently are vulnerable to exploitation and manipulation by those who are more powerful—and they are helpless to change their condition. This is about the 'political economy of poverty and livelihoods'. The poor are adversely positioned in the local configuration of asset distribution,

levels of education, access to resources, labour-market marginality (employment insecurity and unemployment), and, notably, social networks and social power relations in their communities—for example, relative to the rural elite, public officials and other influential gatekeepers of resource and employment opportunity (Du Toit, 2005: 4, 7–11).

All these factors undermine their livelihood and survival strategies — including their access to labour markets. The interaction of these factors can make a successful and sustainable escape from poverty—through employment or self-employment, for example—very difficult (Du Toit & Neves, 2007: 46). In a condition of chronic poverty, a deeper, more malevolent, disempowering, entangling and intractable kind of 'poverty trap' or 'unemployment trap' is present (compare Klasen & Woolard, 2008 and the earlier section, 'Poverty and inequality dynamics — and unemployment' on page 43).

Thus unemployment and enduring poverty cannot be understood, or successfully addressed by policy, without engaging with this reality—and notably its social, sociological and political dimensions, which go far beyond 'malfunctioning labour markets'. Underlying structural dimensions are what renders people vulnerable to being poor and unemployed for long periods of time.

### 2. On segmentation, dualism and the 'second economy'

Du Toit and Neves (2007) make a related point on segmentation and dualism, in particular the 'second economy' metaphor, introduced in the Mbeki era. <sup>11</sup> This term was a recognition that trickle-down effects do not work for those at the margin, which require different interventions. But the concept was open to misinterpretation. Whereas many see the second economy as being structurally disconnected from the first economy, in reality, formal and informal, mainstream and marginal activities often are thoroughly interdependent (Du Toit & Neves, 2007: iv; also Devey et al., 2008: 114; Devey & Valodia, 2009; Philip, 2010a). The problem of poverty and unemployment is not that many people are excluded from or are unintegrated in the economy. It is the *way* in which they are integrated that causes them to be marginalised and powerless to change their position vis-à-vis the 'centre' and to assert themselves as empowered economic actors (2007: 36). (This applies to both rural and urban situations.)

<sup>11</sup> The concept but not the term was introduced by President Thabo Mbeki in 2004. He spoke of 'two nations', and separate First World and Third World economies. Also, the term second economy was not intended to be equivalent to the informal sector, but was quickly christened so by the business community (Du Toit & Neves, 2007: 6). Actually the second economy is broader and includes the involuntary unemployed and some of the economically inactive (see Du Toit & Neves, 2007: 10).

In this view, the challenge is not to eliminate the 'laggard' informal or second economy or integrate it into the first economy, but to analyse and adapt the way the (single, but internally differentiated) economy functions so that the marginalised individuals and informal or survivalist businesses are empowered, and their livelihood and employment strategies supported (also see May & Meth, 2007; Philip, 2010a; Von Broembsen, 2008).

3. Structural inequality as a cause of unemployment among marginalised people Philip (2010a; 2010b) highlights the predicament of marginalised people seeking employment or self-employment—given structural inequality in the South African economy. The people of the 'second economy' face severe economic obstacles that relate to the core economy being concentrated and dominated by large companies (in production as well as distribution and retail), the highly-skewed distribution of assets such as land and capital, as well as the spatial legacies regarding human settlements, economic production and migrant labour. This means that a lack of skills, entrepreneurship or access to credit are not necessarily the main obstacles faced by informal enterprises.

For example, in the informal sector, opportunities for small manufacturing enterprises that target poor consumers are limited because most manufactured goods that are bought by poor people are already mass-produced in the core economy and are available even in remote areas. Access to higher-value or higher-volume market opportunities beyond the local economy faces significant barriers to entry and competition from established core-economy companies. For the informal and/or micro-enterprise retail sector, the opportunity to expand or climb a 'ladder' into more formal enterprise is curbed by 'Big Retail', which is increasingly encroaching into markets previously served by this sector. Entrepreneurial activities in fresh produce and services face similar challenges.

This structural inequality sustains economic marginalisation in a variety of forms and constrains the scope for informal micro-enterprises and self-employment. This means that employment creation 'from below' faces significant constraints and is a poverty trap for many. The poorest and most economically marginalised people simply cannot 'self-employ' their way out of a poverty trap that is structurally determined.

## 4. On the chronic unemployed as an underclass excluded from employment opportunities

Seekings (2003) asks whether the unemployed constitute an 'underclass'. His concern is the 69% of the unemployed who report never having worked before, or the two-thirds of the unemployed with incomes below the poverty line (2003: 20)

and the 68% of the unemployed who have been unemployed for more than 12 months (2003: 10).

He finds evidence that a significant portion of the unemployed and their dependents are, indeed, in an underclass defined in terms of acute disadvantage. Factors underpinning such special disadvantage in the labour market are:

- Long duration of unemployment many are long-term unemployed and have lost the capacity to seek or secure employment.
- Low human capital—they are or have become unemployable, lacking the minimum skills required in the labour market.
- Lack of social capital they have no or limited contact to social networks or connections to employment opportunities via other working, family members or working friends (for example, migrant workers).
- Location they are located a significant distance from areas with employment opportunities, and/or face bad roads to markets, etc., often having attached themselves to families in remote areas that receive social pensions (see Klasen & Woolard, 2008).
- Lack of financial capital for possible self-employment (Seekings, 2003: 19).
- Lack of income more than 80% of the potential underclass are in the bottom four deciles of the income distribution, and more than 50% are in the bottom two deciles (Seekings, 2003: 21). More than 80% of their income comes from pensions and remittances (1993 data).

Such underclass households are susceptible to a range of psychological, social and motivational problems: anxiety, fear, depression, feeling useless and without energy, suffering from boredom, having low self-esteem, being lonely, and being without friends or love partners (Seekings, 2003: 34).

Because of all these factors, and in particular the lack of social capital and networks, these individuals and households are excluded from access to employment opportunities, or at least are disadvantaged in terms of such access (Seekings, 2003: 4). This could impart an ingrained, long-term character to much unemployment in South Africa.

### Box 3.2 The poverty-development cluster: a summary

Development and poverty analysts highlight the existence, alongside the formal and informal sectors, of the worlds of subsistence-survivalist activities, both urban and rural. Several kinds of poverty traps exist, and survival strategies often take people further away from job markets.

Continued

Very different dynamics operate in these worlds, mostly due to various forms of exclusion and marginalisation. Access to formal labour markets becomes very difficult. Barriers include adverse geographical location, and thus high transport costs; a lack of social networks to pass on information about jobs and to support job search logistically in cities; and a general lack of formal labour-market information and modern economy know-how. Structural inequality and the concentrated structure of the core economy all but prohibit informal enterprise and (self-) employment. These factors make job searches expensive and high risk for those with no assets and little cash, and self-employment equally precarious. Psychological and motivational problems due to prolonged periods of joblessness and poverty also significantly affect the job search effort and success.

These dynamics of chronic poverty constitute a 'powerlessness trap'. The condition of poverty as such debilitates and discourages job search and access to labour markets. This means that, whereas unemployment causes much poverty, poverty, in turn, contributes to high and sustained unemployment. This may explain why high unemployment in South Africa is so persistent.

### The macroeconomic and macro-sectoral discourse (cluster 3)

The macroeconomic and macro-sectoral discourse is the one that is reflected most frequently in the public debate. This discourse inhabits a different world, presenting an aggregate take on employment and unemployment, investment and growth, etc. (A brief summary of the findings is provided at the end of this section.)

### A structural change in the long-run equilibrium rate of unemployment?

The first 'macro' discourse, a rather small one, is concerned with the presumed existence of a long-run equilibrium level of unemployment (the non-accelerating inflation rate of unemployment—NAIRU). Banerjee et al. (2006) ask how the large increase in the rate of unemployment after 1995 should be understood. Was it a short-term deviation from the NAIRU level due to temporary shocks—and is the rate of unemployment liable to return to the previous long-run equilibrium without intervention? Or was it a structural shift in the long-run rate of unemployment?

In a largely formal sector analysis, Banerjee et al. (2006: 18–19) demonstrate that the entire secular movement in unemployment between 1994 and 2005 can be accounted for by changes in labour-force participation—mainly a massive influx of female labour supply into the labour force after 1994. In addition, persistent labour shedding by mining and agriculture has occurred since 1970. The mining sector made a transition to lower labour-intensity methods; a similar decline occurred in agricultural employment. Both caused a fall in the demand for unskilled labour. From 1970–2005, total employment had an annualised

growth rate of 1.3% per year, while the working-age population grew at 2.7% per year. Stagnating labour demand thus played a significant role, over a long time, in the growing unemployment problem.

These changes are unlikely to be reversed. Thus, the rise in unemployment in South Africa since 1994 has been due to structural changes in the economy and amounts to an increase in the long-run equilibrium rate of unemployment. The problem will not self-correct. Active policy will be necessary (Banerjee et al., 2006: 6).

## Macro/macro-sectoral analysis: On economic growth, employment and wages

The second 'macro' discourse deals with employment, economic growth, sectoral shifts or changes in specific sectors. Much of the talk of labour-intensive growth or inclusive growth policies is situated here, often with regard to manufacturing.

One quite general characteristic is that most of the work deals with the formal sector only. This is not trivial, given that informal-sector workers comprise approximately 25–30% of all employed and that, between 1997 and 2003, less than 40% of the total number of new jobs in the economy were created by growth in formal sector employment (Casale et al., 2004: 988; Yu, 2010: 25).

### 1. On labour absorption from GDP growth — and jobless growth

The statistical relationship between economic growth rates and formal employment over time is important. It relates to the labour intensity of growth, or the absorption of labour due to growth. This is measured by the employment coefficient (i.e. the ratio of employment growth to economic growth rates).

Hodge (2009) shows that for 50-odd years (1946–2007) the value has fluctuated around an average of roughly 0.5. Such a number means that economic growth leads to formal sector employment growth of only half the real GDP growth rate.

Drops in the coefficient below zero in the 1990s were outliers; the employment coefficient subsequently returned to its long-term value of approximately 0.5. This indicates that jobless growth is not a long-term characteristic of the South African economy. (Jobless growth would require a value below zero.) Thus the rising rate of unemployment after the middle 1990s was not due to an abnormally deficient growth and employment performance of the economy (Hodge, 2009: 502).<sup>12</sup>

<sup>12</sup> Hodge's interpretation here is not quite correct. In the 1990s there were several years of decline in the level of aggregate labour absorption, notably in mining, agriculture and manufacturing (see the earlier section, A structural change in the long-run equilibrium rate of unemployment?), whereafter the rate of growth of aggregate labour absorption returned to normal levels relative to GDP growth.

The cause is not the labour demand side of the economy, but the large increase in the labour force in the mid 1990s (however, see the earlier section entitled 'A structural change in the long-run equilibrium rate of unemployment?').

Of course, any employment coefficient below one implies continually declining labour absorption relative to output. In this sense the employment performance of the South African economy has been declining steadily for many decades — with the 1990s as a particularly bad patch.

As Hodge notes, an employment coefficient of 0.5 is woefully inadequate under conditions of large-scale unemployment. But it is not easy to raise the coefficient. And while growth may pick up in the medium term, the prospects for a sustained lowering of the high rates of unemployment will depend mostly on continued moderation in labour-force growth (Hodge, 2009: 502). People have been entering the workforce at too high a rate since the 1990s.

This pessimistic conclusion captures an important implication of the employment coefficient: formal-sector economic growth alone is unlikely to absorb sufficient numbers of people to reduce unemployment rates significantly (unless real growth rates increase dramatically, of course). Alternatively, the employment coefficient—that is, the labour intensity of growth—must be elevated, in some way, above the long-term value of 0.5.<sup>13</sup>

## 2. On growth constraints, especially wage levels and wage rigidity

Whereas the previous section reflects a concern that growth does not create enough employment, another line of research considers whether the labour market is constraining growth.

There are two key issues, that is, (1) wage levels and wage elasticity, and (2) the causes of badly functioning labour markets. Both are powerful dividing wedges in this debate. The role of ideology and methodology can also be observed. This is a strongly contested terrain, especially on whether excessive real wage increases are a major cause of low employment growth.

<sup>13</sup> The estimation of the employment coefficient (or the output elasticity of employment) is an area of contestation; it can also be done at the sectoral level (see Fourie, 2011: 50–52 for an overview). Too high a value can lead to over-optimism regarding the prospects for reducing unemployment through GDP growth. Altman (2008a: S143), presenting revisions to employment data between 1995 and 2006 and revised formal-plus-informal employment data, estimates the simple employment elasticity to be in the interval 0.45–0.66, depending on the period and data source. In its National Development Plan, the National Planning Commission (NPC, 2012: 121–122) appears to use a value of 0.6 for the formal sector and 0.5 for the informal sector (which appears particularly high; see Altman, 2008a: S143 for other estimates).

## **Box 3.3** How high is the wage elasticity in South Africa?

The wage elasticity of employment in South Africa has regularly been found to be negative (as economic theory would predict).

Calculations of the employment elasticity in South Africa typically range from -0.66 to -0.85 (Fields et al., 1999: 5; Nattrass, 2000: 84). More recently Rodrik (2006) estimated the real wage elasticity at -0.6. (This number implies that a 10% increase in real wages is likely to lead to an approximately 6% decline in the aggregate demand for labour.)

The dispute goes back to the Macro-Economic Research Group (MERG) (1993: 152–154) which rejected IMF and World Bank views (for example Fallon, 1992) that excessive increases in real wages have been the main cause of low employment growth. MERG attributed the latter to inadequate growth in aggregate demand and output, as well as inadequate labour-force education.

Lewis (2002), a World Bank macroeconomist also concerning himself with poverty and livelihoods, provides a synthesis of insights from World Bank research on labour-market regulation and wage flexibility in South Africa. These include broadly parallel upward trends of real wages and unemployment for lower-skilled labour from 1970–1999. At first glance this 'supports the neoclassical conclusion that unskilled and semi-skilled labour has to a large extent been priced out of the market' (Lewis, 2002: 746). However, Lewis cautions that a complex issue such as the relationship between real wages and unemployment cannot be analysed with visual patterns.

Regarding labour-market regulation, he quotes from a 1999 survey of CEOs of large firms putting the (at the time) new labour regulations only fourth on their list of constraints on investment and growth.<sup>14</sup> For small, medium and micro enterprises (SMMEs), the four main constraints on expansion did not include any labour issues (Lewis, 2002: 739–740).

These ambivalent views show 'how difficult it is to disentangle the effects of labour legislation and regulation from underlying economic and industry trends' (Lewis, 2002: 734). He concludes that the new labour legislation 'does at least appear to contribute to an impression of inflexibility' (2002: 747), and undoubtedly 'along some margin, perhaps fairly wide, labour-market institutions

<sup>14</sup> The impact of labour regulations follows crime, the cost of capital and credit, and exchange-rate volatility. While 40% of firms said regulations caused them to employ fewer workers, 60% said that the combined labour legislation had had no cumulative impact on employment decisions (Lewis, 2002: 748). Almost 30% said that labour relations had been improved, and 15% said the regulations had helped to raise labour productivity (2002: 734).

and regulations have constrained more rapid growth in employment' (2002: 748). However, Lewis finds it hard to imagine that wage inflexibility could account for African unemployment rates above 30% — or that greater flexibility would double African employment (2002: 748–749).

Fedderke (2004), concerned that the labour market is constraining growth, is not similarly circumspect in his conclusions. He presents decomposition results that show a declining contribution of labour (as a production factor) in output growth in the 1990s—the flip side of a declining labour intensity of production—and suggests that the labour market is a 'problem market', mostly due to rigidities, distortions and inefficiencies.<sup>15</sup>

Fedderke and associates set out to demonstrate that real wages matter in observed employment trends—in particular that, given the negative wage elasticity, excessive increases in real wages were a major cause of the decline in formal-sector employment in the 1990s. The basic evidence shows, for example, that in the 1990s mining employment declined amidst growing output—and increasing real remuneration (Fedderke, 2004: 56–58; Fedderke & Pirouz, 2002: 13; see Lewis above). Thus a plausible hypothesis is that rising real labour cost may have contributed to declining employment. They also show results that confirm the negative value of the wage elasticity, also sectorally (also that larger values are likely for less-skilled labour). Hence, for Fedderke, finding the culprit for the poor contribution to employment growth is simple: 'Wage moderation has been insufficiently practised' (2004: 98).

Next, relying on the neo-classical theory of 'well-functioning' labour markets, Fedderke and Mariotti (2002: 853–854) develop an argument on the desirability of labour-market flexibility. They produce data that suggest that faster employment growth occurs in sectors in which labour remuneration conforms more closely to 'the dictates of standard economic theory' and conclude that markets should be able to adjust freely and rapidly to the market clearing wage suggested by labour productivity—thus labour-market flexibility is desirable (Fedderke & Mariotti, 2002: 854). <sup>16</sup>

This illustrates a theory-dominant type of argument for the desirability of labour market flexibility (see Box 3.4) as follows: since wage adjustments are

<sup>15</sup> Fedderke estimates the labour contribution to output growth in the 1990s at -0.58%. This is far outside the normal range of 0.6% to 0.9%. The results of Hodge (2009: 497) suggest that the transition period around 1994 may have been an abnormal period, with formal-sector employment quite unstable. It appears that Fedderke's conclusion on a *general* problem with the labour market on the basis of the transition period data may not be warranted.

At a market-clearing equilibrium in a perfectly competitive labour market, the real wage (marginal cost) equals the marginal product of labour.

inadequate to clear the market (which would eliminate voluntary unemployment, according to the theory), the logical deduction is that labour markets currently are constrained. Inappropriate pricing of labour, which causes continued high unemployment, is linked to rising labour market rigidity resulting largely from labour market regulation. Therefore, labour market regulation needs to be revisited and relaxed. With generally freely-adjusting wages, the labour market would not be a 'problem market'. The resultant lower wages and reversal of the 'excessive wage increases of the 1990s' would increase employment and labour absorption and reduce poverty.<sup>17</sup>

A contrary finding on real wage costs comes from Rodrik (2006) from the Harvard Centre for International Development (CID) and a member of the Accelerated and Shared Growth Initiative for South Africa (AsgiSA) expert panel. He provides empirical findings that the decline in formal-sector employment in the 1990s was not due to increasing real wages (that is, wage-push).

First, while South African wages (in the formal sector) are quite high relative to countries at similar income levels, in general real wages have not risen much, if at all, since 1994 (Rodrik, 2006: 2). The role of unions seems to have been mostly to prevent the real wages of their members from falling. Secondly, Rodrik decomposes real remuneration per employee in manufacturing (which increased steeply in the 1990s) to eliminate the part due to skills-upgrading. The remaining component—that is, skill-adjusted real labour costs—would reflect any wage-push. These costs actually fell significantly during the 1990s (Rodrik, 2006: 15, 45). Therefore, excessive real wage increases cannot have caused the decline in manufacturing employment in the 1990s. <sup>18</sup>

Rodrik is not saying that employment would not react to real labour-cost changes. His contrary finding for the 1990s compared to Fedderke is based on a more refined, skills-adjusted calculation of real labour costs (rather than simply using real wages).

Pollin, Epstein, Heintz and Ndikumana (2006), in a report sponsored by the United Nations Development Programme (UNDP), provide somewhat contrasting perspectives on the causes of the problem of mass unemployment. On the demand side, Pollin et al. (2006: 10) highlight two factors impacting on low employment growth. First, low GDP growth: at approximately 4% it is too low to be a major 'engine of employment growth'.

<sup>17</sup> See Fourie (2011: 52–56, 79–80) for a fuller discussion of these issues.

<sup>18</sup> Banerjee et al. (2006: 24; 31–32) note a 10% decline in real wages for 1995–2005, and the absence of evidence that the increase in unemployment was driven by wage growth — despite a large and growing union wage premium.

Second, and most importantly, there has been a significant decline in labour intensity since 1994. In the entire period 1967–2001 there was a gradual drop from 8.2 formal economy workers per R1m output in 1967 to 4.9 in 2001—a total of 40% in 44 years. (This is in line with an employment coefficient below one.) However, in 1994–2001 alone there was a drop of 28% (Pollin et al., 2006: 10). This occurred especially in mining and manufacturing, and mainly due to mechanisation and new labour-saving technology in the context of global competition (also see footnote 15).

On the supply side they scrutinise labour costs. They reject the view that excessive real wages are — together with labour market regulations — at the root of unemployment and the decline in labour intensity. Peferring to Fallon and Lucas (1996) and the qualified conclusions of Lewis, they argue that the evidence linking mass unemployment to high labour costs, especially relative to South Africa's trade competitors, is 'not persuasive'. And the businesses reportedly affected negatively by rigidities imposed by unionisation and regulation (see Lewis above) at most employ roughly 10% of South Africa's labour force (Pollin et al., 2006: 29). Therefore: 'It is fair to conclude that, based on this evidence, the argument that excessive wages and labour market rigidities are one of the primary causes, if not the primary cause, of mass unemployment in South Africa, is based on a weak empirical foundation' (Pollin et al., 2006: 32).

Moreover, even if increasing real wages were the cause of low employment growth, wage reduction can be no solution (2006: 27) given initial inequities in remuneration. Pollin et al. estimate that to halve unemployment may require an average real wage reduction of almost 40% (2006: 33). The negative impact of real wage cuts on worker morale is also likely to reduce worker productivity and workplace efficiency and thus output (Pollin et al., 2006: 35). Far better would be an employment-targeted economic programme to increase labour absorption and economic growth (see the section entitled 'Macro or macro-sectoral policy prescriptions for growth and employment' on page 58).

## 3. On sectoral shifts, skill intensity and unemployment

Rodrik (2006) provides a macro-sectoral analysis of sectoral shifts in formal employment, notably tradeables versus non-tradeables, while distinguishing demand for unskilled and skilled labour.

Employment in tradeable activities (mining, agriculture and manufacturing) dropped from 45% to 30% of total formal employment from 1970 to 2004.

For example, referring to a Fallon and Lucas (1996) estimate of a -0.71 wage elasticity for black employees, they point out that the 'impact elasticity' is only -0.16, implying that any adjustment of employment to wage changes is quite slow.

In contrast, employment in private non-tradeable activities (financial services, construction, trade, retail, transport, etc.) increased from 25% to 37%. The decline in agricultural and mining employment has not been compensated for by an increase in manufacturing employment. South Africa has actually deindustrialised in the past 30 years (Rodrik, 2006: 5–6).

This has had major implications for the employment of low- and unskilled workers—and thus for unemployment, which is heavily concentrated among the unskilled. The declining sectors—the tradeable sectors—have been the lowest skill-intensive parts of the economy. By 2004, more than 70% (60% for manufacturing) of tradeable-sector employees were low-skilled and skilled workers, as against only 25% for private non-tradeables (Rodrik, 2006: 2–3, 8)—even though production techniques in manufacturing and the other tradeable sectors have become more capital-intensive (2006: 10).<sup>20</sup>

The structural shift away from the lowest skills-intensive parts, that is, tradables, and especially manufacturing, is essential to understanding unemployment and employment trends.

## **Box 3.4** A study in contrasts

The contrast is enormous between Fedderke-type macroeconomic conclusions and the findings highlighted in the first two clusters. In considering labour-related constraints on growth in South Africa, or on the functioning of labour markets, no thought is given to the voluminous literature on constraints deriving from labour market segmentation, barriers to labour market entry, barriers to job search, or the impact of poverty conditions on job search and job finding by the poor.<sup>21</sup> These factors prevent a free flow of labour into, especially, formal-sector labour markets, thus the reach and smooth functioning of labour markets are constrained. Fedderke, for example, takes no note of these empirical results from 'another world'. In the final instance, economic theory (the standard model), rather than being informed by a broad range of evidence, is uppermost when drawing conclusions.<sup>22</sup>

Actually this is not uncommon—most macroeconomic models have relatively simple labour market supply-and-demand components, which tend to ignore empirical information, for example, barriers to labour market functioning. The concept of rigidities is limited largely to government-induced regulatory interventions (in addition to unions and, for example,

Continued

All the sectors have become less low-skill intensive since 1970. But tradables are still the most low-skill intensive by far.

Other constraints on growth may include deficiencies in infrastructure, telecommunications, energy, water, spatial planning, logistics, and so forth.

<sup>22</sup> This reveals a predominantly rationalist inclination (perhaps matching much Empiricism in, for example, the labour-market discourse (see Fourie, 2011: 80).

bargaining councils). Many commentators, private-sector economists and economist-lobbyists adopt this line of thinking when commenting on unemployment and labour-market policy.

Lewis's broader awareness, in the World Bank context, of social conditions, poverty and sustainable livelihoods appears to lead to a more careful, qualified engagement with wage and employment data. He appears to be sensitive to the complexities of these metrics in the South African, developing-country context. But while Pollin et al. (2006) display similar sensitivity to the broader social and development context, their economic policy proposals are singularly about economic growth and the formal sector. Perspectives from neither the labour nor the poverty discourse are incorporated.

#### 4. On policy contradictions: A historical-institutional perspective

Seekings and Nattrass (2005: 340–375) provide a different, political–economic analysis of the first decade after 1994. Though not quite part of any of the discourses, it is worth noting here, in part because it may explain why unemployment and employment patterns in the 1990s appear to reflect an outlier decade fraught with major policy uncertainties and adjustments (see the earlier discussion of Hodge [2009] and footnote 15).

Not in the statistical-empirical tradition encountered above, they develop a historical-institutional narrative around institutions, economic policies, labour-market policies and industrial policies — and how their combination affected the growth, unemployment and distributional outcomes before and after 1994.<sup>23</sup> The analysis is mostly at an aggregate or macro-sectoral level.

The late-apartheid period was characterised by a capital-intensive growth path, despite high unemployment (Seekings & Nattrass, 2005: 340). Perhaps surprisingly, this was continued after 1994 via the adoption of an industrial strategy intended to induce the private sector to adopt high-wage, high-productivity, skill-intensive technologies as the new 'engine of sustainable growth'. This, combined with minimum wages, would force a shift away from low-wage, low-productivity, 'bad' jobs and create increasing numbers of 'good' jobs. Labour-market policies would focus on improving training and the supply of skilled labour for these jobs and on discouraging the creation of low-wage, labour-intensive conditions (Seekings & Nattrass, 2005: 347–348). Public works programmes and improved social protection would provide relief for the unemployed.

<sup>23</sup> They designate this combination as the 'distributional regime'. Their analysis involves political and institutional factors, different types of policies and different (sub-) disciplines.

Actual events point to a severe failure of policy consistency and coordination. The Department of Trade and Industry's support for targeted industries was not effective and manufacturing did not deliver on employment growth. A Growth, Employment and Redistribution (GEAR)-induced restrictive monetary and fiscal stance served to constrain aggregate demand, and investment in particular. The Labour Relations Act (66 of 1995) entrenched wage determination via centralised bargaining councils, where the extension of minimum wages (set by stronger employers) to smaller, labour-intensive firms undermined the latter's growth. The Basic Conditions of Employment Act (75 of 1997) restricted hours of work, increased overtime pay and determined minimum benefits and wage floors; the cost of retrenching workers rose (Seekings & Nattrass, 2005: 350). Labour-intensive firms and sectors were particularly vulnerable. Simultaneously, trade liberalisation hit import-competing industries hard—particularly the more labour-intensive industries such as clothing.

Workers who lost their jobs due to these developments were not mopped up, as was intended, by growing 'good job' industries (Seekings & Nattrass, 2005: 351). Public works programmes were not implemented effectively either.

A similar narrative holds for agriculture. Commercial farmers were increasingly subjected to tough local and international competition (due to deregulation and the withdrawal of subsidies). Simultaneously, labour legislation and minimum wages, together with compulsory security of tenure of workers on farms, were introduced. Intended to protect the unskilled working poor on farms, the effect might have been the opposite. The number of workers resident on farms was pre-emptively reduced. Farmers also reduced their (unskilled) labour requirements, opting for capital-intensive methods and more part-time or seasonal employment. Land reform failed to generate self-employment for significant numbers of smallholder (black) farmers. The Department of Land Affairs and Agriculture's policies appeared to encourage capital-intensive farming methods and increasingly supported black commercial farmers (Seekings & Nattrass, 2005: 352–355).

The cumulative result of this combination of policies was a capital-intensive growth path in which unemployment increased significantly. Those with jobs had rising real wages. The unemployed, and especially the rural poor, were the biggest losers (Seekings & Nattrass, 2005: 351, 375).

This analysis highlights how contradictions between policies (including institutional components) that affect the growth path and labour markets can be a major cause of unemployment. This also means that no single, or even one dominant, causal factor was determining (un)employment after 1994.

## Macro or macro-sectoral policy prescriptions for growth and employment

A review of largely macro-sectoral policy proposals emanating mainly from institutional or larger teams (all mostly comprising international economists) provides an interesting perspective on the evolution, but also the typical character, of proposed policy approaches since 1994. Of particular interest is their attention to sectoral strategies and whether these are coupled with increasing labour intensity and, of course, growth.

## 1. Lewis and earlier World Bank perspectives

Lewis (2002) summarises 1990s World Bank thinking on enhancing economic growth and job creation in South Africa. Proposed steps include:

- Macroeconomic and other policies for improving the investment (and foreign direct investment) climate by addressing constraints on growth, plus trade liberalisation (to turn around the tendency of exports to be low in unskilledlabour intensity) (2002: 758).
- Support for the SMME sector, which tends to be more labour-intensive. It is constrained by limited access to, and high cost of, capital, inadequate demand, weak support and procurement from government, and so forth. This sector previously was crowded-out by the effect of sanctions on export markets, a trade regime that favoured capital-intensity, and distortions in factor markets. Noticeable is that Lewis sees this as part of the larger problem facing the emergence or expansion of informal and/or start-up firms (2002: 739).
- Enhancing labour market flexibility, especially for youth and highunemployment areas. While, as noted above, Lewis finds it hard to imagine that inflexibility could account for African unemployment rates above 30%, or that greater flexibility would double African employment, careful and targeted attention to this matter is bound to have a positive impact.
- Augmenting the skills base of the labour force to enhance productivity and the employability especially of the unemployed.
- Employment subsidies (as part of real wage growth moderation) to encourage employment.

There is no specific focus on increasing labour intensity in certain sectors, or use of a term such as inclusive growth. Also, the focus is on formal-sector issues, although there is some awareness of informal-sector issues in the SMME context. Lastly, one finds a more or less standard conceptualisation of labour market rigidity which does not consider segmentation or poverty-related 'supply-side' labour-market barriers — except skills and education constraints.

#### 2. The AsgiSA panel

The AsgiSA (or Harvard) panel had a particular concern with increasing labour intensity, and was quite novel in their specific regard for low and unskilled labour intensity—in addition to growth as such. Rodrik (2006) argues that high unemployment and low growth in South Africa since the early 1990s are both, ultimately, the result of the shrinkage of the non-mineral tradeable sector. The informal sector is unlikely to absorb significantly larger numbers of unskilled job seekers, and real wage cuts for low-skilled workers is unlikely to be a feasible option to reduce their unemployment, given the social and political context (Rodrik, 2006: 10–11). Manufacturing still is the sector that is most intensive in low- and unskilled labour absorption—even though these intensities have declined from as far back as 1970.

Therefore, the only option is the expansion of non-mineral tradeables—and manufacturing in particular—linked to an export-oriented strategy; this will generate economic growth by pulling labour into more productive activities. And since tradeables are relatively low-skill intensive compared to service activities (that have been the major beneficiary of recent patterns of structural change), such a strategy will entail 'shared growth' rather than trickle-down growth. The cures for low growth and high unemployment are largely one and the same (Rodrik, 2006: 4).

The final report of the AsgiSA panel (Hausman, 2008) also recommends depreciation in the real exchange rate to remedy the manufacturing sector's profitability. The panel concludes on an optimistic note: 'the faster development of new high productivity tradeable activities will create jobs that can pay decent wages, so that full employment can be achieved without a major decline in wages at the bottom of the pay scale' (Hausman, 2008: 11).

The reference to full employment suggests that discouraged workers and structural (that is, non-frictional) long-term unemployment are outside their frame of reference. Also, their analysis applies only to the formal sector and to strictly defined unemployment.

#### 3. The Seekings and Nattrass proposals

Seekings and Nattrass (2005: 380–392), using historical-institutional analysis, suggest—alongside the promotion of high-productivity activities—the creation of low-wage jobs. (This is part of a social-democratic package that includes better educational opportunities, welfare reform, worker ownership of firms and land reform.) This employment path could include job-sharing or lower-wage, labour-intensive activities, and public-works programmes. Targeted regulatory changes are needed to make it easier for lower-wage, labour-intensive activities to survive. This could include removing or lowering minimum wages for such firms,

removing the extension of collective bargaining agreements to non-parties, and changing rules about retrenchment (Seekings & Nattrass, 2005: 390).

Realising that organised labour would be reluctant to agree to a low-wage strategy, a social accord would need to be negotiated among organised labour, capital and the state, hopefully enabled by a general recognition of an employment crisis. Contrary to the current corporatist composition of the National Economic Development and Labour Council (NEDLAC), it would have to include the labour market outsiders (the unemployed, civil society organisations) in some way. An insiders-only accord is unlikely to produce a meaningful impact on unemployment.

While the authors are deeply concerned with inequality, poverty and the position of labour market outsiders, the proposals of Seekings and Nattrass appear to focus on formal-sector employment only.

### 4. The UNDP panel

The UNDP-sponsored report of Pollin et al. (2006) explicitly focuses on 'an employment-targeted economic programme for South Africa'. Regarding a 2004 government goal to halve unemployment by 2014, they proposed three sets of policies (Pollin et al., 2006: 39):

- 1. Increase the rate of economic growth.
- 2. Increase the average labour intensity of output.
- **3**. Increase the degree of inclusion of the poor in society, and particularly in the job market.

Regarding labour intensity, the report first notes the importance of public employment schemes such as the Expanded Public Works Programme (EPWP). However, its scope is too limited: even the EPWP component of public infrastructure (R3 billion of R30 billion at the time) is too small to make a meaningful impact on aggregate employment.

Regarding private-sector employment, they propose carefully identifying activities with potential for producing the biggest boost in employment. This requires considering (1) own employment intensity as well as (2) the overall employment multiplier, that is, including backward employment linkages to other sectors. An activity may produce a large overall boost to employment even if it is not highly labour intensive itself, but because of backward linkages to other sectors that are labour intensive. That means considering, in addition to labour intensity, the total employment multiplier of an activity as the basis for policy support. Agro-processing is a good example.<sup>24</sup>

Agro-processing is very capital intensive (2.3 jobs per R1m output) but with strong employment linkages (15.7 jobs per R1m), producing the third-highest total

A sector that is capital-intensive but with labour-intensive linkages is also the appropriate place to pursue high productivity and new technologies. Mining would be an example (Pollin et al., 2006: 65). Other criteria would include balance-of-payments and poverty-reduction impacts (for example, small-scale agriculture; social and community services). They propose that the following industries/sectors be boosted: agriculture; agro-processing; apparel and textiles; wood, paper and furniture; and social and community services.

Eventually, as part of generally growth-enhancing steps, they also propose the stimulation of manufacturing sectors, such as motor vehicles and capital-goods industries—even though they have low employment multipliers. This, they argue, is warranted to enhance productivity and produce competitive capital goods (for example, office equipment) for domestic and export markets, that is, import-competing capital goods (Pollin et al., 2006: 140).<sup>25</sup>

It is noticeable that this report displays much sensitivity for the condition of the poor and development issues. But eventually there are no proposals for 'inclusion of poor, particularly in the job market', except for the EPWP; what is surprising is that they appear not to consider the capacity-enhancing impact of EPWP work on individuals, which could potentially enable post-EPWP labour market access for the poor (contrast NPC, 2012: Chapter 11). There is no strategy for the informal sector either. The calculated employment multipliers are only for formal sector jobs, and in their employment scenarios they simply assume the informal sector to remain constant at 27% of total employment. The report also does not consider segmentation or labour-market access barriers. At heart it remains a macro approach.

### 5. The IMF and OECD proposals

Similar criticisms would apply to a group of official reports from international and local organisations. The IMF and the Organisation for Economic Co-operation and Development (OECD) country reports often address unemployment and labour-market issues as part of a package of largely macroeconomic findings and proposals. Given their influence in the public debate, characterising these are important. Often there is limited reporting of the research itself, but one can

employment multiplier of 18.2 jobs per R1m output. Agriculture is the sector with the highest total employment multiplier of 27.9. Motor vehicles and chemicals have values of approximately 9, and mining 13 (Pollin et al., 2006: 63).

In this sense, together with explicit labour-intensity enhancing selective sector stimulation, they adopt a two-pronged formal-sector stimulation strategy—one internally oriented, the other externally oriented. Compare NPC (2012: Chapter 3) for another kind of two-pronged proposal; also see Seekings and Nattrass discussed earlier.

recognise typical themes. In the 2007 IMF country report (IMF, 2007), we find the following:

With inflation risks on the upside, a tightening of monetary policy could be needed ... remaining committed to the flexible exchange rate regime ... maintaining a neutral fiscal stance and lower rate of government expenditure growth ... further trade liberalization ... the revision of labour market regulations and practices that limit job creation ... initiatives to address income and wealth disparities.

The 2008 OECD country report (OECD, 2008) highlights the importance of growth in labour productivity, labour market rigidities in the form of high firing costs, the potentially negative labour demand consequences of strong trade unions (being mainly focused on employed workers), and sectoral minimum wages. Lastly, it notes the possible disincentive effects of social grants on labour supply.

The IMF (2007) quote above, and the general approach which speaks for itself, typify institutional advice given to the South African government after 1994. Many of these sentiments are also echoed in the views of private-sector economists.

## 6. The CDE proposals

A local example is the Centre for Development and Enterprise (CDE), a business-oriented think tank which publishes reports on key issues, often still in the context of the growth-versus-redistribution debate. It suffices to quote some statements from its 2010 Round Table (CDE, 2010: 34–40):

The depth of poverty in South Africa is a major challenge. Poverty cannot be reduced without high and sustained rates of economic growth ... Inequality in South Africa cannot be ignored, but it is not the same thing as reducing poverty ... Rapid growth to address poverty might increase inequality in the short term ... Increased public spending on redistributive policies is not only unsustainable, it will have adverse effects on our growth potential ...

[W]e should learn from the impressive performance of many countries in the developing world. This means we should focus as single-mindedly as possible on adopting and implementing policies that will maximise sustained economic growth. 'Going for growth' will pay off in far higher levels of national income and faster expansion of formal employment, with more and more people being drawn into the formal wage economy and the consequent lifting of millions of people out of poverty.

We are arguing that rapid economic growth has a proven capacity to address large-scale poverty and, in time, inequality ... South Africa needs high and sustained economic growth, and a massive increase in the number of formal sector jobs. Nothing else will do.

The extent to which this self-avowed 'single-mindedness' appears oblivious to low labour-absorption rates — not to mention poverty-related and other labour-market barriers — is striking. There also is no consideration of employment intensity, sectoral differences or the informal sector.

## **Box 3.5** The macro and macro-sectoral cluster: A summary

The macro discourse reflects an almost exclusive focus on economic growth and the production side of the macroeconomy—and on employment rather than unemployment. Thus, at an aggregate level it deals with the demand for labour.

- The significant increase in unemployment in the 1990s appears to be a structural shift in the long-run level of unemployment. It is unlikely to return to earlier levels by itself, that is, without active policy measures.
- In addition, sectoral shifts, for example sub-par manufacturing growth as against strong tertiary sector growth, can be an important cause of unemployment. Coupled with different low-skills labour intensities it has significant implications for labour absorption.
- Formal-sector growth can produce only a limited total absorption of labour (given the
  average output elasticity of employment of approximately 0.5). And the long-run trend is
  one of declining labour absorption relative to aggregate output (that is, declining labour
  intensity of output).
- Conflicting findings exist on whether labour-market legislation causes wage rigidity which
  prevents labour markets from clearing and resolving the unemployment problem and
  whether excessive real wage growth has been a major cause of declining formal-sector
  employment. Regarding the latter, the more sophisticated analyses suggest that this was
  not the case in the 1990s; of course, that may have changed in the past decade or so.
  Nevertheless, the negative real wage elasticity of the demand for labour has important
  implications for the potential role of real labour cost trends in future employment and
  unemployment.
- Historical-institutional analyses demonstrate how a combination of perhaps well-intended economic, industrial and labour-market policies could undermine employment when they are intrinsically contradictory and inconsistent.

As has become clear—also from the policy recommendations—this discourse takes little note of the findings from labour market and poverty analysts and largely excludes the informal sector from analysis.

## The existence of three discourses: What does this mean?<sup>26</sup>

The question addressed in this chapter is whether the corpus of research findings generates a coherent analytical picture of the unemployment issue. More fundamentally, do the analytical frameworks that underlie the surveyed research and the many South African policy initiatives constitute a sound basis for formulating consistent and, hopefully, successful policy to reduce unemployment? What implications do they have for employment-intensive growth or inclusive growth, for example?

## Fragmentation

The three discourses that have been reported on do not provide a coherent picture of unemployment. The meta-analysis suggests a significant degree of separation, although less in some cases. Three very different perspectives on unemployment prevail. Recognising the differences is important because they shape employment-oriented policy proposals emanating from the respective discourses. The following characterisation (somewhat over-simplified) of the basic views on unemployment is suggested:

Macro: Unemployment (and low employment growth) is primarily due to a lack of economic growth aggravated by wage inflexibilities (excessive wages) — and perhaps growth in the 'wrong' sectors in terms of labour intensity. The focus is on the demand for labour at the aggregate or meso level.

Labour: Unemployment is the main problem as such; it is a labour market problem and occurs primarily due to labour-market factors, segmentation and worker characteristics, such as education and gender. The focus is on the supply of labour at the micro level.

Poverty: Unemployment is a serious problem, but part of a larger problem of marginalisation, structural and chronic poverty, as well as powerlessness and underdevelopment—which also undermine access to labour markets. The focus is much broader than labour demand or supply.

Most macroeconomists in South Africa rarely incorporate the implications of the details from labour, household and poverty studies into their analyses. Policy proposals tend to focus on growth enhancement (for example, stimulating

This entire section draws heavily on Fourie (2011), which the interested reader should consult for more detail and the finer nuances regarding research findings on these issues, including deep-seated reasons—some legitimate, others worrying—for the fragmentation.

investment, addressing growth constraints), sectoral stimulation and wage moderation/flexibility to stimulate employment (and growth).

Almost in turn, most labour-market analysts and inequality analysts are less concerned with growth issues or macroeconomic policy variables/instruments. Proposed policies address segmentation, discrimination, skills and education backlogs and so forth. However, there is limited engagement with the details and implications of poverty and marginalisation analysis—although there are some exceptions. (Actually these two discourses are closer to each other—closer than either of them to the macro discourse—but different paradigms, data and especially research methods make it uncomfortable for them to engage with each other's work.)

Poverty-marginalisation analysts are sceptical of the standard style of labour-market analysis and of macroeconomic growth analysis, since none of these capture, recognise or address the powerlessness of the unemployed poor. Their view is that, whatever the growth rate, the poor, marginalised and unemployed do not benefit much from the economy and are powerless to change their position. More fundamental restructuring of the economy would be necessary to counter marginalisation and non-inclusive growth.

The fragmentation between the discourses constitutes a major limitation of the literature. It is the cumulative effect of a pattern of discourse-confined analysis that restricts the range of questions, issues and data being considered in specialised research.

A policy-maker should be alert to these patterns and needs to be wary of the limitations of discourse-specific policy advice.

## Fundamental gaps and the need for cross-discourse integration

There are two fundamental gaps flowing from the fragmentation and limited engagement between discourses that must be overcome in what should be, essentially, a cross-discourse integrated approach to unemployment.

One gap lies in the treatment of the formal economy, and the distinction between the formal and informal sectors. Many South African economists do not seem to find informal-sector employment—or linkages between the formal and informal sectors—relevant as a topic for theoretical or empirical analysis. Growth-oriented discourses focus on the formal sector: formal-sector growth is the 'engine of employment growth', absorbing (or 'sucking in') the unemployed and the poor into formal employment. The unemployment problem is implicitly equated to a lack of employment creation in the formal sector (due to inadequate growth or low labour intensity). The same occurs in large government employment-oriented policy initiatives launched recently.

Meanwhile 30% of the employed are in the informal sector and perhaps 60% of new employment is created there (although many informal jobs may be short-lived). And while sectoral stimulation or wage flexibility (moderation/reduction) in formal-sector labour markets is often seen as a solution to the unemployment and poverty problems, many of the unemployed poor cannot transition even into the informal sector and are outside the reach of any 'labour market'. Indeed, the informal sector and the so-called second economy may be key to understanding (and addressing) unemployment and poverty.

This almost exclusive focus on the formal sector is part of the second major weakness, that is, a broader denial, especially in macroeconomic and macrosectoral analyses, of segmentation and dualism, as well as employment barriers. Both labour-market and poverty analyses highlight evidence of segmentation and dualism (including poverty traps, both rural and urban) that inhibit labour-market functioning and employment. Moreover, a multitude of factors and barriers affect access to opportunities for employment and self-employment — notably from a condition of poverty and marginalisation.

A comprehensive analysis and thorough understanding of South African unemployment requires the analytical incorporation of segmentation, the informal sector, entry and mobility barriers, and the impact of poverty conditions and marginalisation. In particular, macro, macro-sectoral and industrial analyses should incorporate pertinent aspects highlighted by the labour-market and poverty discourses. More generally, in analysing a problem as complex and as intractable as unemployment in South Africa—and considering policies to address this problem—it is imperative to be open to insights from all discourses and to go to great lengths to learn from, and integrate, such insights. Narrow, discourse-specific analyses are unlikely to bear fruit.

## Elements of a coherent picture

Despite the fragmentation, much can be learned from the different discourses. In searching for an integrated perspective, the following analytical conclusions can be distilled:

1. The South African labour market is characterised by multi-segmentation. This includes informal-formal and rural-urban dualisms, and segmentation within the informal sector. Furthermore, alongside the formal and informal sectors is the subsistence-survivalist segment, where large numbers of poor households and unemployed individuals live. The nature of such multi-segmentation, the nature of labour-market linkages between segments — and factors enabling or disabling persons to transition to a better segment — may be critical to understanding and addressing both unemployment and poverty.

- 2. A range of factors information, entry and mobility barriers, inter alia due to the condition of poverty as well as marginalisation structurally inhibit job searching and entry into labour markets, both from a condition of poverty and from one segment to another. These factors intrinsically limit the reach and smoothness of the functioning of labour markets. Such factors also explain the category of discouraged (non-searching) unemployed, whose existence is a real and integral element of labour markets and of the broad unemployment, joblessness and poverty problems even if statistical practitioners may want to exclude them from official measures of unemployment.
- 3. As a result of all these factors, 'upward' transitions between the three segments that is, from the subsistence-survivalist sector into employment in either the informal or formal sectors, or from the informal to the formal sector can be quite difficult, even if there is growth in the demand for labour from employers in these sectors. Structural conditions and dynamics are at work. Something like 'excessive wage levels and labour market regulation' cannot adequately explain or be used to reverse this. It is by no means clear that either of these play a determining role in the existence of the various barriers that have been identified (although they may play some role, of course).
- 4. Understanding South African unemployment requires dealing with the real wage elasticity of the demand for labour (approximately –0.7, being the most quoted number), in particular, the likely negative versus positive impact on employment of sustained real labour cost increases or decreases, especially on a sectoral or a sub-sectoral level.
- 5. The output-elasticity of employment is another key parameter. This relates to the important though constrained impact on (un)employment, of formal-sector growth, given a value of 0.5 (approximately). No matter how high the GDP growth rate, formal-sector employment growth will be significantly lower. This is visible in a steady, long-run decline in labour intensity (aggregate labour absorption relative to GDP), which underlies much of the observed increase in unemployment. This probably reflects, to a large extent, trends in technology and cost-management techniques rather than local increases in (skills-adjusted) real labour costs alternatively, an interrelated combination of these. Whatever the cause(s) may be, the persistent downward trend in labour absorption all but dominates any consideration of ways to increase employment intensity
- 6. Little is known about the current and potential labour absorption (for both employment and self-employment) in the informal sector. However, a large number of people are making a living in this sector and cannot be left out of

- (un)employment policy analysis. More and better data need to be generated so that the dynamics and linkages of this sector can be analysed.
- 7. The impact of skills and education on poverty, inequality and unemployment, respectively, may be dissimilar and complex. Education appears to have a significant impact on (un)employment only once working-age persons have a matric qualification or higher. Sectoral shifts that imply changes in the demand for labour of different skills levels can be a significant cause of unemployment of, for example, lower-skilled workers (amidst perceived shortages of high-skilled labour).
- 8. Pensions and social grants constitute a critical policy nexus that links poverty, marginalisation, inequality, labour supply, (un)employment and macro-fiscal considerations. Complex incentive and disincentive effects may be present.
- **9**. Gender, race, age and generational aspects influence, in complex ways, the causal relationships surrounding aspects such as vulnerability, job search, migrancy, grants and education.
- 10. There are indications of bidirectional causality between unemployment and poverty. Unemployment causes poverty, but, in turn, the condition of poverty contributes to unemployment and, notably, its persistence. This may contribute to the apparent permanent, or structural, nature of high unemployment in South Africa. The implications for policy to facilitate access of poor people to labour markets can be very important.

This list, derived from the survey and meta-analysis, is not meant to constitute a definitive integrated analytical picture, but captures aspects that should be central to such a picture.

## **Conclusion and interpretation: Policy-related implications**

## Some policy implications: An illustrative list

Because of the fragmentation and resultant narrowness of the public discourse, we are not using all the information and knowledge we have at our disposal—as evidenced in the media debate and even in major policy initiatives such as the National Development Plan. Interest groups tend to bark up one tree. Meanwhile there are several important trees—and their roots and branches are thoroughly intertwined.

The many analytical gaps and problems identified in this chapter suggest that policy prescriptions, design and implementation that rely largely on one discourse are unlikely to make headway in addressing unemployment and poverty. Such policies will be fundamentally constrained.

This chapter analysed research findings on the nature and causes of unemployment—and not on the policy discourse in particular (although some

policy strategy documents were discussed earlier). Yet the findings do have definite implications for policies and strategies to address unemployment, in its relation to poverty and inequality. The following list is an illustration.

- 1. A growth-oriented employment strategy (or employment-oriented growth strategy) should deal with (a) the constrained employment-creation capacity of formal-sector growth and (b) the growth potential in the intrinsically linked worlds of informal production/employment and the various types of subsistence-survivalist activities (that is, an entire spectrum of livelihoods); and (c) the implications of segmentation, poverty conditions and marginalisation for the flow of labour into the formal sector, even one with 'flexible' labour markets. A strategy attempting to prime and fine-tune the 'engine of job growth' to absorb more labour is fundamentally constrained as long as large sections of the working-age population are structurally excluded from being absorbed into the formal labour sector.
- 2. The long-run decline in labour intensity (aggregate labour absorption relative to GDP), probably reflects, to a large extent, trends in technology and cost-management techniques in the formal sector. Turning this trend around, or even slowing it, can be a daunting policy challenge. Policy attempts to promote employment-intensity in the formal sector must carefully consider differences in sectoral labour intensities, as well as total employment multipliers.
- 3. While rising real labour costs are likely to have negative impacts on employment by encouraging capital-intensive techniques, attempts to significantly increase labour intensity through real wage cuts are unlikely to be feasible, given the social and political contexts. Nevertheless, low-wage, employment-intensive activities are potentially important instruments to fight unemployment.
- 4. Promoting employment-intensive manufacturing will, at best, increase the employment-creation capacity of the formal sector, while leaving the entire spectrum of survivalist and informal livelihoods (including agriculture) and millions of poor households—largely unaffected and still marginalised. Measures to increase labour absorption and employment intensity in the informal sector are imperative. Employment-related policy must consider enabling measures that can substantially increase employment and self-employment in durable activities and enterprises in a vibrant, diversified and growing informal sector.
- **5**. Getting a job, or a better job, is about transitions: from one employment state to another, and frequently from one segment to the other for example, from the subsistence-survivalist sector into either the informal or formal sectors, or from the informal to the formal sectors. Transitions between employment states, and between segments, need to become the focus of analysis and

- policy. Policy interventions that create effective 'transition enablers' may be crucial to increase employment intensity.
- **6**. Transition is one thing, a sustainable transition quite another. Retention of jobs is a problem ('getting a job versus keeping a job') and fallbacks to unemployment or less secure forms of employment occur frequently. The conditions for durable employment and self-employment (including via SMMEs) in any of the sectors should be explicitly targeted if policy is to be successful in the longer run.
- 7. Self-employment is not just another form of employment, but involves embryonic enterprises (firms), often still partially intertwined with households. This should be analysed and targeted separately, rather than being dealt with amorphously as part of 'job creation' or 'labour' markets.
- 8. A diversified informal sector would include rural as well as urban/peri-urban 'community economies' (or village economies) to generate diversified local income-generating opportunities servicing the needs of local communities and townships/towns with regard to retail trade (food, clothing, etc.), personal and (small) business services, home construction, home maintenance and improvement (that is, work for craftsmen), public spaces and facilities maintenance and improvement, transport, skills development, etc.
  - One of the most debilitating legacies of our political and economic development path over the last century notably migrant labour and the dominance of large factories and mines in that system is the stunted growth of 'village economies' and the perpetuation of the idea that villages/towns/townships function mainly as labour pools for mines and factories elsewhere rather than places for working in dignity.
  - There is also the question of why, for example, the significant growth in social grant payments does not stimulate village economies. Is the money spent outside these villages and townships, or are the majority of businesses and shops in the townships national chain stores, which limit the potential impact and multiplier effect of local expenditure on local (small) businesses?
  - As a more robust and durable informal sector develops, linkages to the formal sector can become possible and also contribute to the sustainability and vibrancy of the informal sector. This will in all likelihood require some formalisation of elements of the sector.
- 9. The ability of macroeconomic policy measures to shoulder a large part of the burden of resolving long-term, chronic or structural unemployment may be quite limited. However, policy consistency with regard to other, employmenttargeted policies (including industrial policy) is essential. Employment and unemployment are very sensitive to conflicts between policies from different

- spheres—for example, fiscal, monetary, industrial, trade and labour—as well as elements of labour-market policy and regulation, including labour-market institutions.
- 10. A proper policy evaluation of labour regulations cannot be based on a stylised model of (flexible) formal-sector labour markets only, given a context of highly-segmented labour markets, various job search and labour-market access barriers, and so forth.

# Reflections on employment-intensive growth and inclusive growth: From exclusion to inclusion

It has become clear that the objective of increasing employment, as a way to address unemployment, poverty and inequality, is a hugely complex one. On the one hand, there is the relationship of (un)employment to growth, often captured in terms like employment-creating growth, labour-absorbing growth, employment-intensive growth, pro-poor growth, shared growth or inclusive growth—all implying that growth often tends to be of a kind that excludes the unemployed and/or the poor. Then there is the relationship of unemployment to labour-market functioning, often captured in debates on wage levels and elasticities, segmentation, worker characteristics (such as education and skills) and regulation. Each of these elements can serve to exclude potential workers from the workplace. Lastly, there is the relationship of unemployment to poverty and marginalisation—which, essentially, implies non-inclusion amidst growth (or inclusion 'on an adverse basis').

This variety of terms relating to growth is not unrelated to the fragmentation of discourses highlighted by the survey of the unemployment debate. Unless sensitised to this fragmentation, a debate may adopt terminology without realising that it embeds a certain view of the relationships surrounding unemployment. A few illustrations will suffice.

All the permutations involving 'growth' essentially imply that growth is the key to, precondition for, or cause of, higher employment and incomes. However, there are important differences.

The term 'labour-intensive growth' may subliminally carry the idea that income and employment is to be derived from people serving as labour in the core formal economy, that is, the mining-manufacturing-services core, supported by industrial policy. Usually not considered is self-employment, employment in the non-formal economy or rural labour absorption. Unless the term is explicitly defined to include these elements, it may harbour much of the weakness of the macro discourse and may not be a consistent guide for effective policies. (Employment-intensive may be a significantly better term, although still somewhat restricted with regard to outcomes, as discussed below.)

Shared growth often means that growth must happen first, whereafter the fruits of growth — presumably higher GDP and tax resources — can be distributed to, or used for the benefit of, the poor ('spreading the benefits'). It is a redistributive concept.<sup>27</sup> Of course, this acknowledges that the poor were not part of the growth to start off with — that it was, essentially, a non-inclusive growth process. It does not target the employment-intensity of production processes and may not even include employment growth. Therefore, it does not appear to be a useful concept for employment-oriented policy design.

Pro-poor growth typically refers to the outcomes of growth with regard to income levels. There are two definitions: (1) the relative definition: whether the incomes of the poor have improved relative to the incomes of the non-poor; or (2) the absolute definition: whether poverty has declined (that is, absolute incomes of the poor have risen).<sup>28</sup> The nature, inclusivity or participative nature of the growth process is not an integral part of the concept.

The term 'inclusive growth' (or 'broad-based growth') has not been definitively described in the South African debate. Broadly intended to be growth that reduces poverty and inequality, it appears to mean any of the following:

- the idea of increased employment and labour absorption/intensity
- increased public-sector employment or employment schemes
- better social outcomes due to increased public services to the poor (health, education, etc.)
- increased social protection
- the increased integration of the 'second economy' (compare the 2009 Medium Term Strategic Framework [MTSF] formulation; however recently the second economy has all but disappeared from consideration in government policy documents such as the 2010 New Growth Path initiative and the 2012 National Development Plan).<sup>29</sup>

Some of these relate solely to outcomes, others to the process and nature of growth — but without much clarity. This is in contrast to the internationally used

<sup>27</sup> Rodrik's (2006) use of the term holds, inter alia, that low-skill workers find employment due to a strategy which boosts sectors that are low-skills intensive — an interpretation that appears to be closer to labour-intensive growth.

For a debate on these concepts and their measurement, see http://www.ipc-undp. org/PubSearchResult.do. For a South African application of pro-poor growth measurement, see Bhorat and Van der Westhuizen (2011).

<sup>29</sup> The 2009 Medium Term Strategic Framework (RSA, 2009) and the 2010 Cabinet Delivery Outcomes document (RSA, 2010a) of the South African government both explicitly list the second economy as a priority area for policy. However, both the New Growth Path initiative (RSA, 2010b) and the National Development Plan (NPC, 2012) do not use the term or recognise the problem. They largely ignore the informal sector as well.

definition, which expressly includes process and outcomes. The International Policy Centre for Inclusive Growth (of the UNDP)<sup>30</sup> defines inclusive growth as

both an outcome and a process. On the one hand, it ensures that everyone can participate in the growth process, both in terms of decision-making for organising the growth progression as well as in participating in the growth itself (and earning income). On the other hand, it goes some way towards ensuring that everyone equitably shares the benefits of growth. Inclusive growth implies participation and benefit-sharing. Participation without benefit sharing will make growth unjust and sharing benefits without participation will make it a welfare outcome.

Because of its fuzziness and perhaps gratuitous overusage in the South African debate, the concept of inclusive growth has not served as a solid guide for policy. It needs better articulation.

A multi-segment approach is useful for articulating the concept of inclusive growth. Inclusive growth as a concept must encompass and integrate the formal, informal and subsistence-survivalist segments. This means that inclusive growth would be economic growth (an increasing scope and value of economic activity and income) that is generated also in the subsistence-survivalist and, especially, the informal sector. Income-generating activities in these segments would be an integral part of growing economic activity—rather than these segments just receiving some benefits afterwards from formal sector growth (or, at most, being 'pulled along' by the formal sector). This would ensure that inclusive growth means that the poor and marginalised participate in the growing economic activity, contribute to growth and simultaneously benefit from it. Both processes and outcomes would be integrally involved, in a multi-segment context.

As a policy strategy, the pursuit of inclusive growth must then involve a comprehensive strategy to increase productive activity, employment and self-employment in all three segments, and to facilitate and develop durable linkages and sustainable transitions between employment states and between segments.

Such inclusive growth would mean that a process of growth and development reduces, or overcomes, the various forms of non-voluntary exclusion highlighted by the three discourses. It would encompass the concepts of labourand employment-intensive growth, as well as pro-poor growth. Employment-intensive growth (in the multi-sector sense) is a constituent element of inclusive growth and, by definition, inclusive growth is pro-poor (at least in the absolute sense).

<sup>30</sup> Available from: http://www.ipc-undp.org.

Most of the elements from the South African debate noted earlier could be part of such inclusive growth — particularly if public services, public employment schemes and, notably, social protection explicitly adopt an enabling approach. However, they will need to be situated in a comprehensive set of well-targeted and well-integrated policies based on insights from all the discourses. And, of course, bureaucratic and institutional fragmentation in government will have to be addressed.

To summarise: sustainable and consistent policy remedies for unemployment and poverty will require an integrated response that covers the formal sector, the informal sector and subsistence-survivalist activities, and especially the various linkages and transitions between these segments. Such remedies will need to integrate insights from labour-economic, macroeconomic and poverty/development studies.

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Part II
Employment and the structure of the economy





## Chapter 4

## Employment outcomes and earnings in postapartheid South Africa

Haroon Bhorat and Natasha Mayet1

### Introduction

South Africa's formal transition from white minority rule in 1994 justifiably received international attention and acclaim. In April 1994, the country's first democratically elected party, the African National Congress (ANC), was voted into power. Masked by this relatively peaceful transition from apartheid however, was the challenge that lay ahead in dealing with the economic vestiges of the system of racial exclusivity. Nowhere is this challenge more apparent than within labour markets. Probably the most perplexing, and therefore troubling, feature of the South African labour market remains its extraordinarily high unemployment rates. Indeed, together with the economy's stubbornly high (and growing) inequality levels — the rate of joblessness most cogently expresses the welfare and development challenges facing the society.

This chapter attempts to understand some of the possible drivers of employment trends within the South African labour market in the 15 years following the demise of apartheid, utilising data from the 1995 to 2009 period. It is worth noting, however, that while the discussion here provides a flavour of selected labour-market issues in South Africa, there are, of course, a range of factors pertinent to labour markets and employment creation — most notably the generally accepted determinants of economic growth, such as fixed investment levels; competitiveness; multi-factor productivity; domestic and foreign relative price fluctuations; monetary and fiscal policy, and so on — which remain crucial to understanding outcomes in the South African labour market. These additional issues, however, remain beyond the scope of this chapter.

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## Understanding a high unemployment labour market: An overview of labour market trends and challenges in South Africa since 1995

A number of factors feature in the understanding of South Africa's labour market dynamics in general, and its high unemployment levels in particular. In this section we explore some of the key supply-side dynamics characterising the post-apartheid labour market in South Africa. The availability of trend data from 1995 to 2009 makes it possible to examine the movements in the labour force, employment and unemployment during the last 15 years.<sup>2</sup>

# The role of race, gender and age in determining labour-market outcomes

During the first 15 years of democratic rule in South Africa, the economy generated approximately 3.2 million jobs. Over the same period, some 5.3 million individuals entered the labour market in search of jobs. The consequence was an increase in the number of narrowly defined unemployed by 1.5 million individuals.

During this period, the number of employed Africans grew significantly at an average rate of 3.5% per annum. Although both male and female employment increased between 1995 and 2009, female employment grew at twice the rate of male employment. Indeed, the feminisation of employment is a key trend observed in the post-apartheid labour market (see Casale, 2004; Casale & Posel, 2002).

Selected results from our estimates of employment probabilities and mean (semi-logarithmic) earnings are presented in figures 4.1 and 4.2. The econometric results suggest that race, some 15 years after apartheid ended, continues to determine the probability of participation, employment and earnings in the South African labour market.

The datasets used in this study are provided by Statistics South Africa (Stats SA). While we acknowledge the obvious difficulty of providing reliable nationally representative data, as well as the data issues that may arise, the household surveys conducted by Stats SA remain the only nationally representative labour-market data for South Africa for the 1995–2009 period and are widely used by South African economists.

Table 4.1: The South African labour force: 1995–2009 (thousands)

Category	1995	2001	Q32009	Change		AAG 1995–2009
	'000s	'000s	'000s	'000s	%	%
Official (narrow) definition						
Employment	9 6 4 5	11 181	12 884	3 239	33.6	2.1
Unemployment	2 0 3 2	4655	4119	2 087	102.8	5.2
Labour force	11676	15836	17 003	5327	45.6	2.7
Broad definition (including discouraged work seekers)						
Employment	9645	11 181	12 884	3 2 3 9	33.6	2.1
Unemployment	4239	7 649	5 751	1512	35.7	2.2
Labour force	13 883	18830	18 635	4752	34.2	2.1

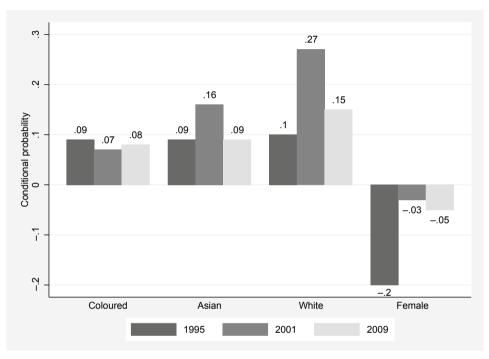
Source: Stats SA. October Household Survey (OHS), 1995; Labour Force Survey (LFS), September 2001; Quarterly Labour Force Survey (QLFS), Quarter 3, 2009

#### Notes:

- 1. Working-age population includes individuals aged between 15 and 65 years.
- 2. 1995 data is reweighted according to the 1996 Census. Data from 2000 onwards has been reweighted according to the 2001 Census.
- 3. The broad definition of the labour force includes discouraged work seekers, while the official or 'narrow' definition does not.
- 4. The change in definitions of discouraged work seekers in the QLFS renders the 2009 estimate of the broad unemployment rate incomparable with those of 1995 and 2001.
- 5. Growth rates in this table are compounded annual growth rates and were calculated using the 1995 and the 2009 estimates. Therefore they may not match the other growth rates, which were computed as the average of the annual growth rates from 1995 to 2009.
- 6. The estimates here employ the 'hybrid' labour-market definitions for the OHS and LFS. Since the analysis of long-term labour-market trends in this chapter required using the OHS, LFS and the QLFS surveys, we attempted to use a labour-market status definition for the OHS and LFS surveys that was comparable to the QLFS surveys. These 'hybrid' labour market definitions for the OHS and LFS were constructed based on the definitions of 'employment', 'narrow unemployment', 'discouraged workers' and 'inactive workers' employed in the QLFS.' It is this

It is worth noting that in the construction of the hybrid labour market definitions for the OHS and LFS, each of the labour market states were specifically and individually coded, while the 'status' definitions created by Stats SA in the OHS, LFS and QLFS datasets are coded using 'residual coding', that is, all of the labour-market states captured by the status variable are not explicitly coded in either of the two surveys. For instance, in the QLFS 'employment', 'unemployment' and 'discouraged jobseekers' are explicitly coded, while 'inactive workers' are essentially the residual.

hybrid labour-market status definition that is utilised in the analysis in this chapter. Nevertheless, it must be noted that the hybrid definition employed here is not a perfect remedy to the problem of comparability between the OHS and LFS surveys datasets and the new QLFS. Until such time as there is a time series of QLFS estimates of sufficient length, labour-market analysis in South Africa will be vulnerable to these comparability issues.



**Figure 4.1:** The conditional probability of employment by race and gender (1995, 2001 and 2009) *Sources*: Stats SA. OHS, 1995; LFS, 2001; QLFS, Quarter 3, 2009; own calculations

#### Notes:

- 1. Estimates shown are marginal effects from an employment probit and were significant at the 1% level.
- 2. A Heckman two-step approach was used (Heckman, 1979).
- 3. The dependent variable was a binary variable equal to 1 if the individual was employed and 0 otherwise, using the expanded definition of unemployment.
- 4. Robust standard errors were used and individual weights were assumed.
- **5**. The number of observations included was 42 955 in 1995, 43 820 in 2001 and 41 894 in 2009.
- 6. All regressions control for age, province, as well as literacy and level of education.
- 7. The referent for the race, gender and age variables are African, male and individuals aged 15 to 24 years respectively.
- 8. The value of R-squared was 0.28, 0.22, and 0.23 for 1995, 2001 and 2009 respectively.

The coefficients for race are positive and significant in all the periods under review. Since African is our referent variable for race, our results show that coloured, Asian and white workers have consistently been more likely to be in employment than their African counterparts. Hence some 15 years after apartheid ended, the labour market continues to afford a greater advantage in securing employment to non-Africans. It is worth noting, however, that the observed race effect, particularly in the context of the variables available in the dataset, may embed a series of omitted variables in our estimation equation including, for example, the quality of schooling and higher education, the availability of social networks, the field of study of an individual, parental influence, and so on. These factors, together of course with employer discrimination, retain particular importance in the South African context in terms of interpreting the size of the predicted racial differences in employment outcomes.<sup>5</sup>

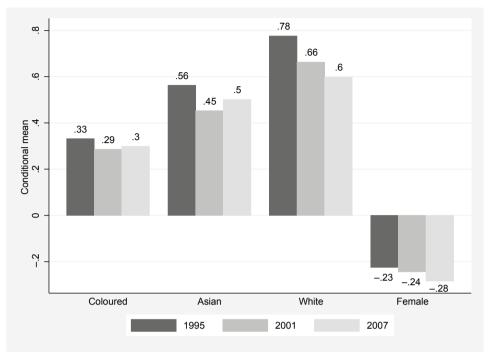
Our results also indicate that the gender differences identified in the participation equation are also prevalent in our employment equation. Females have consistently been less likely to be in employment than males over the three periods. This suggests that, despite a rapid growth in employment of women, females on average, and controlling for a range of explanatory factors (demographics, province, etc.), are less likely to be employed than males for all years under scrutiny here.

Figure 4.2 presents estimates of conditional mean earnings by race and gender. The sample was all employed individuals, using the broad definition of employment (that is, including discouraged jobseekers in the sample). We replaced the 2009 period with 2007, as it is the latest year for which earnings information is available. For each year we report the standard Ordinary Least Squares (OLS) coefficient at the mean of the wage distribution. In all the estimations, earnings are measured by the log of the monthly total wage earned by each individual.

The results by race suggest that 15 years after the end of apartheid, racial differences in mean earnings remain when controlling for a range of observed characteristics. Hence in 2001, the estimates suggest that a white worker earned on average 59.8% more than an African worker, assuming that the two workers had the same characteristics for gender, age, education, experience, etc.

A study by the HSRC (2005) showed that employers might be using other factors as a screening process in hiring individuals, such as grades obtained during higher education (discussed later).

While other factors (performance in higher education, soft skills, etc.) are likely to play a role in influencing the probability of employment, data for these variables are not available in the national labour-market data.



**Figure 4.2**: Earnings function estimates by race and gender (1995, 2001 and 2007) *Sources*: Stats SA. OHS, 1995; LFS, September 2001 and 2007; own calculations

#### Notes:

- 1. The estimates are obtained using an earnings function in which the dependent variable was the log of monthly earnings. The referent category for race and gender is Africans and males respectively.
- 2. Regression estimates shown were significant at the 1% level.
- 3. A Heckman two-step model was implemented, consistent with the employment equation in Figure 4.1.
- 4. Robust standard errors were used and individual weights assumed.
- 5. The number of observations included was 22 776 in 1995, 22 884 in 2001, and 22 936 in 2007
- Explanatory variables included were those controlling for education, education of parents, province, occupation, sector of employment, experience and experience squared, union membership and hours worked.
- 7. The referent for the race, gender and age variables were African, male, and individuals aged between 15 and 24 years respectively. The value of R-squared was 0.63, 0.66 and 0.63 for 1995, 2001 and 2009 respectively.

Two important nuances are worth noting here: first, as a measure of the conditional racial differential in wages, this is of course an overestimate. Unobservable characteristics such as quality of human capital accumulated (for example quality of schooling, type of institution attended, etc.) and so on—as in the estimates presented above from our employment equations—could be correlated in South Africa with race, and therefore the results here are meant to be indicative rather than interpreted as a pure race effect. The second, perhaps more important result, is that this conditional mean racial wage gap has declined significantly since 1995. Hence, while white employed individuals on average earned 77.6% more than their African counterparts, this premium declined by nearly 18 percentage points some 12 years later. The mean conditional racial wage gap has therefore declined very rapidly in the post-apartheid labour market.

The same result though is not true for gender. Here the estimates indicate that the conditional mean gender wage gap has, in fact, increased since 1995; from earning 22.5% less than males in 1995, women some 12 years later were earning 28.4% less. In general, while one would expect employment shifts to be associated with improved labour-market conditions, the evidence does not suggest that gains in employment for women have been accompanied by a shift in returns to employment for females relative to males.

Ultimately then, the above suggests at least three consistent trends regarding the labour market in the post-apartheid period. First, it is evident that race and gender continue to determine the probability of labour-market outcomes, namely employment and earnings in the South African labour market. In particular, African women are on average less likely than white males to find a job, and when in employment, their conditional wage is significantly lower than white male employees. A second key result is that while the conditional mean racial wage gap (African-white) has declined in the post-apartheid period, the conditional mean gender gap has risen by around five percentage points when comparing male and female workers (of the same race, age, etc.). Finally, age continues to be significantly and positively associated with a higher probability of employment and higher mean earnings.

The changes in nominal mean monthly earnings by race and gender from 2001 to 2007 are statistically significant at 5%. The changes in real mean monthly earnings for males and females between 2001 and 2007 are statistically significant at the 5% and 10% levels respectively, while the real mean monthly earnings of Africans and whites rose significantly between 2001 and 2007 at the 5% and 10% levels of significance, respectively. Changes in real mean monthly earnings for the other race groups over the period are statistically insignificant.

## Sectorally uneven employment generation since 1995

Aggregate employment growth in post-apartheid South Africa has been driven by the financial and business services sector, on the one hand, and the wholesale and retail trade sector on the other hand. The data show that these two main sectors alone accounted for close to 2.3 million of the 3.4 million new jobs created in South Africa between 1995 and 2009. Put differently, 66% of all employment generation in post-apartheid South Africa can be located within these two sectors.

Table 4.2: Sectoral distribution of employment change, 1995–2009

	1995 2001 Q3 2			Change					
	'000s	Share	'000s	Share	'000s	Share	1995 to 2009	'000s	Share
Primary	1696	17.9%	1732	15.5%	952	7.4%	-2.4	-744	-22%
Agriculture	1247	13.2%	1178	10.5%	653	5.1%	-1.7	-594	-17.3%
Mining	449	4.8%	554	5.0%	299	2.3%	-2.9	-150	-4.4%
Secondary	1988	21.0%	2348	21.0%	2861	22.2%	3.1	873	25%
Manufacturing	1452	15.4%	1620	14.5%	1723	13.4%	1.6	271	7.9%
Utilities	86	0.9%	94	0.8%	81	0.6%	-0.2	-5	-0.2%
Construction	449	4.8%	634	5.7%	1057	8.2%	7.7	608	17.7%
Tertiary	5774	61.0%	7 0 5 8	63.1%	9064	70.4%	4.4	3 290	96%
Retail	1684	17.8%	2 4 5 4	22.0%	2852	22.1%	6.9	1168	34.1%
Transport	483	5.1%	546	4.9%	737	5.7%	3.8	254	7.4%
Finance	592	6.3%	1035	9.3%	1682	13.1%	8.3	1 090	31.8%
CSP	2 2 0 5	23.3%	1989	17.8%	2627	20.4%	2.6	422	12.3%
Private Household	809	8.6%	1034	9.2%	1 166	9.1%	2.7	357	10.4%
Total	9 4 5 8	100%	11 179	100%	12883	100%	2.8	3 425	100%

Sources: Stats SA. OHS, 1995; QLFS, Quarter 3, 2009

*Note*: AAG is the average annual growth rate in employment, estimated as the average of the growth rates from 1995 to 2009. Other and unspecified categories are not shown here. Bold indicates that the change between 1995 and 2009 was statistically significant at 5%.

The secondary sectors also experienced employment expansion over the 15-year period, with manufacturing and construction adding approximately 271 000 and 608 000 jobs respectively. Over the past few decades, slow growth in the value added by the manufacturing sector in South Africa, despite the significant growth

in population, has resulted in a decline in the country's manufacturing value added per capita. Furthermore, since the 1980s, growth in manufacturing exports has also been slow and South Africa's share of world manufactured exports has declined (Kaplan, 2004). The poor performance of the manufacturing sector in South Africa reflects a wider concern around both the lost opportunities in manufacturing and the sector's ongoing lack of dynamism and competitiveness in the post-apartheid era.

However, an important part of the above analysis requires additional nuance. Below we provide a more detailed examination of the employment trends observed within the two largest job generating categories in the post-apartheid period, namely financial and business services, and wholesale and retail trade. We provide the change in employment, in absolute terms, for the various subsectors within financial and business services. The data suggest a key result: of the total number of jobs created within this sector since 1995, the overwhelming majority of these have been in the subcategory defined simply as 'business services not elsewhere classified (NEC)'. Specifically, the data indicates that over the 1995–2007 period, 77% of all the jobs created within financial and business services were created in this 'business services NEC' or 'other' subsector. Put differently, of the close to 1.2 million jobs generated in this sector, about 900 000 emanated from 'other financial and business services' activities.

Closer inspection of this category reveals that it includes mainly employment agency, labour brokering (or temporary employment services) and security services activities.<sup>7</sup> This result suggests that job growth within the financial and business services main sector has effectively been driven by the rapid rise in two nodes of economic activity — security services and labour brokers. This is a critical result, as it suggests in part that the high incidence of crime in South Africa has in fact resulted in rapid employment expansion within the subsector providing crime-prevention services. In addition, the rise in the use of employment agencies, for long noted in policy debates in South Africa, is powerfully evident in these numbers. There are two important caveats here. Firstly, outside of employment agencies and security services, other activities within this subsector will also have generated employment.

This subcategory consists in the main of activities noted officially in the survey codebook as: 'labour recruitment and provision of staff; activities of employment agencies and recruiting organisations; hiring out of workers (labour-brokering activities); disinfecting and exterminating activities in buildings; investigation and security activities; building and industrial-plant activities; photographic activities; packaging activities; other business activities; credit-rating agency activities; debt collecting; agency activities; stenographic, duplicating, addressing, mailing list or similar activities; other business activities'.

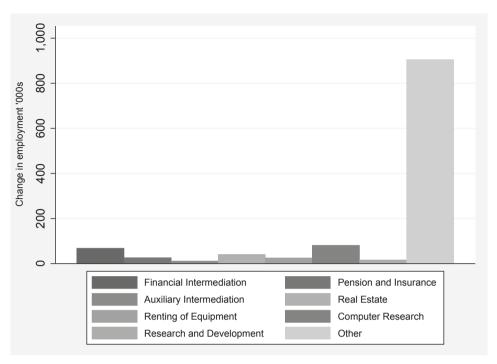


Figure 4.3: Change in employment (thousands), 1995–2009: financial and business services, by subsector

Sources: Stats SA. OHS, 1995; QLFS, Quarter 3, 2009

*Notes*: Subsectors shown are financial intermediation, pension and insurance, auxiliary intermediation, real estate, renting of machinery and equipment (for example, transport equipment without operator) and of personal and household goods, research and development, and other (classified according to Stats SA Industry Classification codes).

Hence, the over 800 000 additional jobs within this subsector would not all be representative of security workers and labour-broker employees. Secondly, given the fact that this sector of employment is self-reported by individuals within the surveys used, the growth in labour-broker employment in particular, may be an underestimate of the true extent of growth in jobs within the labour-broker subsector. Finally, it should not be overlooked that, outside of employment agencies, there was also a rapid rise in the growth of employment within financial and business services, as classified. Hence, while starting off a low base in actual employment numbers, subsectors such as computer services, research and development, real-estate services, renting of equipment and so on, in many cases witnessed an annualised growth in employment of 10% on average over the 14-year period under review.

In an attempt to shed light on the implications of the first caveat mentioned above, the changes in the three main occupation groups<sup>8</sup> represented in the business activities NEC category (notably protective service workers NEC, helpers, cleaners in offices, hotels, etc. and farmhands and labourers) are shown for the periods 1999 to 2011 and 2001 to 2011 in Table 4.3.<sup>9</sup> These subcategories were identified using the four digit occupational codes in the OHS and LFS surveys for individuals employed in the business activities NEC sector. These three groups accounted for the largest share of those employed within this category.<sup>10</sup> The share of each subcategory in the business activities NEC sector is shown in parentheses.

The results show that protective services workers NEC<sup>11</sup> accounted for between 42% and 47% of employment in the business activities NEC category. Helpers and cleaners in establishments such as offices and hotels accounted for the second largest share, which may be a reflection of the increase in the use of contract-cleaning services over the period.

Although we consider different time periods here, the results in Table 4.3 confirm that employment in the business activities NEC increased at a much faster rate than aggregate employment.

Finally, in 2011, almost 50 000 of the newly employed in this subsector were classified as 'farmhands' and 'labourers', in contrast to zero in 2001 and only 131 in 1999. While the absolute number of these workers was small in 2011, the enormous growth rate can be seen as evidence of the increased number of workers employed as farmhands and labourers supplied by labour brokers.

To summarise, it is extremely difficult to estimate accurately the total number of workers employed in the labour-brokering industry using official labour-force data.

<sup>8</sup> These were the main occupations recorded as increasing in the second quarter of 2011.

<sup>9</sup> The detailed occupations were not recorded in the 1995 OHS.

<sup>10</sup> The three occupational groups (protective services, helpers and cleaners, and farmhands) were classified using the four-digit occupational codes in the surveys for the business activities NEC sector only. Therefore the estimates provided here do not include those individuals in the three occupations that fall into other sectors (for example, the total for farmhands is only for individuals who were coded as 'farmhands' in the occupational codes and who were employed within the business activities NEC sector).

<sup>11</sup> The category includes the specific subcategories of security guards, security patrolmen and patrolwomen, bodyguards, coastguards, beach guards, lifeguards, beach patrolmen and patrolwomen, traffic wardens, game wardens, bird-sanctuary wardens, wildlife wardens, taxi-guards, traffic coordinators.

Table 4.3: Change in employment: business activities NEC ('other')

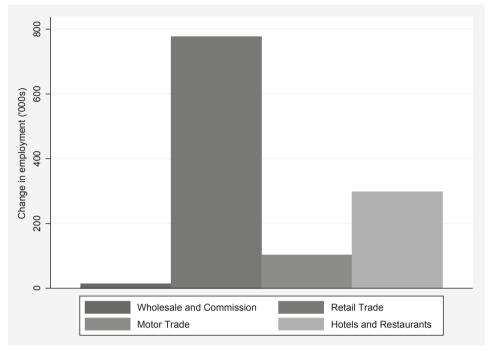
				Average growth	
	1999	2001	2011	1999– 2011	2001– 2011
Business activities NEC	312 401	398 022	810 035	8.3%	7.4%
Selected occupations within this subsector					
Protective services workers NEC	147 165	169 360	349885	7.5%	7.5%
	(47.1%)	(42.6%)	(43.2%)		
Helpers, cleaners in offices, hotels, etc.	40 715	58774	144 265	11.1%	9.4%
	(13.0%)	(14.8%)	(17.8%)		
Farmhands and labourers	131	0	49 167	63.9%	
			(6.1%)		
Total employment South Africa	10411239	11 178 049	13 343 731	2.1%	1.8%

Sources: Stats SA. OHS 1999: LFS, September 2001; QLFS, Quarter 4, 2011

It can, however, be inferred that a significant share of these workers is recorded in the official surveys in the subsector 'not elsewhere classified' within the financial and business services sector. As discussed above, this subsector accounted for a significant share in total employment growth in the post-apartheid period and can therefore be considered a key driver of job creation in the South African labour market.

Given the total employment growth within wholesale and retail trade of 1.2 million jobs since 1995, the data below disaggregate the four subsectors for which it is possible to generate a consistent series over the 14-year period. Employment creation within the sector, it is evident, is slightly more evenly distributed compared to financial and business services. However, one subsector, namely 'retail trade', dominates employment creation within the overall sector. Closer inspection of this category reveals that it includes mainly shop assistants, cashiers, store clerks, spaza shopowners and street vendors. Estimates reveal that this subsector generated about 770 000 of all the new jobs in the wholesale and retail sector, constituting 66% of all the jobs created in the main sector.

This is followed by the 'hotel and restaurants' subsector where some 300 000 jobs were created, at an average rate of 12.3% per annum, representing a growth rate higher than within the retail trade industry. Also of relevance here is that the largest share of employment creation within the latter industry in 2009 accrued to a category coded as 'sales not in stores'.



**Figure 4.4**: Change in employment (thousands), 1995–2009: wholesale and retail trade, by subsector *Sources*: Stats SA. OHS, 1995; QLFS, Quarter 3, 2009

The 'sales not in stores' employment category constituted some 35% of the total level of employment within the retail trade subsector in 2009. This would, of course, be a strong proxy for the informal sector, with the data confirming that 90% of jobs in this sector are informal.<sup>12</sup> While we do not dwell in detail here on the informal sector, this result does suggest that the informal sector has emerged as a key generator of employment within the wholesale and retail sector (34% of all retail sector jobs were informal in 2009).<sup>13</sup>

The sectoral results presented above point to at least five key trends in employment in the post-apartheid period:

1. Almost all the employment expansion since 1995 can be attributed to the tertiary sector, and in particular, the retail and finance sectors.

Own calculations using the QLFS, Quarter 3, 2009 (Stats SA). The informal sector variable is a derived variable by Stats SA using responses to a series of questions: Work for whom? (Question 4.5); Income tax deducted? (Question 4.10); Business registered for VAT? (Question 4.13); Business registered for income tax? (Question 4.14); Number of employees? (Question 4.16).

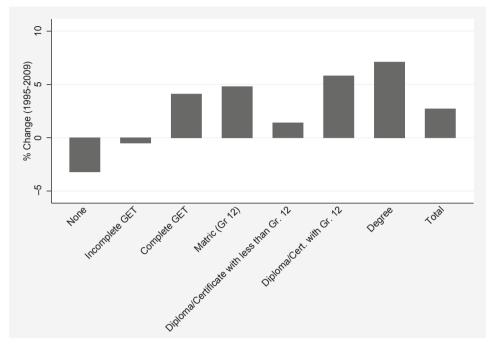
<sup>13</sup> QLFS, Quarter 3, 2009 (Stats SA).

- Growth in jobs in the secondary sector was relatively unspectacular, and where there was an expansion this tended to be dominated by the construction industry.
- 3. Perhaps most worryingly, the sharp and significant absolute decline in the number of jobs in agriculture and mining manifests these sectors' declining share of GDP in the domestic economy.
- 4. Our detailed subsectoral analysis suggests that within the two job-generating main sectors, it has been subsectors such as security services, employment agencies (or labour brokers) and, of course, the informal sector, which has dominated these employment shifts. This result highlights the fact that job creation in the 14 years since 1995 has been dominated by atypical forms of employment; that is, employment not necessarily characterised by formal sector, wage employment wherein the relationship between the direct employer and employee is contractual and sometimes underwritten by legislation.
- 5. Finally, it is also possible to portray South Africa's employment shifts since 1995 as characterised by a rise in employment in two services sectors on the one hand, and a collapse in labour demand for the unskilled-intensive extractive industries, on the other.

## The skills mismatch between labour demand and supply

Figure 4.5 shows the changes in aggregate employment by education level over the 1995 to 2009 period. As the estimates indicate, since 1995 the fastest growth in employment was registered by better-educated individuals, that is, those with a Grade 12 (4.8% per annum), a diploma/certificate with Grade 12 (5.8% per annum), or a degree (7.1% per annum) qualification. The estimates are a signal that skills-biased labour demand shifts have characterised the post-apartheid period. Most notably, individuals with a Grade 12 or a tertiary qualification have registered the highest employment gains since 1995.

Labour-market data from industrialised countries have often found an increase both in the relative wages of skilled (tertiary education) to unskilled (high school education or less) workers, as well as in the ratio of employment changes for these workers across time (Katz & Murphy, 1992). The graph (Figure 4.6) then presents the ratios of the real monthly wages of skilled workers relative to unskilled workers ( $W_s/W_u$ ) as well as the ratio of skilled to unskilled employment ( $N_s/N_u$ ) in 2001 and 2007. Following the international literature, we use education level to categorise workers into two skill groups: skilled individuals are defined here as those with a tertiary education, while



**Figure 4.5**: Per cent change in aggregate employment by education level, 1995–2009 *Sources*: Stats SA. OHS, 1995; QLFS, Quarter 3, 2009

#### Note:

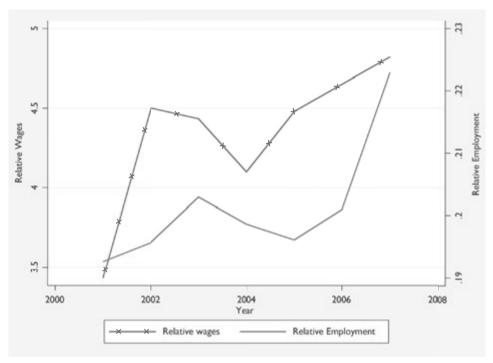
 GET means general education and training. The educational categories are: no education; incompleted GET (grades 0-8); completed GET (grades 9-11); Grade 12; a diploma/certificate without completed Grade 12; a diploma/certificate with completed matriculation and a degree from a university.

less skilled or unskilled individuals are those with a Grade 12 education or lower qualification.<sup>14</sup>

Over the period 2001 to 2007, both the ratio of (skilled-unskilled) wages and the concomitant ratio of skilled-unskilled employment rose. Specifically, the results show that the ratio of real monthly wages of skilled to unskilled individuals increased significantly between 2001 and 2007 at 4.4% per annum, while the relative employment of skilled individuals rose by 4.7%. Put differently,

<sup>14</sup> Katz and Murphy (1992), and Borjas, Freeman and Katz (1992) use a similar categorisation procedure, classifying more skilled individuals as those who have completed a college degree, and grouping individuals with high-school (12 years) education or less into the lower skills category.

this increase in the relative employment, and simultaneously the relative wages of skilled to unskilled workers, is evidence of labour demand preferences driven by skills-biased technical change.



**Figure 4.6:** Skilled–unskilled relative wages and employment, 2001–2007 *Sources*: Stats SA. LFS, September 2001 and 2007

#### Notes:

- 1. Wages are in constant 2005 prices.
- 2. Wages were estimated using the midpoint of the monthly brackets.
- Skilled workers are defined here as workers with a graduate education, that is, a tertiary qualification. Unskilled workers are those with a high-school education or less, that is, a Grade 12 education or lower.

# The institutional and regulatory environment remains critical

Wage formation in the South African labour market is effectively managed, governed and operationalised through two key avenues. These are firstly, through institutionalised bargaining between employer and employee representatives; and secondly, through government-mandated wage minima (known as sectoral determinations) set for specific sectors. In the former case, this bargaining takes place through either a formal bargaining council (usually sectorally

representative) or more informal bargaining fora (Godfrey et al., 2007). The state involves itself, only by means of sectoral determinations, in sectors which tend to be unorganised, or those deemed to contain a disproportionate share of low-paid, vulnerable workers.

Bargaining councils (known as industrial councils before 1995) are therefore the key institutions involved in the statutory system of collective bargaining and wage determination in the South African labour market. Although the share of formally employed workers who were members of a bargaining council doubled from 15% to 32% between 1995 and 2005, this proportion accounted for less than one-third of aggregate formal employment. Most of the increase in bargaining-council membership during this period was driven by the public sector, while private bargaining-council membership stagnated or declined.

A bargaining council can be established by one or more registered trade unions and one or more registered employer organisations for a specific industry and area.<sup>15</sup> Worker interests are therefore represented at a bargaining council by the representative trade union. Both trade unions and bargaining councils have claimed not to be contributing to labour-market inflexibility, and specifically wage inflexibility.

South Africa's strong trade-union movement has often been raised as a key determinant of the country's high unemployment levels. Simply put, it has been argued that representative trade unions in South Africa, have over time constructed a highly segmented labour market, ensuring that large numbers of the unemployed are excluded from work opportunities through the high-cost protection (in terms of wages and benefits) which trade unions offer to their members. South Africa had approximately 3.4 million individuals who reported being members of a union in 2011 (QLFS, Quarter 4, 2011, Stats SA). This represents a union density of 25%, which places South Africa in the middle of a range of Organisation for Economic Co-operation and Development (OECD) economies. Hence, South Africa's union density levels are not unusually high or low.

Much of the discussion on the role of trade unions in possibly engendering high levels of unemployment tends to revolve around the wage premia associated with bargaining council and trade-union membership. Evidence indicates that public-sector bargaining-council members earn more than private-sector bargaining-council members, as well as more on average than non-bargaining-council members. Bhorat, Goga and Van der Westhuizen (2012), using the 2005 Labour Force Survey, estimated the union wage gap when controlling for both

<sup>15</sup> In other words, unionised and non-unionised firms may coexist within the same industry.

firm level and job characteristics. When correcting for endogeneity of union status through a two-stage selection model and including firm size, the type of employment, and non-wage benefits in the wage estimations, the estimated wage premium for formal-sector African workers in the public sector, who are both union members and covered by bargaining council agreements, stood at 22% (a + n + t) in Table 4.4).

Their estimates are presented in Table 4.4. The sample for the earnings estimations comprised all African, working-age, formally employed individuals who provided wage information in the survey. Earnings in the estimation are based on the log of total monthly wages.

Table 4.4: Union wage premia in South Africa: earnings function estimates (2005)

	I	II	III
Union (a)	0.0588**	0.0666**	0.068**
BC dummy (b)		0.0894**	
BC union interaction (c)	-0.0038		
BC private (m)		0.0859**	
BC public (n)		0.0995**	
BC private-union interaction (s)	-0.0871		
BC public-union interaction (t)	0.0323		

Source: Bhorat et al. (2012)

#### Notes:

- 1. The data are weighted using 2001 Census weights.
- 2. The dependent variable is log of monthly wages.
- 3. \*\*\* significant at the 1% level
  - \*\* significant at the 5% level
  - \* significant at the 10% level
- **4.** The following personal characteristics were included: gender; a five-level education spline; whether the person is married or not; whether the person is the head of his/her household or not; whether the person resides in a metro area; and province controls.
- 5. General job characteristics included were occupation controls, industry controls, experience, experience squared, hours of work and a dummy for self-employment. Additionally, controls for type of job and firm size were included.
- **6**. Estimates presented here use an instrumental variable approach to control for the endogeneity of union status.

The results from specifications I and II show that union members who are not covered by the bargaining-council system earned a premium of between 5.9 and 6.7% (a). In turn, the results indicate that workers covered by bargaining councils (but not belonging to unions) earned an 8.9% (b) premium over other non-union workers not covered by bargaining-council agreements.

Specification III separates those covered under agreements in the private sector from those covered by Public Service Co-ordinating Bargaining Council (PSCBC) agreements. The results suggest that the bargaining council premium for non-union members in both the private and public sectors is positive and statistically significant, although the premium in the private sector is slightly lower, standing at 8.6% (m), compared to the premium in the public sector of nearly 10% (n). It is clear then that bargaining-council coverage (outside of union membership) in both the private and public sectors is associated with a premium, though the premium is higher in the public sector. This suggests that bargained wages within both the private and public bargaining-council systems are extended to non-unionised workers.

The union premium within the private bargaining-council sector (a + s) is not significant. The sum of the coefficients on the private bargaining-council dummy and the private bargaining-council—union interaction term (m + s) is also not significantly different from zero. The positive and significant coefficient for union members (a) does, however, suggest that unions attempted to win certain wage increases for their members in the private sector.

Finally, considering the wage premium to union members within the PSCBC system, the results show a significant union premium within the PSCBC of 11% (a+t). Furthermore, since both a+t and n are positive and significant, it follows that union members won supplemental awards, relative to non-union members, for their members at the plant level. The total premium to these union members stands at 22% (a+n+t).

A final crucial result though is that these estimates show that when we control for job and work characteristics, the conditional union wage premia in South Africa are between 6% and 7%. These results suggest that the union wage premia in South Africa are within the range of other developing country estimates (World Bank, 1995).

It appears then that union wage premia in South Africa from previous studies may be overestimated due to the lack of key controls that capture both firm and job characteristics, which are strongly associated with average earnings differentials (Azam & Rospabe, 2007; Banerjee et al., 2008; Moll, 1993; Schultz & Mwabu, 1998). This finding highlights both the importance of including firm and work characteristics in the wage equation, as well as the fact that the union wage premium, though significant, is possibly lower than implied in previous studies.

Another reason often sought for the economy's extreme unemployment levels is that of the labour regulatory environment. The World Bank's Doing Business survey provides objective measures of the costs of business regulation within an economy. We concentrate, in what follows, on the labour regulation module within the World Bank's survey that provides measures of the rigidity of employment index.<sup>16</sup>

Table 4.5 presents the means of the aggregated measures of regulation by country income level, as well as the estimates for South Africa. The rigidity of hiring index measures whether fixed-term contracts are prohibited for permanent work, the maximum duration of fixed-term contracts as well as the minimum wages for trainees relative to the average value added per worker. The rigidity of firing index has a range of components which examine and evaluate specific dismissal clauses in the national labour-market legislation. The rigidity of hours index measures the various restrictions around night work and weekly holiday work, as well as limits on the duration of a workweek and overtime work. The aggregate employment index (also referred to as the rigidity of employment index) is simply the average of the three sub-indices and thus presents an estimate of overall employment rigidity. Finally, the firing cost index measures the costs associated with terminating the employment of an individual in terms of the legislated notice-period requirements, severance payments and other penalties.

Table 4.5: Mean measures of regulation, by income level (2010)

Type of regulation	Low income	LMI	UMI	South Africa	Total
Rigidity of hiring	34.43	30.02	29.97	56.00	29.88
Rigidity of firing	34.90	29.45	26.18	30.00	28.85
Rigidity of hours	25.31	22.36	24.68	20.00	23.75
Aggregate Employment Index	31.55	27.29	26.97	35.00	27.49
Firing Cost Index	65.08	50.04	40.29	24.00	48.63

Source: World Bank (2010) and authors' own calculations

#### Notes:

- 1. Results in the table may be biased due to small sample variance.
- 2. LMI: lower middle-income countries; UMI: upper middle-income countries (World Bank income group classifications used in the Doing Business survey).

More information on the methodology used by the World Bank in deriving the *rigidity of employment index* and its component sub-indices is available from: http://www.doingbusiness.org/MethodologySurveys/EmployingWorkers.aspx.

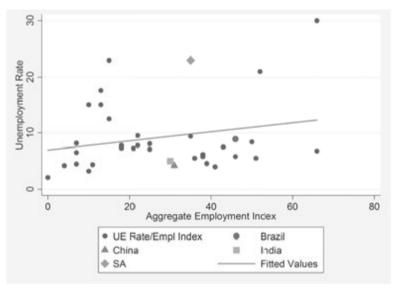
The results for South Africa indicate a relatively high level of difficulty of hiring workers, with the value of this index above the averages for all countries by income groups, and indeed well above the average for all countries. The rigidity of hiring index value of 56 places South Africa at position 151 of 183 economies sampled in 2010. The country's value for the rigidity of firing index suggests that South Africa is only slightly above the global average, while the rigidity of hours index has a value below the global average. Primarily as a result of the difficulty of hiring in the country as empirically measured, South Africa has an aggregate employment index value above all the averages for the different income groups, ranking it 120th out of 183 countries. The index value for firing costs, on the other hand, is far below the global average.

Figure 4.7 illustrates the relationship between the official unemployment rate and the value of the aggregate employment index for the sample of upper middle-income countries, as well as for China, Brazil and India. The positions of these three countries, as well as that of South Africa, are specifically highlighted in the figure. The trend line illustrates that for this sample of countries there is a weak positive relationship between the unemployment rate and the value of the aggregate employment index. Put differently, a relatively higher level of rigidity of employment may be associated with a relatively higher rate of joblessness. A simple linear correlation of the relationship, however, found that it is not statistically significant.<sup>17</sup>

South Africa has the second highest rate of unemployment of the sample of countries, while the economy's relative level of rigidity is above average, but not particularly severe. Brazil, in contrast, displays a relatively high level of aggregate rigidity but an unemployment rate of less than 10%. Both India and China have relatively benign levels of employment rigidity with values of 30 and 31 respectively (which are just slightly above the global average of 27.5) and relatively low levels of unemployment of less than 5%.

The above, albeit incomplete analysis, does confirm, of course, that unemployment will always be a function of a number of probable causative variables. These may include labour regulation, but will almost always encompass a range of additional demand- and supply-side factors. It is therefore not only incorrect, but also analytically incomplete, to focus exclusively on labour regulation when debating the causes of the high levels of unemployment in South Africa. This judgement is supported by the evidence presented above, which suggests a statistically insignificant relationship between unemployment and employment rigidity using cross-country data.

<sup>17</sup> A simple cross-country regression of the narrow unemployment rate on the aggregate employment index yields a statistically insignificant coefficient.



**Figure 4.7:** Comparison of aggregate employment index and unemployment rates for UMI and other selected countries

Source: World Bank (2010); own calculations

It must be remembered, however, that on the basis of the above evidence, South Africa does display a higher than average level of employment rigidity, driven by its relatively high levels of perceived hiring rigidity as well as its above average levels of firing rigidity. This suggests that in the current regulatory environment, any notion of a lack of flexibility within the South African labour market lies specifically in the hiring and firing provisions. Legislation that governs fixed-term contracts and the clauses governing dismissals and unfair labour practices (particularly but not exclusively as applicable during probation periods) are, according to the evidence presented here, the issues at the heart of the labour market flexibility debate in South Africa.<sup>18</sup>

# The quality of higher education and labour-market outcomes

The earlier discussion provided evidence that the post-apartheid labour market in South Africa has been characterised by skills-biased shifts in employment, with the highest returns in employment and wages accruing to higher-skilled individuals. In South Africa there is a mismatch between the types of skills supplied in the

A more detailed discussion on current debates in the labour regulatory environment has been undertaken in Bhorat et al. (2009), Bhorat and Cheadle (2009) and Benjamin et al. (2010)

labour market and those demanded by firms. Indeed, the rising spectre of graduate unemployment is testimony to this problem. Data for the post-apartheid period indicate that unemployment rates among those with post-matric qualifications, although low in absolute terms, have increased the fastest relative to other education categories of unemployed in the period since 1995 (Bhorat et al., 2006).

Bhorat, Mayet and Visser (2009) investigated determinants of the probability of graduates finding employment when controlling for a range of observable characteristics judged relevent, including field of study and type of institution in a multivariate context. The analysis was based on data from a survey collected by the Human Sciences Research Council (HSRC) in 2005. The survey collected data from individuals who were either graduates or non-completers during the 2000–2002 period from seven selected higher education institutions (HEIs).<sup>19</sup>

Selected results from their study are shown in Table 4.6. The dependent variable was binary, equal to one if the individual was employed at the time of the survey.

The dummy variables for race and gender are significant, suggesting that being African lowered the probability of finding a job relative to being white, and being female decreased the probability of finding employment relative to being male. The coefficient of the dummy variable for Africans at historically white institutions (HWIs) is significant and negative, suggesting that even when controlling fully for differences due to the quality of education and field of study, Africans at HWIs still have a lower probability of finding employment than whites at these institutions. There are two possible reasons for this measured differential in employment probabilities for Africans and whites at HWIs. The first is that employers continue to discriminate against prospective African candidates. The second is that there are other characteristics on the basis of which employer decisions are made, which could not be controlled for given the information in the dataset.

The selected institutions were Stellenbosch University, University of the North, University of the Western Cape, University of Fort Hare, University of the Witwatersrand, Technikon Pretoria and Peninsula Technikon. The data was gathered from two postal surveys — the 2005 Graduation Destination Survey and the 2005 Student Retention Survey. The questionnaires were sent via mail to the sample of graduates and leavers, respectively, between June and September 2005. Graduates were defined as students who had fulfilled the requirements for their qualification in 2002. The estimates contain a residual bias of students who were still studying at the time of the survey, that is, who were neither graduates nor leavers, since these students were not included in the survey. Of the total survey population of 34548 students within selected HEIs, there were 5491 valid responses, representing a return rate of 15.8%. The dataset was weighted. Weights were calculated as  $\frac{N}{n}$ , where N = 1 the number of students in the population of graduates or leavers by institution, race, gender and field, and N = 1 the number of students in that cohort in the sample.

Table 4.6: Probability of finding employment: selected results from a sample of HEI attendees

Variable	Marginal effects		
Graduated	0.0084		
Female	-0.1658**		
African from HBI	-0.2248**		
African from HWI	-0.2647**		
Maths scores in Grade 12	0.0260**		
Used social network	0.0199		
Number observed	2.965		

Source: Results from Bhorat et al. (2009)

#### Notes:

- \*\* significant at the 1% level
- \* significant at the 5% level

HWI and HBI denote historically white and historically black institutions respectively. The referent group is white people aged between 16 and 25 years who attended a HWI, were registered for a degree or diploma/certificate qualification, and who did not use a social network in their job search. Provincial and socio-economic controls as well as controls for field of study (Education; Humanities; Science, Engineering and Technology; other), and university or technikon attended, were also included (results not shown here).

Surprisingly, the graduation dummy is insignificant. This suggests that whether an individual completes a tertiary qualification or drops out before completion does not have a significant effect on the probability of finding employment. This may be attributed to the fact that the leavers in our sample have completed some years of tertiary education and perhaps also acquired some workplace skills while at the HEI, which may give them an advantage compared to those without any tertiary education.

The coefficient for the variable measuring performance in mathematics at the Grade 12 level was found to be positive and significant, suggesting that students who scored higher in mathematics in their Grade 12 examinations had a higher probability of finding employment than their counterparts who scored lower. This proxy for relative performance at the HEI could arguably be a factor influencing employer decisions in the hiring process. Employers may thus be using subject grade performance, in addition to whether an individual is a graduate or not, in their hiring process. However, even when controlling for grades obtained, Africans at HWIs and HBIs were still found to have lower employment probabilities than their white counterparts.

The dataset also contained information on the job search methods used by both the unemployed and the employed in the sample — 30% of the employed found their job through a personal contact. Furthermore, a significantly higher proportion of whites made use of a social network in the job search process than Africans. However, the coefficient for this variable was not statistically significant in the equation, suggesting that the method of job search did not impact on the probability of securing employment for this sample of graduates and non-completers.

Overall, the results show that, given labour-demand needs and a certain level of human capital, race still influences the probability of finding employment.<sup>21</sup> Within the context of this chapter, these results suggest that, despite clear evidence indicating variously the presence of skilled-wage premia, skills-biased labour-demand trends and relative wage hikes for degreed workers—this transmission from human-capital accumulation to employment is far more complicated. In addition though, and this is the surprising yet key result here, we do need to understand more about the preferences of South African employers, as well as their specific decision-making framework when employing or not employing individuals who, at first glance, appear to be equally certified.

## **Conclusion**

To identify the causes of high unemployment within the labour market in post-1994 South Africa, our analysis in this chapter suggests a number of possible candidates. In particular, we highlight five key challenges in the labour market:

- 1. Race, gender and age continue to play a significant role in inferring labour-market outcomes. However, our econometric evidence, while confirming much of the race, gender and age determinants of employment and earnings, did suggest some important changes in the post-1995 period. On the one hand, it was clear that the average African–white wage gap had declined significantly in the 1995–2007 period; on the other hand, the gender wage gap had grown since 1995.
- 2. Employment generation since 1994 has been sectorally uneven. Our sectoral results demonstrate a key outcome, namely that the vast majority of jobs

A dummy variable was created that was 1 if the individual used a personal contact or social network, and 0 if another method of job search was employed (other search methods included advertisement, direct application, employment agencies, and recruitment at the HEI).

Indeed, other characteristics such as soft skills (for example, punctuality, reliability in work, attendance, sociability, initiative, etc.) may also play a role in influencing employer decisions. However, this data was unavailable at the time of the study.

- since 1995 have been created in the financial and business services, and the wholesale and retail trade sectors, while primary sector employment has declined. Within financial and business services however, it has been the rapid rise in crime-prevention services and temporary employment agencies, notably labour brokering, which have driven employment growth, not only in this sector but in the aggregate as well.
- 3. The skills mismatch between the composition of labour demand and supply continues unabated. It is clear that a labour-demand pattern characterised by the disproportionate employment of the better-educated and skilled individuals continues to be a strong feature of this economy. These results corroborate the evidence that labour-demand patterns in South Africa have been characterised by a rise in the demand for skilled and semi-skilled workers, relative to the unskilled. This in turn, in the face of a constrained supply of individuals with these characteristics, has resulted in significantly higher returns to those with some form of post-schooling qualification. The overall result has been a growth path with employment heavily skewed towards those with better skills and education. These skills-biased employment shifts have exacerbated the mismatch between labour demand and supply, thereby fuelling the post-1994 unemployment numbers.
- The institutional and regulatory environment remains critical in South Africa. The union wage premia results suggest much lower union wage effects than previously estimated for South Africa. They also show that bargaining councils are instrumental in significantly raising wages of their members relative to non-members. The critical question however, is whether there is an argument for hypothetically curtailing union activity in order to maximise employment creation. The fact that the union movement in South Africa remains central to industrial relations and, indeed, broader social and political stability makes any discussion of this sort simplistic at best and fallacious at worst. Within the regulatory and institutional environment, the analysis above suggests that very specific aspects of the regulatory architecture are worth policy scrutiny. On the basis of the available evidence, South Africa does display a higher than average level of employment protection legislation, resulting in its relatively high levels of perceived hiring rigidity as well as its above average levels of firing rigidity. This suggests that in the current environment, any diagnosis of a lack of flexibility within the South African labour market will lie within the specific areas of hiring and firing provisions. Existing legislation that governs fixed-term contracts and the clauses governing dismissals and unfair labour practices (particularly but not exclusively as applied during probation periods) is at the heart of the labourmarket regulation debate in South Africa.

5. The quality of higher education remains a critical constraint to finding employment. Evidence suggests that even when fully controlling for differences due to the quality of education and field of study, African graduates at HWIs still have a lower probability of finding employment than white graduates from these institutions. Indeed, it is evident that South Africa's unique educational history renders the quality of higher education a particularly important part of the debate about labour-market outcomes.

While this chapter has been analytical by design, it has steered clear of specific policy suggestions or proposals because any employment creation suggestions need to be mindful of the unresolved issues raised earlier. Perhaps the most important conclusion to be drawn from the discussion is that, within the area of labour-market interventions and policies, it is essential that the trade-offs and choices, which are so stark within this domain, are appreciated and understood by policy-makers in their pursuit of a job-generating growth path for South Africa.

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# Chapter 5

# Sectoral dimensions of employment intensity

Fiona Tregenna<sup>1</sup>

### Introduction

A central challenge facing South Africa is the extremely high rate of unemployment. One dimension of this is that production is insufficiently labourabsorbing. This points to the need for a better understanding of employment intensity, and the possibilities of increasing the labour-absorbing capacity of the economy. For the economy to absorb more labour (at any given level of production), either the share of relatively employment-intensive sectors needs to increase, or the degree of employment intensity within sectors needs to increase, or both.

There is a high degree of heterogeneity across sectors of the South African economy in terms of their employment intensity. At the extremes, a unit of demand in the most employment-intensive subsector is associated with approximately 20 times as many (direct and indirect) jobs as a unit of demand in the least employment-intensive subsectors.<sup>2</sup>

This sectoral heterogeneity implies that the sectoral dimension of employment intensity is important. This importance lies firstly at the analytical level, as it implies that an analysis of employment intensity at the aggregate level, neglecting sectoral disaggregation, will miss important aspects. Secondly, it has important policy implications that would need to be explicitly taken into account in the promotion of higher employment intensity. For instance, industrial policies that target particular sectors need to take their employment intensity into account as one of the key factors in determining which sectors to prioritise. Accurate information on employment intensity at a sectoral level could enable the targeting of highly employment-intensive sectors, as well as

Acknowledgments: helpful comments and suggestions were received from Anthony Black, from anonymous referees and from participants at the SANPAD Workshop on Employment Intensive Growth held at the University of Cape Town in March 2012.

<sup>2</sup> Author's calculations, based on the methodology set out later in this chapter.

aiding in projecting and monitoring the impact of other policies that are likely to affect the influence of the sectoral composition of the economy upon overall employment outcomes.

While there would be other dimensions along which employment intensity would vary, this chapter takes a sectoral perspective regarding the empirical analysis of employment intensity in South Africa. It provides an overview of the sectoral composition of employment and trends therein, and presents employment multipliers by sector, thus showing the combined direct and indirect employment intensity of various sectors.

In this chapter, 'sectors' refer to broad sectoral categories such as manufacturing or agriculture, while 'subsectors' refer to the more disaggregated categories of activities within these sectors. South African data allow for analysis at the level of 46 subsectors.

# **Sectoral patterns of employment**

It is well-known that the sectoral composition of employment has changed internationally over time. In Chapter 2, Rolph van der Hoeven shows international trends in the sectoral composition of employment over time. The rise in the share of manufacturing subsequent to industrialisation was eventually followed by a decline in this share and a concomitant increase in the share of services. The falling share of manufacturing in total employment is typically referred to as deindustrialisation. Deindustrialisation was observed prominently in advanced economies from about the early 1970s onwards, and more recently has become common in middle-income countries as well.

Indeed, just considering the stylised facts of the transitions between the primary, secondary and tertiary sectors, internationally and historically, the relative growth of manufacturing might be expected to level off as a natural phase in economic development. Baumol (1967) argues that activities with relatively low scope for cumulative productivity improvements—he focuses specifically on services in this regard—will tend to absorb an ever-increasing share of employment (even without increasing their relative share of output), and that this will result in a corresponding slowdown in growth. Extensive international empirical evidence points to the stylised fact of a generally declining share of manufacturing in total employment as countries' income per capita increases above a threshold.

Whether deindustrialisation is to be considered a cause of concern in terms of growth is another issue, and depends largely on whether or not manufacturing is considered to be a stronger 'growth-puller' than other sectors. If manufacturing does indeed have a particularly important role to play in stimulating and sustaining aggregate economic growth, this would imply that a decline in the relative

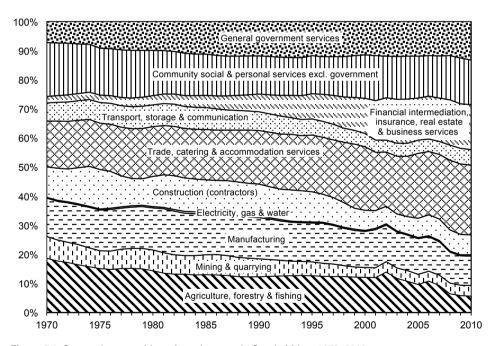
share of manufacturing would tend to affect growth negatively.<sup>3</sup> These sorts of negative effects are likely to be particularly pronounced in cases of 'premature' deindustrialisation, where a country's turning point in the share of manufacturing in total employment occurs at lower levels of income per capita than is typical internationally (see Palma, 2005; 2008). Premature deindustrialisation tends to be caused or accelerated by policy interventions, such as liberalisation, rather than simply by rising levels of income per capita. It seems likely that premature deindustrialisation would tend to have more negative effects on growth than would comparable deindustrialisation at higher levels of economic development, where more of the benefits of a full development of manufacturing have been obtained and also a country is more likely to be competitive in sophisticated high-productivity services activities.

Broad sectors are of course heterogeneous, and as such the specific characteristics of declining and growing sectors need to be considered when analysing the likely effects of structural change on growth. At a theoretical level, it can be argued that the 'technological–organisational' characteristics of activities are central to the growth implications of changing shares of such activities; that there is considerable intra-sectoral variety in these characteristics, but that, on aggregate, manufacturing generally tends to have high scope for cumulative productivity improvements (Tregenna, 2013).

A further consideration concerning the growth effects of sectoral change is whether such change is in the composition of employment, of output, or both. The standard definition of deindustrialisation is in terms of decreases in the share of manufacturing in employment specifically. However, an empirical study of episodes of 'deindustrialisation' internationally (Tregenna, 2009) points to the vast heterogeneity of experiences that would be characterised as deindustrialisation, where the share of manufacturing in employment only (that is, not the share of manufacturing in GDP as well) is taken into account. These episodes include cases such as South Korea, where manufacturing-output growth is healthy and decreases in the share of manufacturing employment seem to be driven primarily by rising productivity in manufacturing. Such types of structural change are likely to have very different growth implications from instances in which manufacturing as a whole is struggling or collapsing. Deindustrialisation might be more appropriately defined as a sustained decline in both the share of manufacturing in total employment and the share of manufacturing in GDP.

<sup>3</sup> Such a perspective is associated inter alia with literature in the tradition of the work of Nicholas Kaldor, as well as with the 'structuralist' school of economics, developed prominently around the Economic Commission for Latin America.

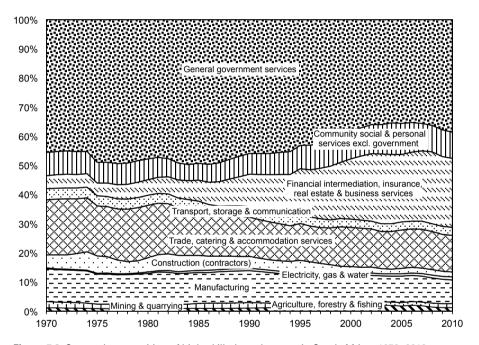
Turning to the case of South Africa, Figure 5.1 shows the broad sectoral composition of employment since 1970. While there is a noticeable decline in the share of manufacturing employment, this is not as dramatic as in some other middle-income countries. Significant declines in the share of employment of the two primary sectors can be clearly seen. There is a large increase in the share of services employment, with most of this increase in the sector 'financial intermediation, insurance, real estate and business services'. This increase is discussed in further detail later. General government services are separated out from other 'community social and personal' services here, since the dynamics of the public sector tend to be quite different from those of private services in terms of the causes of rising or falling employment, as well as in terms of the determinants of employment intensity. Note, however, that some of the other services categories would include public-service employees in fields such as education and health.



**Figure 5.1:** Sectoral composition of employment in South Africa, 1970–2010 *Source*: Derived from South African Standardised Industry Database (SASID) data (Quantec, 2012)

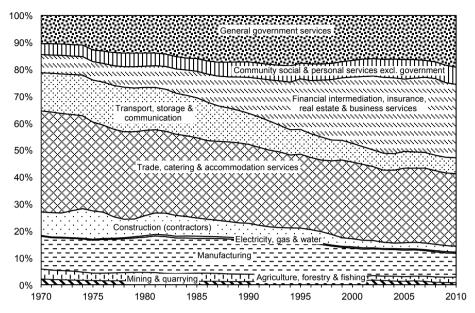
Figures 5.2 to 5.4 show trends in the sectoral composition of formal employment, disaggregated by skills category. These skills categories are actually based on

occupational classifications.<sup>4</sup> While the use of occupational categories as a proxy for skills levels is certainly not ideal, time-series data on the actual skills composition of the various sectors is not available. The use of occupational classifications as a proxy for skills categories may, for instance, result in 'managers' at even relatively low levels being classified as high-skilled. This could be part of the explanation for, as an example, the apparent dominance of general government services in the sectoral composition of high-skilled employment shown in Figure 5.2. The use of occupations to proxy for skills levels also does not take into account changes in intra-occupational skills profiles over time.

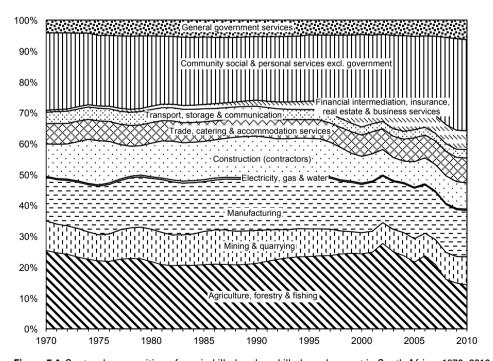


**Figure 5.2**: Sectoral composition of high-skilled employment in South Africa, 1970–2010 *Source*: Derived from SASID data (Quantec, 2012)

<sup>4</sup> High-skilled workers are those in the following occupations: professional, semiprofessional and technical; managerial, executive and administrative; and certain transport occupations, for example pilot navigator. Skilled workers include the following occupations: clerical, sales, transport, delivery and communications; service; farmer and farm manager; artisan, apprentice and related occupations; production foreman and production supervisor. Semi- and unskilled workers include all other categories (Quantec, 2012). This disaggregation is available only for formal employment.



**Figure 5.3**: Sectoral composition of skilled employment in South Africa, 1970–2010 *Source*: Derived from SASID data (Quantec, 2012)



**Figure 5.4:** Sectoral composition of semi-skilled and unskilled employment in South Africa, 1970–2010 *Source*: Derived from SASID data (Quantec, 2012)

With this caveat, it can be observed that the services sectors overall account for most of high-skilled employment, in greater proportion than services' share of total employment (that is, they are relatively 'intensive' in high-skilled employment). Conversely, the primary sectors (agriculture and mining) are particularly 'intensive' in semi- and unskilled employment.

An important consideration in analysing sectoral shifts in the composition of employment relates to the extent to which the changes apparent in the data, as shown in the figues, represent genuine structural changes as opposed to mere changes in the statistical allocation of employment due to intersectoral outsourcing. The latter phenomenon has been referred to as the 'statistical illusion' or 'statistical artefact' component of deindustrialisation.<sup>5</sup> This refers to the degree to which the apparent decline in manufacturing and the rise in services, as shares in total employment, is simply due to the outsourcing of employment from manufacturing companies to service providers that are counted in the services sector. For instance, if security guards at a chemicals plant were previously employed directly by the plant, they would have been classified as manufacturing workers, but if the security function was subsequently outsourced to a specialised security company, those security workers would then have been classified as service workers. Taking account of such trends is important for understanding the extent to which apparent changes in the sectoral composition of employment, such as those depicted in the figures above, are in fact real structural shifts.

In earlier research (Tregenna, 2010), I developed a methodology for estimating the extent to which intersectoral outsourcing might account for apparent changes in the sectoral composition of employment. The methodology utilises inter alia dynamic decomposition analysis and counterfactual analysis based on cross-referencing of individual employees' occupational and industrial classifications, and taking into account both the share of particular occupations in industries and the shares of industries in those occupations. This methodology was applied to the case of South Africa, using microdata from various rounds of the Quarterly Labour Force Survey and earlier data from the October Household Survey. In the absence of actual data on outsourcing, these seem to give the best indication of the likely extent of outsourcing and what this implies for structural change in South Africa.

The results suggest that the relatively high growth in services employment in the 2000s was, to a significant extent, based on the overall expansion of employment of cleaners and security guards specifically and, in particular, by outsourcing-type reallocation of these activities from manufacturing and from the public sector towards private services (such that an increasing share of the total

<sup>5</sup> See, for instance, Rowthorn and Coutts (2004) and Palma (2008).

employment of these occupations was classified in private services). Even though cleaners and security guards are just two occupations among many, between 2001 and 2007 about 46% of the total increase in private-services employment was in these two occupations. The estimates of the extent of outsourcing suggest that approximately one-fifth of the total growth in private-services employment between 2001 and 2007 can be accounted for by the outsourcing of security guards and cleaners from other sectors to private services. According to the projections in this study, in the absence of intersectoral outsourcing, manufacturing employment would actually have grown slightly faster than employment in private services over that period.<sup>6</sup>

These findings suggest that some of the apparent shifts in the sectoral composition of employment shown in Figure 5.1 are accounted for by the outsourcing-style reallocation of jobs towards the services sector. These would fall under the subsector 'business services' within the sector 'financial intermediation, insurance, real estate and business services', in which firms such as those providing outsourced-cleaning services are classified. Figure 5.1 shows this sector to be by far the fastest growing subsector within services. The findings on the possible prevalence of intersectoral outsourcing, referred to above, suggest that this apparent growth in services employment is, in fact, largely outsourcing-driven, rather than reflecting an underlying shift in sectoral structure.

One implication of this is that the growth in services employment may not really be as dynamic as it appears to be. Secondly, to the extent it is driven by outsourcing, this growth in services employment may diminish over time insofar as the functions that are easiest or most cost-efficient to outsource have already been outsourced. A further implication is that the performance of manufacturing employment may not be as dismal as initially seems to be the case, at least relative to other sectors of the economy. In fact, once intersectoral outsourcing is taken into account, what might otherwise seem to be deindustrialisation in South Africa in recent years may actually be, in large part, a 'statistical illusion'. However, it seems likely that there is indeed a genuine — in the sense of being an underlying structural shift not deriving from classification issues — longer-term trend (since about the early 1980s) towards a decline in the share of manufacturing in the South African economy.

Outsourcing of jobs from manufacturing to the services sector is likely to have also contributed somewhat to the apparent capital intensification — or the decline in labour-factor intensity — of South African manufacturing over time. The activities most likely to be outsourced would tend to have higher labour-capital ratios, as well as being more employment-intensive in terms of output than would

<sup>6</sup> See Tregenna (2010) for more detail on the methodology and results.

be the case for manufacturing overall. The hiving off of such activities would thus affect the aggregate factor ratios and employment intensity of manufacturing. It seems probable, however, that this would be a relatively minor factor in the longer-term decline in the labour intensity of manufacturing, since this decline began well before the intensification of intersectoral outsourcing.

In the case of a sector such as agriculture, for which a significant decline in employment can be seen in the figures above, while intersectoral outsourcing may be a partial contributor to this trend, the main drivers are likely to be real structural changes, in particular falling employment intensity in this sector.<sup>7</sup>

These trends and observations should be borne in mind when considering sectoral dimensions of employment intensity and the changes therein. The following section presents empirical evidence on employment intensity across sectors.

# **Employment multipliers**

While there are various ways of calculating and comparing employment intensity, the optimal measure is arguably employment multipliers. Employment multipliers are calculated by combining the Leontief inverse derived from input—output data with a measure of the direct employment intensity of each sector. The Leontief inverse shows the strength of backward linkages by sector, based on a matrix of the outputs of each sector that go as inputs into each other sector. For technical details of the methodology, see Tregenna (2008). The advantage of using employment multipliers as an indication of sectors' employment intensity is thus that the indirect as well as the direct employment intensity of a sector are accounted for.

For example, the employment multiplier of the motor-vehicle-manufacturing sector would measure not only the direct employment intensity of motor-vehicle manufacturing itself, but also the indirect employment intensity in terms of the industries supplying inputs to motor-vehicle manufacturing (such as steel, rubber, paints, services purchased, and so on.) Both the strength of the backward linkages from motor-vehicle manufacturing to these upstream (input-supplying) industries, as well as the direct and indirect employment intensity of those industries, would enter into the calculation of the indirect employment intensity of the motor-vehicle industry.

Employment multipliers essentially indicate what increase (decrease) in economy-wide jobs could be associated with a given increase (decrease) in final output of a sector. More specifically, the employment multipliers shown here

See Chapter 9 for an analysis of employment intensity in the agricultural sector.

<sup>8</sup> See Tregenna (2015) for an overview of methods of calculating employment intensity.

project how many additional jobs would be required economy-wide in order to meet a R1 million increase in final demand for a given sector.

It should be noted, however, that as the calculation of employment multipliers is on an average and not a marginal basis, projections of how many new jobs could arise from an increase in production would generally be most accurate for short- to medium-term analysis and for relatively small changes in demand; that is, for fairly incremental changes in the size of a sector in the short- to medium-term, employment multipliers should give a good sense of the likely employment implications. Where there is a massive change in the size of a sector, for example due to a significant trade shock or a new government policy that effectively promotes rapid growth in the sector, this would be likely to affect the sector's direct employment intensity and/or its input–output relationships with other sectors, such that the existing average multipliers would become less accurate predictors of marginal employment changes over time.

When calculating employment multipliers, it needs to be taken into account that some of the intermediate inputs to production are imported. To continue with the earlier example, not all of the steel, rubber and other inputs to motor-vehicle manufacture are domestically produced. Some of the (total) backward linkages are thus not to the rest of the domestic economy but instead to production occurring outside South Africa. Ignoring this issue would mean an overstatement of employment multipliers, especially for sectors which source a significant proportion of their inputs from outside South Africa. To take account of this difference, employment multipliers are calculated and shown here 'in total' (that is, not distinguishing between domestically produced and imported intermediate inputs) and 'import adjusted' (excluding imported intermediate inputs). The import-adjusted employment multipliers give the best indication of the overall effects on domestic employment should a sector expand or contract. Where there is scope for import substitution of intermediate inputs, the total employment multipliers give an indication of the upper ceiling of the potential employment multipliers.

The analysis uses data in 2009 current prices. It should be noted that employment multipliers are extremely sensitive to whether the calculations are based on constant or current prices (and of course, in the case of constant prices, to the choice of base year), which can significantly affect the results. This concerns in particular the employment-output figures, since output figures are affected by pricing, whereas employment numbers are not, which are combined by the Leontief inverse to yield employment multipliers. This means that the figures shown here are not comparable to those calculated for different years (or for 2009 in constant prices). The input–output data are from SASID (Quantec, 2009), which is based on data from Statistics South Africa, with some additional calculations and interpolations.

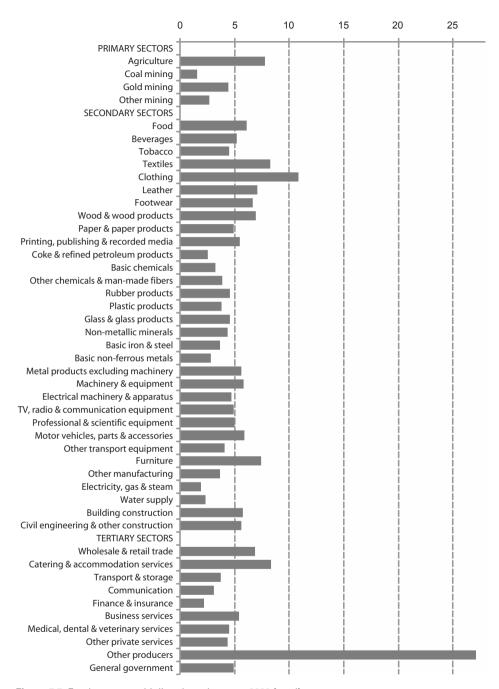
Figure 5.5 shows total employment multipliers by sector, while Figure 5.6 shows these when imported intermediates are excluded. The latter gives a more accurate indication of the actual domestic employment intensity across sectors. Table 5.1 ranks sectors according to their employment intensity (using both total and intermediate, import-adjusted employment multipliers), showing which sectors across the economy are the most and least employment-intensive. Insofar as there is a desire from policy-makers to promote relatively employment-intensive sectors, this table indicates which sectors could be considered in this respect.

The heterogeneity in employment intensity across sectors comes through clearly from the two figures. The 'other producers' subsector has a total employment intensity that is more than 17-fold that of the least employment-intensive sector (according to that measure), coal mining. Using the intermediate import-adjusted measure, 'other producers' is 20 times as employment-intensive as the next-most employment-intensive sector—coke and refined petroleum. These very large differences in employment intensity across subsectors underscore the importance—for both analytical and policy purposes—of a disaggregated sectoral analysis of employment intensity.

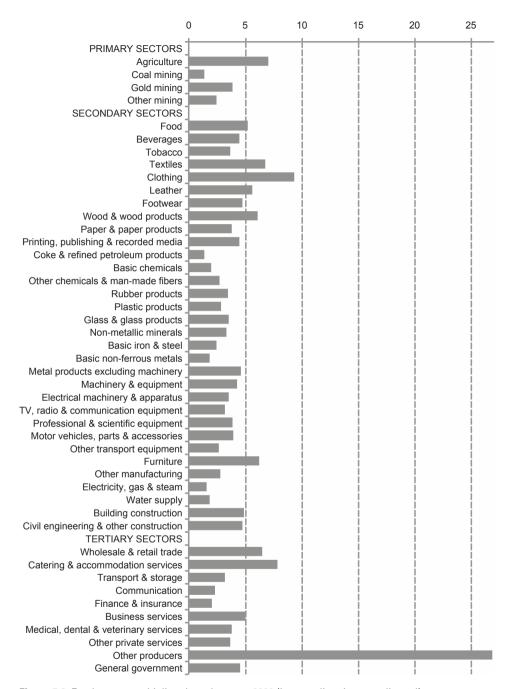
The 'other producers' subsector is by far the most employment-intensive, using both measures, and appears as a clear outlier. A difficulty in analysing this subsector is that, apart from a few minor specific activities (laundries and dry-cleaning, hairdressing and other beauty treatments, and funeral services), it essentially includes employment in services not elsewhere classified. No further detailed information is available on what sort of activities account for most of the employment in this subsector. This is unfortunate as it precludes both a more detailed analysis of the nature of this highly employment-intensive subsector, as well as at the policy level allowing for targeting of the activities classified in the subsector.

Profiling the nature of employment in this 'other producers' subsector to the extent to which data allow, the share of informal employment in total employment (17%) is somewhat lower than for private services overall (23%). However, the percentage of formal employment in the subsector that is classified as semi- or unskilled is 92%, markedly higher than the 35% rate for private services overall (this uses the skills categories explained earlier, with their attendant caveats). In terms of size, this subsector is significant, accounting for about 18% of total (private and public) services employment and about 13% of economy-wide employment; so despite the lack of clarity around its composition, this subsector cannot be disregarded.

<sup>9</sup> Figures 5.5 and 5.6 are taken from Tregenna (2016).



**Figure 5.5**: Employment multipliers by subsector, 2009 (total) *Source*: Author's calculations based on SASID data (Quantec, 2012)



**Figure 5.6:** Employment multipliers by subsector, 2009 (intermediate import adjusted) *Source*: Author's calculations based on SASID data (Quantec, 2012)

While it is likely that some—perhaps even much—of the employment classified in this sector is in some way misclassified or simply allocated there as a sort of residual services sector, this type of employment would presumably be services jobs which would otherwise be classified in other services subsectors. An implication of this is that, were the jobs allocated to this subsector to be reclassified in other services subsectors, the employment intensity of those other services subsectors would rise commensurately. Under such a reclassification, the very high, apparent employment intensity of the 'other producers' subsector would ultimately still fall to the broad services sector (although 'diluted' across other services subsectors to which this employment could be reclassified).

The next most employment-intensive subsectors come from a mix of broad sectors: clothing, catering and accommodation, agriculture, textiles, wholesale and retail trade, furniture, and wood and wood products. The least labour-intensive include heavy manufacturing subsectors, such as coke and refined-petroleum products, and basic non-ferrous metals; the electricity, gas and water subsectors; and coal mining. Perhaps unsurprisingly, the least employment-intensive subsector of services is finance and insurance.

For the overall sectors, agriculture has the highest multiplier, followed by services excluding general government and then by general government services. Although manufacturing has high backward linkages, its own direct employment intensity is relatively low, and hence its overall employment multiplier is lower than for the services sectors.

Table 5.1: Ranking of sectors according to employment multipliers

Sector	Rank (intermediate import adjusted employment multiplier)	Rank (total employment multiplier)	
Other producers	1	1	
Clothing	2	2	
Catering & accommodation services	3	3	
Agriculture	4	5	
Textiles	5	4	
Wholesale & retail trade	6	9	
Furniture	7	6	
Wood & wood products	8	8	
Leather	9	7	
Food	10	11	
Business services	11	18	

Continued

#### Continued

Sector	Rank (intermediate import adjusted employment multiplier)	Rank (total employment multiplier)		
Building construction	12	14		
Footwear	13	10		
Civil engineering & other construction	14	16		
Metal products excluding machinery	15	15		
General government	16	23		
Beverages	17	19		
Printing, publishing & recorded media	18	17		
Machinery & equipment	19	13		
Motor vehicles, parts & accessories	20	12		
Professional & scientific equipment	21	20		
Gold mining	22	29		
Medical, dental & veterinary services	23	28		
Paper & paper products	24	21		
Tobacco	25	27		
Other private services	26	30		
Glass & glass products	27	26		
Electrical machinery & apparatus	28	24		
Rubber products	29	25		
Non-metallic minerals	30	31		
TV, radio & communication equipment	31	22		
Transport & storage	32	35		
Plastic products	33	34		
Other manufacturing	34	36		
Other chemicals & man-made fibres	35	33		
Other transport equipment	36	32		
Other mining	37	41		
Basic iron & steel	38	37		
Communication	39	39		
Finance & insurance	40	44		
Basic chemicals	41	38		
Water supply	42	43		
Basic non-ferrous metals	43	40		

Continued

#### Continued

Sector	Rank (intermediate import adjusted employment multiplier)	Rank (total employment multiplier)
Electricity, gas & steam	44	45
Coal mining	45	46
Coke & refined-petroleum products	46	42

Source: Author's calculations based on SASID data (Quantec, 2012)

#### Conclusion

One of the dimensions along which employment intensity varies is economic sectors, and there are significant differences in the degree of employment intensity across sectors. Appreciating this heterogeneity is important for increasing the employment intensity of the South African economy, so that more jobs might be generated by any given rate of output growth.

Needless to say, there is also considerable variation in the degree of employment intensity *within* sectors, and even within subsectors. Not only do subsectors include a wide range of productive activities, but even within an activity there are significantly more and less employment-intensive production techniques. Firm size, firm location, product characteristics and management choices are among the factors affecting employment intensity at firm level. This sort of detail does not come out at the meso-analysis at sectoral or subsectoral levels, which points to the need for complementing the sort of analysis presented in this chapter with firm-level studies of employment intensity.

Nonetheless, as is clear from the empirical results shown here, there are distinct patterns and differences across both sectors and subsectors concerning the degree of employment intensity, which underscore the value of analysing employment intensity at these levels of disaggregation. Furthermore, from a policy perspective, a comparison of employment intensity at the subsectoral level is of value since any targeting of particular activities for support on the basis of employment intensity in the interests of promoting greater overall job creation is more likely to be feasible (in terms of efficient policy implementation) at a subsectoral level than on the basis of individual firm characteristics. Of course, success in the expansion of employment through policy aimed at the promotion of especially employment intensity sectors and subsectors is contingent on how well policy can be targeted and implemented in practice.

In addition to sectoral heterogeneity in terms of employment intensity, there is also considerable unevenness across sectors in terms of average job quality, such as the levels of wages and benefits, job security, the protection of labour rights, and so forth.

This chapter has empirically analysed employment intensity in South Africa at the subsectoral level. Employment multipliers measure both direct and indirect employment intensity. Although calculated on an average and not a marginal basis, the results shown here give an indication of which sectors are likely to be relatively job-rich should they expand and, similarly, which would have particularly pronounced negative effects on economy-wide employment should they contract.

The indirect employment intensity of a sector — which is incorporated in the measurement of employment intensity — could be thought of as part of the positive externalities of economic activity in that sector. As with externalities in general, these positive externalities are not factored into the private decision-making with regard to the level of production in an individual firm falling within a particular sector. More broadly, there are, of course, positive externalities of employment in general, which are not factored into private decision-making with regard to the level of direct employment in a firm. These positive externalities would include the development and/or retention of skills which have broader economic benefits; reduced dependence of an employee on public and private support, which would otherwise need to sustain them should they be unemployed; the contribution of an employee's wages to aggregate demand; any payroll and income taxes paid to the state; and the positive effects of employment (lower unemployment) on social stability and cohesion. These positive externalities of employment would form part of the motivation for public-policy support for employment creation in general, including the promotion of employment-intensive production. In addition to these general positive externalities of employment, there are additional externalities associated with the indirect employment in the rest of the domestic economy that are associated with production in any given sector. These positive externalities of indirect employment form part of a case for support - through public policy — of activities with high indirect (in addition to direct) employment intensity, in particular through the various tools of available industrial policy. Employment multipliers, as presented here, are important for quantifying the actual levels of not only direct but also indirect employment intensity.

While employment intensity is an important consideration from a policy perspective, it is of course not the only one. Some sectors or subsectors might not be particularly employment-intensive but could make important economic contributions through other channels, such as the balance of payments, revenue contributions to the fiscus, technological progress, and so on. These contributions could be important not only for growth but for employment as well. Furthermore, characteristics of the output of a sector in terms of the degree of technological advancement, as well as demand dynamism (referring here to the trend in international demand for the output of the sector), are also crucial considerations

in relation to the contributions of an activity to growth, especially medium- and long-term growth. The prioritisation of sectors for support, such as through industrial-policy incentives, thus needs to factor in employment intensity as well as other sectoral attributes.

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### Chapter 6

# Inequality traps and human-capital accumulation in South Africa<sup>1</sup>

Miguel Pellicer and Vimal Ranchhod

#### Introduction

A large body of theoretical literature has emerged in recent decades which explores the links between the degree of inequality in a society and its investment levels and patterns. This literature has the potential to yield useful insights for South Africa. South Africa has one of the highest levels of inequality in the world, as well as very high unemployment levels. Moreover, growth has been relatively sluggish in recent decades, in comparison to other emerging markets. The study of inequality and investment in the aforementioned literature has the potential to shed light on the conditions under which situations of high inequality, low growth and high unemployment can emerge. The key contributions of this literature are the acknowledgement that all of these variables are interrelated, as well as the focus on their interactions. In this chapter we examine the insights of this literature that are potentially most relevant to South Africa and tentatively explore the empirical relevance of the mechanisms emphasised. We believe that this exercise can be helpful in informing policy discussions.

There are several types of investments through which inequality and employment interact to produce poor economic outcomes. An important one is entrepreneurship. Inequality may limit entrepreneurship in certain contexts and thus limit employment levels.<sup>2</sup> This would be a rather direct connection between inequality and employment, through the demand for labour. Another potential channel is via investment in innovation. Inequality may encourage or discourage innovation, thus affecting growth and employment levels.<sup>3</sup> Attempting to account for all of the ways in which inequality and investment interact in a

<sup>1</sup> We would like to thank Murray Leibbrandt, Anthony Black and the participants of the SANPAD Employment-Intensive Growth workshop for very useful comments and suggestions. All errors are our own.

See, for instance, Banerjee and Newman (1993).

<sup>3</sup> See Foellmi and Zweimüller (2006).

coherent and compact way would be unmanageable. Thus, in order to narrow down the problem, we ignore many of these channels and focus specifically on one: investment in education. We believe that education differentials are a crucial element for understanding South Africa's inequality, unemployment and poor growth.

Regarding inequality, recent empirical evidence shows that labour-market differentials account for most of the observed income inequality in South Africa (Leibbrandt et al., 2010). Wage differentials between skilled and unskilled labour in South Africa have likewise been shown to be extremely high compared to other countries (Lam, 1999).

With regard to unemployment, we present strong evidence later in this chapter that the unemployment rate of graduates with post-secondary qualifications is substantially lower than the average. From a partial equilibrium point of view, this implies that broadening access to higher education would foster employment. The effects can actually be substantially stronger after considering any general equilibrium effects: increasing the supply of skills is likely to make the remaining unskilled workers more desirable from the employers' point of view, thus relieving the unemployment problem of the unskilled. Finally, with regard to growth, skill accumulation would naturally contribute directly to growth via increased productivity, as well as indirectly through the effect mentioned above on unemployment. Thus, broadening access to higher education can be thought of as a labour-supply-side mechanism for achieving overall growth and, more particularly, employment growth.

In this context, we discuss the role of inequality in enabling or constraining employment and growth via the interactions of inequality and educational decisions. We discuss three different theoretical frameworks to study the interactions between inequality and educational choices. The following frameworks are ordered in terms of their complexity and (arguably) realism:

- 1. that markets work perfectly and that the social environment plays no role in decision-making
- 2. that credit markets are imperfect and play no role in the social environment
- 3. that the social environment affects information, preferences and actions.

These three frameworks lead to very different conclusions with regard to the effects of inequality on educational decisions, and to very different policy implications. According to the perfect-markets framework, inequality can actually be beneficial for growth and investment, as it generates incentives to obtain higher levels of education. In such a framework, there is no room for policy on a normative or on a positive basis. In the second framework of imperfect markets, inequality acts mainly as a constraint to investment. Inequality traps can emerge where high levels of inequality lead to little educational investment, which in turn regenerates the

high levels of inequality. In such a situation, the role of inequality for incentives is minimal, and is dwarfed by its constraining role. Implications for policy include individual-income redistribution and education financing as well as, interestingly, the expansion of educational opportunities for intermediate levels of skill. Finally, the framework which takes social interactions into account leads to additional mechanisms through which inequality traps might arise: disadvantaged social environments may limit the aspirations or discourage the development of the abilities of their members, leading them to remain disadvantaged. This framework warns against the utility of individual-income redistribution and instead suggests policy interventions that target groups as a whole.

We then make use of two, large datasets to identify which of the hypotheses seems to have greater empirical support. The National Income Dynamics Study of 2008 is used to investigate returns to education for youth, educational attainment and the reasons for not continuing with one's education. All of this is done for different quintiles of household per capita income, which is how we operationalise inequality in our data. We then make use of the Cape Area Panel Study to identify some aspects relating to the third hypothesis, namely those dynamics driven by social influences. In particular, we look at young people's career aspirations as well as how measures of scholastic aptitude vary with age for youth from different socio-economic backgrounds.

To briefly summarise our findings, we find most support for the second theoretical framework discussed. Youth in South Africa from all backgrounds would like to study further to obtain a post-secondary qualification, but income and credit constraints bind many of them. In addition, youth from poorer backgrounds are disadvantaged by their primary and secondary schooling experiences, to the extent that many of them do not graduate from school with sufficient grades to even be eligible for enrolment in a post-secondary qualification.

We conclude with a discussion of policy choices to improve education and reduce inequality in the South African context. Two types of objectives are considered: improving access to tertiary education and reducing differences in education quality at the primary and secondary levels. On the first, we argue that there is scope for improving access to information on existing education subsidy programmes, as well as increasing the coverage of these programmes to include registration fees. Moreover, there would be potential benefits and scope to improve access at lower levels of tertiary education. Regarding pre-tertiary education, we argue that a policy to integrate students from poorer backgrounds into high quality schools is likely to be fraught with problems and, at best, have a minor effect. In contrast, efforts focused on improving the quality of schools in disadvantaged communities would probably be more productive.

### Inequality and investment: Insights from the theoretical literature

#### Introduction and general framework

A growing body of theoretical literature in economics has addressed the interactions between the level of inequality in a society and the investment choices of individuals within that society. Overall inequality and individual investment choices can feed into each other in potentially complex ways. There have been different approaches, or theories, that emphasise different aspects of these interactions, reaching significantly different conclusions as to the role of inequality for investment. The purpose of this section is to give a streamlined and non-technical account of these different approaches, focusing particularly on the decision to invest in education.<sup>4</sup>

We shall discuss the different approaches to analysing interactions between inequality and individual choices using a common overall framework. The key components of this framework are the following. First, when facing a series of choices, individuals make the choice that is best for them, given their aspirations and values, their perceptions and their constraints. The different approaches below make different assumptions with regard to how aspirations, perceptions and constraints are formed, but they all assume that once they are taken into account, individuals try to make the best decision possible for themselves.

Second, we focus particularly on the choice of whether to obtain more/better education or not, although many of the insights would apply equally well to the decision to become an entrepreneur, for example. For concreteness, we shall often frame our analysis in terms of the decision to attend college or not. However, all relevant insights apply to other educational decisions, such as whether to attend better-quality education at primary and secondary levels.

We frame the decision of whether to obtain a tertiary education or not (or whether to attend higher-quality primary and secondary education or not) as entailing costs and benefits. The benefits are mainly the perceived improvement of labour-market prospects and economic status gained by improving one's education. These benefits may differ from person to person, first because different people have different abilities that make them exploit their educational investment differently and, second, because even people with similar abilities may hold different perceptions as to how the investment is rewarded in the society. In turn, the value attached to these perceived benefits may also differ from person to person, as people differ in aspirations and values. Some individuals may value

For excellent technical surveys of many of the models discussed in this section, see Piketty (2000); Bertola (2000); Bertola et al. (2006).

a higher economic status or fear the possibility of a low socio-economic status more strongly than others.

The educational investment also has costs. Here we focus particularly on monetary costs arising from tuition fees and living expenses, as well as potential psychic costs associated with the effort of studying. In addition to the direct benefits and costs of educational investments, we account for the fact that people may face constraints when making their decisions. These constraints may prevent people from undertaking their preferred option on the basis of cost–benefit calculations. We focus particularly on monetary constraints: individuals need to acquire the funds necessary to pay for the tuition and the living expenses while studying.

Thus, in our general framework of individual decisions, people have perceptions about the payoffs from education; they have aspirations that make them value these payoffs more or less; they consider their costs and constraints, and if the benefits outweigh the costs while satisfying their constraints, they then choose to obtain more education. This is a very stylised account of how actual decisions work. However, we can still capture what we believe are key elements in the decision-making process, and the framework is sufficiently flexible in the sense that it accommodates vastly different approaches to investment decisions.

Since we are interested in possible interactions between inequality and individual choices, we need to have a framework for how inequality is generated. For simplicity, and to focus as cleanly as possible on certain key mechanisms, we consider inequality as emerging primarily from the differences in pay and economic status that come from differences in productivity, which in turn derive from differences in education and ability.

This stylised framework allows us to discuss different, important approaches to the interactions between inequality and educational choices. We consider three approaches. We label the first the 'perfect world' because it abstracts from many real-world factors. Nonetheless, it is useful in the sense that it serves as a benchmark and because some policy debates are informed by its logic. In the 'perfect-world' approach, everyone knows the returns from education, which depend only on innate ability, and markets work perfectly. The second approach is the 'capital-market-imperfections' approach. This approach is the same as the previous one except for the fact that markets, and in particular the market for borrowing and lending, do not work perfectly. The third approach emphasises social interactions and social externalities. This is arguably the most realistic approach where aspirations, perceptions and the development of abilities depend on one's environment, be it one's neighbourhood or one's social group, however defined.

#### Inequality and investment in a 'perfect world'

Consider a setting in which young individuals differ in their innate abilities and in their family background: some come from wealthy families and others from poor families. Suppose, moreover, that everyone knows the returns from education, which depend only on ability, and that tuition costs are the same for everyone. Who would like to go to college (or, more generally, invest in more/better education) in such a setting?

The benefits of education in such a setting would be higher for those with higher abilities and higher aspirations. The costs would be the same for everyone. Thus, only children with high abilities and high aspirations would choose to go to college, while for the rest, the costs would outweigh the benefits and they would prefer not to go to college.

How does this change when we consider wealth constraints? Would poor, bright children be able to go to college if they so wished? In a setting where markets work perfectly, the answer is yes. Poor, bright children would have good prospects in the labour market—they are very likely to end up with high earnings in the future. For them, the educational investment is very profitable and everyone knows this in our setting. Thus, for banks, financing such an investment could generate considerable returns. Banks, in turn, could obtain the necessary resources from rich parents with children of low ability. For these parents, the returns from the bank would be higher than the returns from the education of their children. The key point is that in a perfect world, what matters for investment is not the resources at one's disposal, but the potential benefits of the investment. What matters is not whether one is rich or poor, but whether one is bright or not. Sufficiently bright children can always find financing for their studies.

The fact that wealth does not affect investment choices, in turn, implies that inequality does not matter for access to college. Regardless of the level of inequality in a country, how many poor people there are or how poor they are, all bright people, whether they are rich or poor, would find it desirable to go to college and would be able to finance it. To be sure, in a very poor country, there would be relatively few funds available and borrowing would be costly. But then again, this implies that saving would be very rewarding and, ultimately, only the very brightest children would find it worthwhile going to college. Again, individual income would not matter for investment decisions and nor would the level of inequality.

In this setting, there is little scope for policy, either normatively or on efficiency grounds. From a normative point of view, wealth results from one's contribution to the economy in terms of the higher productivity afforded by ability and education. This distributional criterion could be considered fair. Moreover, to

the extent that ability is not transmitted across generations, the resulting society would display high levels of mobility. Even if ability were transmitted across generations, and poor and rich dynasties emerged, each dynasty would be rich or poor on the basis of ability, not on the basis of their prior wealth.

From an efficiency point of view, there are two types of policies that might be considered: (1) a subsidy to pay for tuition fees, and (2) progressive redistribution from rich to poor. An education subsidy would induce middle-ability individuals to study. However, it is not clear whether that would be a wise policy to follow in this case. In such an economy, there are no 'unexploited educational opportunities'. Those that do not go to college, choose not to because it would give them relatively low returns. Presumably, the resources that would go to the education subsidy could be put to better use, that is, invested in an activity that yields higher returns. Regarding the policy of redistributing income from rich to poor, redistribution towards poor dynasties would not affect education choices and would not have long-lasting effects. This would be the case even if ability were transmitted across dynasties, which would result in some inequality persistence. In fact, to the extent that such redistribution took resources from the educated and rich, it would reduce the benefits of education, and would actually drive the middle-income/middle-ability people away from colleges.

#### Inequality and investment with market imperfections

A large body of theoretical work has addressed the interactions between investment and individual investment choices in a context of imperfect capital markets.<sup>5</sup> Capital-market imperfections imply that certain individuals have limited access to credit. In such a situation, family wealth matters for investment choices: only individuals who are rich enough can afford to go to college. This leads to interesting and important interactions between the level of inequality and overall educational attainment, and leaves room for policy to improve economic outcomes.

The first question to address in settings of capital-market imperfections is: Why would capital markets not work properly in the first place? We focus here on the market for borrowing and lending. Borrowing and lending, and more generally any financial transaction, has the peculiarity that the different elements of the transaction occur at different moments in time. Transactions in traditional

See, among others, Galor and Zeira (1993); Banerjee and Newman (1993); Aghion and Bolton (1997); Piketty (1997); Owen and Weil (1998); Maoz and Moav (1999); Ghatak and Jiang (2002) and Mookherjee and Ray (2003). The *World Development Report*, 2006 by the World Bank offers an excellent non-technical survey of some of this literature.

markets essentially occur simultaneously: when buying groceries, the product and the payment for the product get exchanged at the same time. When borrowing a sum of money, the product (that is the loan) is given first, and the payment (the reimbursement of the loan) is done later, sometimes after a substantial amount of time. This generates the possibility that the payment side of the transaction might not be honoured. In the case of educational investments, individuals may ask for an educational loan and then run away, or they may not exert much effort during the studies and end up unskilled, earning insufficient amounts to pay back the debt. The incentives to do such things increase with the amount of money that needs to be paid back. The higher the debt burden, the more attractive it becomes to rescind on one's obligations, and the less reward there is for one's efforts. For this reason, lenders cannot respond to default risks by increasing interest rates on loans, as this just worsens the problem. The solution for banks is to fund individuals that need to borrow only limited amounts, for whom the incentives to default are smaller. These individuals are the richer ones, so the end result is that the poor get excluded from credit.

In a setting of imperfect markets, therefore, wealth constraints matter. All high-ability individuals, be they poor or rich, would still wish to invest in education; but the poorer ones would not be able to do so because they would not obtain the necessary funding. In this context, the level of inequality in the society matters for overall access to education. A highly unequal society, in which there are many very poor families, would suffer from low levels of education, as most of their population would be unable to finance it.

In this framework, inequality and education levels interact in meaningful ways. Consider, as seems sensible and realistic, that the relative wages of skilled and unskilled workers depend on the relative scarcity of skills: in an economy with severe skills scarcities, the few skilled individuals would command a strong premium while unskilled labour, being so abundant, would suffer from high levels of unemployment and low pay. This generates a potential feedback loop between inequality and education levels. High levels of inequality would generate few educated individuals, making skills scarce. This, in turn, would lead to high differences in pay between the educated (and rich) and the less educated (and poor); in other words, it would lead to high inequality, which would then generate low levels of education, and so on. The society would be trapped in a high-inequality/low-education situation—an 'inequality trap'.<sup>6</sup> In contrast, an equal society would feature the reverse type of equilibrium, equally stable: low inequality would lead to broad educational access, which would lead to low-skills premia, which would in turn ensure that inequality remains low and education levels high.

<sup>6</sup> See Bourguignon et al. (2007).

An inequality trap of the sort just described leaves extensive room for policy intervention, both for normative and efficiency reasons. From a normative point of view, some people are stuck as there is no equality of opportunity: life opportunities and life trajectories are strongly affected by one's family background. People from poor backgrounds are more likely to remain poor, just because they have a poor family. Moreover, the source of wealth differences is questionable from a normative point of view: the rich end up being rich by virtue of being scarce, whereas the poor end up being very poor due to their overabundance, which in turn is inherited from past inequalities. It seems difficult to justify large differences in welfare on such a basis.

From an efficiency point of view, inequality traps also feature serious problems. First and most obviously, education levels are low compared to what they could be, as testified by the 'good' equilibrium with low inequality and high education levels. This, in turn, directly leads to less productivity, possibly less innovation and possibly large and unnecessary unemployment levels for the unskilled. A second, more subtle, efficiency cost of the inequality trap emerges from the type of people that do and do not obtain education. In an inequality trap, the criterion for obtaining education is family wealth, not ability. The poor are unable to fund their education, even if they have high ability. At the same time, returns to education are very high because of the skills scarcity. Thus, rich families find it worthwhile to educate their children, even if these children are of low ability. This can entail an important efficiency cost: the inequality trap implies that people who do not really benefit much from education (the low-ability rich) go to college, while a large proportion of those that would actually benefit most (the high-ability poor) do not. This, again, contrasts with the low-inequality 'good' equilibrium, where the skill premium is low, and the poor earn sufficiently high wages to afford education. In this case, there is no payoff for rich families with low ability children to send them to college, as the benefits are small. Thus, those that go to college are the high-ability individuals, for whom education pays off the most, be they rich or poor.

In an inequality trap situation, both education subsidies and income redistribution can lead to long-lasting social improvements. Both types of policy, by improving educational access below the top of the distribution, can generate a cascade effect which can enable the society to escape the inequality trap. Increased levels of education result in skills being less scarce, and wage differentials become less pronounced. This reduces inequality and improves the capacity of the poor to further increase their access to education, which in turn leads to more skills, less inequality and ever more access, until the 'good equilibrium' is reached.

An alternative policy option, which emerges from this type of framework, is to enlarge the offer of intermediate skills. In a world with only two types of skill, say,

highly skilled and unskilled, there is scope for inequality traps implying very large wage differentials. The reason is that in a situation with very high inequality, the poor will be so poor that they will not be able to take advantage of the returns to education, even if these are enormous. In contrast, with numerous skill levels, these very large wage differentials are difficult to maintain. Consider an inequality trap with just two skill levels—a strong skill scarcity and large wage differentials between the highly skilled and the unskilled. Now suppose that intermediate semi-skilled training opportunities, with more affordable tuition costs, emerge. Because the semi-skilled families will be richer than the unskilled, they will certainly want to take advantage of the high-skill premium, unless the returns to semi-skilled work are also high. But if this is the case, then the poor will want to exploit the opportunities of semi-skilled work, which they can access more easily due to their lower tuition costs. In any case, skill levels would tend to rise, leading in turn to lower wage differentials, that is, lower inequality.

#### Inequality and investment with social externalities

Absent from the previous frameworks is the idea that individuals are affected by their social environment in a manner relevant to their investment decisions. Considering these social effects increases the potential for low-investment inequality traps to occur. The reason is that individuals are affected by their environment but they also affect their environment in turn. Thus a situation may arise where a 'bad environment' leads to low individual investment, which in turn feeds back into the 'bad environment'. These types of situation lead to specific policy implications, which differ from the ones discussed earlier.<sup>8</sup>

Following Durlauf (2006), social externalities can be categorised on the basis of the type of social environment that one considers. These range from peer groups where individuals actively interact, to reference groups with which individuals identify, to neighbourhoods which might contain both peer and reference groups and where relevant collective decisions, such as the level of school fees, might be taken.

Peer groups, reference groups and neighbourhoods can have a significant effect on an individual's education decisions. Consider first peer groups. Childhood peers often serve as source of information and inspiration. In this way, they can affect substantially one's perceptions of returns to education as well as one's

<sup>7</sup> See Mookherjee and Ray (2003).

The theoretical literature on social externalities and investment include Benabou (1993); Benabou (1996); Fernandez and Rogerson (1996); Durlauf (1996); Brock and Durlauf (2001). See Durlauf (2006) for an excellent non-technical summary of this literature.

aspirations. Moreover, to the extent that individuals within a group engage in imitative behaviour, or to the extent that the group rewards and punishes certain types of behaviour, one's actual behaviour will be influenced by the behaviour of the group as a whole. This can severely affect the development of abilities. For instance, certain peer groups may encourage hard work while others condemn it, thus creating incentives for members of the group to behave accordingly.

Reference groups can have similar effects to peer groups. Even with limited interaction with members of one's reference group, this type of group can have a great influence as a role model. Role models partly shape one's values and aspirations; for instance, role models that practise and condone behaviours which are not conducive to productive investment are likely to discourage educational investments.

Finally, neighbourhood composition can be relevant for individual education decisions in a variety of ways. First, they partly determine peer groups and reference groups, thus helping to shape perceptions and aspirations. Second, they represent the setting in which important types of collective action are taken. One instance of collective action at the neighbourhood level, with important implications for education, is school quality. Residents of certain types of neighbourhoods may be able or willing to invest more heavily in education quality (for instance by setting higher fees) than those in other neighbourhoods. In this way, neighbourhood characteristics exert an externality on the development of each child, regardless of the specific situation of that child. Bright children that would derive strong benefits from quality education might not be able to find schools that match their needs if they live in a neighbourhood in which high quality education is not available.

These types of social externalities can naturally give rise to inequality traps. Certain groups may end up reproducing behaviour that is not conducive to educational investment, while others generate opposite outcomes because of the feedback mechanisms between the group as a whole and each individual's behaviour. Peer groups that encourage ambition, and have optimistic perceptions about the returns from education and productive behaviour, also generate incentives for each of the individuals in the group to exert effort and invest. This behaviour will then tend to confirm the appropriateness of these messages, hence solidifying the outcomes in the group. The same type of mechanisms operate in reference groups, except that the feedback effects tend to occur between different generations, where older generations serve as role models for younger ones, who, in turn, engage in behaviours that lead them to become similar types of role models for the future generation.

Absent from the previous discussion is the issue of group formation. For group externalities to generate inequality traps, groups must themselves be stable; in other

words, there must be mechanisms to ensure that individuals stick to their groups, even if these generate bad outcomes. For reference groups, this is achieved largely by identity and cultural influences which may be difficult to break. Peer groups, in turn, may be strongly constrained by availability, particularly in highly segregated communities. To the extent that neighbourhoods provide the main pool of potential peers, and to the extent that neighbourhoods are themselves stable in terms of characteristics, peer groups will also need to be constrained correspondingly. This brings us to the question of the stability of neighbourhoods and their potential to generate inequality traps; that is, the interaction between residential choices and educational outcomes. Several articles have modelled these interactions.<sup>9</sup>

It comes to light from this literature that residential segregation can emerge naturally due to the differential preferences of the rich and poor. The sensible assumption is made that everyone benefits from a 'good' environment (that is, an environment composed of wealthier and more-educated neighbours or of better quality education). Then, to the extent that the rich/educated derive a sufficiently higher benefit from a 'good' environment or that they find it less costly to procure, residential choices lead to segregation. This can arise via rents or via school-financing arrangements. Rich individuals end up living in communities in which rentals and schools are more expensive. Because the rich benefit from a better environment, they are willing to pay more for it and the high rentals and expensive schools deter the poor from moving into those neighbourhoods. In this way, segregation results.

This type of framework delivers specific policy implications. First, it clearly leaves room for policy intervention, since undesirable outcomes at the group level cannot be resolved by individuals acting in isolation. This is because these very individuals act rationally and follow their own interests, given the configuration of the group and the influences it exerts on them. This framework calls for policy interventions at the group level. Only by breaking the potentially harmful group effects can bad outcomes be avoided. This stands in stark contrast to the framework of capital-market imperfections - where redistribution of income by itself could help to improve educational access and break the inequality traps. Here, it is not the lack of income per se that constrains poor individuals, but an environment that depresses their aspirations and their perceptions of the benefits of education. Redistributing income does not help to solve these issues. Instead, policies targeted at neighbourhoods-such as generous public financing of schools in poor communities — can help to break the vicious circle by directly helping the development of abilities, making schooling more attractive to peers and providing better, future role models.

<sup>9</sup> See, for instance, Benabou (1996) and Fernandez and Rogerson (1996).

In addition, some of the models in this framework give valuable insights into segregation. On the one hand, they make it clear that segregation may, to a certain extent, be inevitable, short of a continuous enforcement of integration. At the same time, they argue that the amount of segregation that occurs spontaneously will typically be socially undesirable.<sup>10</sup> This is because individuals, when making their residential decisions, take into account how prospective neighbourhoods will affect them, but not how they themselves will affect the neighbourhoods. Benabou (1996) argues that a highly educated neighbour will typically have a stronger positive impact on a poorer community than they would in one where everyone is already highly educated. Thus, it would be socially desirable to increase the number of highly educated individuals in poorer communities. Fernandez and Rogerson (1996) argue that if the poorest among the rich living in the rich neighbourhood moved to the poor neighbourhood, both neighbourhoods would become richer and hence lead to higher overall investment in education. Thus, a policy that makes poorer neighbourhoods more attractive would be desirable.

## Empirical evidence on the relationship between inequality and higher education

#### Introduction

In this section, we present some brief analyses of our own and complement these with some of the existing findings from the relevant literature in the South African context. We briefly argue that the 'perfect credit markets' hypothesis should be rejected in favour of the 'imperfect credit markets', using the National Income Dynamics Study (NIDS) data. We then consider whether the social externality models also seem to have validity in South Africa. For the second part, we use Cape Area Panel Study (CAPS) data. The evidence (in either direction), which relates to this second question, is empirically quite weak. Identifying peer effects and social externalities empirically is extremely difficult, and our findings are based on a mixture of theoretical insights, crude summary statistics and plausible conjectures.

In general, our overall analysis involves estimating the differences in various outcomes between groups defined by their relative position in the income distribution. The outcomes in which we are interested relate to the returns to education, educational attainment and career aspirations. Finally, we look at how poorer and richer students fare in terms of scholastic ability, which reflects both neighbourhood and peer effects, as well as other dimensions of school quality.

<sup>10</sup> See, specifically, Benabou (1996) and Fernandez and Rogerson (1996).

#### Data

For our empirical section, we make use of data from Wave 1 of the National Income Dynamics Study (NIDS), conducted in 2008, and Wave 1 of the Cape Area Panel Study (CAPS). The total sample is large, about 30 000 individuals, and the sampling frame is nationally representative. Wave 1 of CAPS involved a cross-section of about 4800 young adults aged between 14 and 22 years, living in the Cape metropolitan area in 2002. These data are well suited for some of our analyses as they focus in detail on the youth who are at the stage of their lives at which they are finalising their educational decisions. Included in CAPS are several questions about role models, educational expectations and career aspirations. CAPS also includes a standardised literacy and numeracy module, which we used as a combined measure of external school quality and peer effects.

Throughout our analyses, we make use of a simple measure of relative income. Since this is the running variable throughout this section, it is worth explaining how it is calculated and what it does and does not capture. The variable that we used is the quintile in which a respondent's household's per capita income would rank. To explain—suppose that we knew the amount of money which each household earns in aggregate and the number of people in that household. The per capita value is simply the amount of money available per person if they shared the aggregate evenly within the household. We then ranked all households in terms of their per capita income from smallest to largest. We took the poorest 20% of households and placed them in the category called quintile 1. Quintile 2 comprised those households that fell between the 21st and 40th percentiles, and so on, until we reached the richest households between the 81st and 100th percentiles in quintile 5.

What is attractive about this measure is that it cleanly and simply captures groups in terms of their relative economic well-being. This is essentially what inequality is about. What it does not do, is reflect the absolute level of well-being corresponding to each quintile. It also does not give an idea of how far apart the various quintiles are in terms of levels. However, we know that South Africa was classified as an upper-middle-income country by the World Bank, with a gross national income (GNI) per capita of \$6 090 in 2010. In addition, the World Bank reported a Gini coefficient for South Africa of 63.1 in 2009. This places South Africa as one of the most unequal countries in the world. This means that quintile 5 can be considered to be the 'rich', with developed levels of income, while the remainder can be considered to be the 'poor', with developing country levels of income. Of course, between quintiles 1, 2, 3 and 4 there are varying degrees of poorness and, in some ways, those in quintile 4 seem to have a clearly middle-class lifestyle. Nonetheless, insofar an income matters for our outcomes,

we expect a difference in order of quintile rank, and potentially a much larger difference between quintiles 4 and 5 compared to the other adjacent quintiles.

#### **Empirical findings**

#### How high are returns to a post-secondary qualification in South Africa?

An inequality trap emerging from the imperfect credit-markets hypothesis implies that the returns to education remain exceptionally high due to the scarcity of skilled people. In Table 6.1, we consider the cohort of 25–29-year-olds in NIDS in 2008. We separate them into three educational categories, and estimate their mean employment rates and wages conditional on employment. Assuming that the wage from being unemployed is zero, one measure of the rates of returns to a college education as compared to a matric only, would be to calculate the products of the employment probability and mean wages for the two groups, and to then calculate the ratio of these products.

Turning to the table, we first observe that the fraction with any type of tertiary qualification in this group is approximately one in six. In fact, the largest group are people that never finished secondary school, at about three in five. This would be expected if unskilled workers could get reasonably well-paid jobs easily, but the employment rates of high-school dropouts is below 50%, while those with some tertiary schooling is 30 percentage points higher at 73.6%. Moreover, the mean income, conditional on employment, goes up dramatically as we increase the educational qualifications. From the least educated to those with only a matric, the mean income more than doubles. From those with only a matric to those with more than a matric, it more than doubles again. Note also that this is for a fairly young group, and these disparities would almost surely get wider with time. This means that our estimate of the returns to education are likely to be conservative.

Finally, if we consider the ratio of expected values, getting a matric will triple your expected earnings, while moving from a matric to some tertiary qualification will increase your expected earnings by about 167%.

To conclude, our analysis does find extremely high returns to education, as well as a relatively small fraction of people obtaining a tertiary education. These findings are widely supported by the findings of several other researchers. For example, Lam (1999) found evidence of increasing returns to incremental levels of education in South Africa. Hoogeveenand and Özler (2005) and Leibbrandt, Levinsohn and McCrary (2010), at the household and individual levels respectively, both identified increases in the rates of return to education between

<sup>11</sup> All summary statistics are calculated including the post-stratification weights released with the surveys.

1995 and 2001. Thus, taken together, the empirical evidence is consistent with the existence of an inequality trap driven by credit constraints.

Table 6.1: Educational attainment and returns to education

25–29-year-olds in NIDS Wave 1								
Education	(1)	(2)	(3)	(4)	(5)			
Level	N	% (weighted)	Employed (%)	Total income (mean)	Expected value (3)*(4)			
No matric	1 028	59.94	43.2	1 237	534			
Matric only	356	23.55	56.9	2 681	1524			
Some tertiary	173	16.51	73.6	5 547	4081			
Total	1 557	100						

Source: NIDS Wave 1

#### Notes:

- 1. The total income column is calculated using only 656 observations. This is due to:
  - a. the low levels of employment (754 observations in our sample)
  - b. missing data/invalid responses
- 2. All summary statistics are calculated using the post-stratification weights.
- 3. The definition of employment includes wage employment, self-employment, casual work, working without pay in a family business, or subsistence agriculture.

#### Is attainment related to income?

A second testable implication of the credit-constraints hypothesis is that the rich are more likely to attain a tertiary education. In Table 6.2, we present the mean proportion with some completed tertiary qualification, by income quintiles, for each age in the 20–24-year-old age cohort. At age 20 years, the young adults in the richest households are four times more likely to have some tertiary qualification than any of their counterparts. While differences between the lower quintiles are not systematic, there is a clear advantage to being in quintile 4, compared to quintiles 1, 2 and 3. Moreover, despite the gradual catching up with age of the youth in the lower quintiles, by age 24 years, the proportion of youth in the richest households remains double that of those in the second richest quintile, at 31.4%. Again, we find that the evidence is clearly consistent with the credit-constrained model.

Table 6.2: Mean of some tertiary qualification

(By age and income quintile: NIDS Wave 1)								
	Per capita household income quintiles							
Age	1	2	3	4	5	Total		
18	0.000	0.000	0.007	0.000	0.000	0.001		
19	0.000	0.041	0.004	0.005	0.037	0.016		
20	0.050	0.036	0.038	0.054	0.212	0.070		
21	0.035	0.106	0.034	0.043	0.290	0.087		
22	0.035	0.063	0.026	0.117	0.345	0.101		
23	0.005	0.089	0.007	0.130	0.233	0.084		
24	0.097	0.123	0.098	0.157	0.314	0.151		
Total	0.027	0.058	0.031	0.075	0.191	0.068		

Source: NIDS Wave 1

#### Why do youth who do not have a tertiary qualification not enrol?

A third dimension that is central to the theoretical models being considered is that credit markets do not work well. Given the extremely high rates of return from education, even average students would rationally want to get some type of a tertiary qualification. Yet the fraction that does so is fairly low, especially in the bottom three quintiles. In Table 6.3 we summarise the primary reasons given by 18–24-year-olds for not enrolling even though they do not have any tertiary qualification. As usual, we do so separately by income quintile.

The most important categories include having found employment, financial costs and looking for employment, all of which are directly or indirectly related to financial status. However, there is considerable heterogeneity when we consider the responses by quintiles. In the poorest two quintiles, the main reasons are the costs of staying in school and the decision to look for a job, while the fraction of respondents who stopped enrolling because they had actually found a job is relatively low. Fertility-related reasons also feature strongly in this group. The pattern is similar for those in quintile 3, but a substantial fraction had stopped enrolling because they were working instead of looking for work. Quintile 4, our 'middle-class' quintile, are once again somewhere between the poorer quintiles and the top quintile. While in the poorer quintiles 1 to 3, somewhere between one in three and one in four respondents left their education due to the financial costs of remaining in school; in quintile 4 this number drops to about one in six. In the top quintile, this fraction decreases even further to one in ten. Moreover, more than half of the 'dropouts' from the top quintile do so because they already have a job. This fraction is more than double the overall average.

This fits well with other existing research. In a very comprehensive report by Branson et al. (2009), the authors found that the returns to tertiary education are indeed very high, but that students face two substantial, yet quite different, sets of constraints that restrict their ability to obtain such qualifications. Firstly, many students choose subjects or attain grades at the pre-tertiary level which result in them not being eligible to enter into tertiary institutions. Secondly, the costs and financial considerations associated with attending a tertiary institution can be prohibitively high, for most of the (minority of) students whose secondary school performance does meet the various entrance criteria.

In summation, we find clear evidence that returns to education are very high, that richer students are much more likely to attain a tertiary qualification, and that financial costs are a significant deterrent to poorer students. Overall, the data seem to favour strongly the credit constraints model over the perfect credit markets model.

Table 6.3: Reasons for not being enrolled in 2008 (NIDS Wave 1)

	Quintiles					
	1	2	3	4	5	Total
Finished school/education	9.1	15.1	12.2	10.5	16.1	12.1
I was working	3.7	7.4	21.7	35.4	52.2	21.3
Could not afford to stay in school	32.2	24.8	31.2	17.4	10.0	24.7
Wanted to look for a job	24.8	27.1	14.7	18.3	11.6	19.9
Was pregnant/had a baby	17.2	13.5	9.1	9.2	3.8	11.3
Was needed at home	2.0	1.6	2.8	1.1	0.3	1.7
Was ill/sick	2.7	2.5	2.8	2.1	0.6	2.3
I got married	2.1	2.3	0.0	1.7	0.7	1.4
Grades were very poor	2.1	0.4	2.4	1.5	0.6	1.5
Was suspended/expelled	0.9	0.5	0.3	0.5	1.1	0.6
Other (specify)	3.3	4.7	2.3	1.8	3.2	3.0
Too old	0.0	0.0	0.5	0.5	0.0	0.2
Total	100	100	100	100	100	100
N	422	396	440	350	135	1 743

Source: NIDS Wave 1

#### Notes:

- 1. Sample is aged 18–24 years, are not currently enrolled and do not have a tertiary qualification.
- 2. Means are weighted using the post-stratification weights.

#### What empirical evidence is there to support the social externalities theories?

In general, it is hard to find compelling evidence that speaks to the social externalities hypotheses. The reason for this is that, due to social stratification by neighbourhoods, it is almost impossible to disentangle neighbourhood effects from individual or household-level income effects. Even if one were to focus on the small number of poorer students who commute to richer schools, any comparison would be contaminated by unobserved selection; the parents who make such sacrifices are likely to have a strong preference to invest in their children's education. This would probably manifest in several other dimensions which are important but unobservable to an empirical economist.

To date, there are at least two papers that speak to potential peer effects. The first, by Lam et al. (2009), makes use of CAPS data and finds that the age profile of one's peer group significantly affects the probability of an early sexual debut for girls. The second, by Garlick (2012), makes use of the random allocation of peers in dormitories at the University of Cape Town to investigate the effects of the scholastic aptitude of one's peers on one's own academic performance at university. He finds that peer effects are substantial and significant, and manifest most strongly for weaker students.

We provide two pieces of evidence that speak to the social externalities literature, one relating to career aspirations and the other concerning the development of abilities.

In Table 6.4 we summarise CAPS data and calculate the fraction responding to a particular category as their response to the question, 'What work do you expect/ plan to do at age 30?' Recall that these were all young adults aged 14–22 years at the time of the Wave 1 survey in 2002. The responses are varied as there are several categories, so we present the largest categories and collapse the remainder, which is the majority of responses, in an 'other' category.

Overall, it is hard to see clear patterns in this table. We find, for example, that youth in the poorest quintiles were the most likely to plan to be doctors, lawyers, social workers, college professors and nurses. Youth in the 5th quintile, in contrast, were most likely to be in agriculture or fisheries, decorators or designers or general managers in trade. The lack of a clear pattern, combined with the fact that even the poorest youth expect to be doctors and lawyers, suggests that aspirations are not being negatively affected by social externalities.<sup>12</sup>

<sup>12</sup> In analyses of the NIDS data that are not included in this chapter, we also found no discernible differences in terms of expectations with regard to obtaining a tertiary qualification across the quintiles.

Table 6.4: Expected occupation at age 30 years (CAPS Wave 1 data)

	Quintile					
Occupation	1	2	3	4	5	Total
Accountant	4.68	3.64	4.4	7.44	6.3	5.39
Medical doctor	7.75	6.47	4.85	2.93	4.14	5.14
Agriculture and fishery	4.29	4.12	6.08	3.15	7.63	5.11
Lawyer/attorney	6.56	4.86	5.43	3.88	2.89	4.61
Social worker	7.27	4.81	3.16	3	0.8	3.67
Teaching professional in higher education	4.95	4.47	1.68	2.63	2.25	3.18
Nursing	6.26	4.27	3.78	1.87	0.53	3.17
Decorator, designer	1.39	1.57	1.81	3.23	6.69	3.14
Machinery worker, mechanic, fitter	2.43	3.88	2.78	2.65	1.5	2.6
Mechanical engineer	2.48	3.35	2.61	2.74	1.21	2.42
Productions and operations manager	2.5	2.13	2.68	2.74	1.79	2.34
General manager (wholesale/retail trade)	1.5	1.67	1.55	1.86	3.29	2.04
Other	47.94	54.76	59.19	61.88	60.98	57.19
Total	100	100	100	100	100	100

Source: CAPS Wave 1

The second piece of data relates to scholastic aptitude, and how it varies across income groups. We use the standardised literacy and numeracy scores from CAPS for this, and present the results graphically. In order to make the graphs clearer, we collapsed the respondents into three income categories: 'low income' which means that they are in quintiles 1 or 2; 'middle income' which corresponds to quintiles 3 or 4; and 'upper income' which corresponds to quintile 5. We then plotted the distribution of aptitudes for three different age groups. This allows us to compare the differences in aptitudes across income groups, as well as how these differences evolve with time.<sup>13</sup>

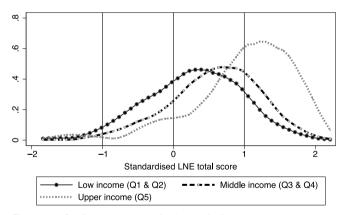
The first thing that is striking is that the distributions are clearly different, and unambiguously improve with income. Even among the youngest CAPS respondents, these differences are already pronounced by the time they would ordinarily be in the early parts of secondary school. This corroborates the findings

<sup>13</sup> Technically, we cannot separate between the effects due to aging or potential differences in cohorts.

of Branson et al. (2009) regarding the statement that many students might experience sufficiently poor learning environments well before the tertiary level, such that eligibility for the tertiary level becomes a binding constraint.

When we consider the distributions among slightly older respondents, the differences become even more pronounced. The distributions for the low- and middle-income groups are mostly stable, with slight increases in both the means and variances. In contrast, the distribution of the upper-income youths clearly shifts sharply to the right, and converges to the upper bound of the test.<sup>14</sup>

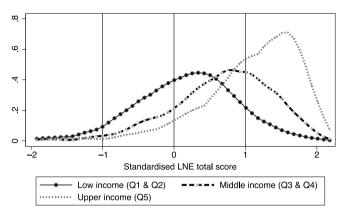
These findings are likely to be a result of several factors, one of which must be school quality. School quality itself is likely to be a function of resources, infrastructure and teacher quality, as well as peer effects. As explained earlier, we cannot separate the effects of these factors empirically. A partial resolution might be found in Wittenberg (2005). He uses data from Statistics South Africa's Time Use Survey 2000 to analyse differences in time allocated to school and studies by children from different socio-economic groups. He finds that punctuality and absenteeism seem to be disproportionate problems among poor learners, and that poor learners spend considerable time each day on chores. One could interpret this as weak evidence in favour of the social-effects hypotheses, although the links are somewhat tenuous.<sup>15</sup>



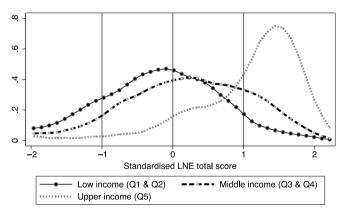
**Figure 6.1:** Performance on aptitude test by income group, ages 14–16 years *Source*: CAPS Wave 1 (2002)

<sup>14</sup> The test was relatively simple and comprised just a few questions. For this reason, it is a relatively poor discriminator of aptitude among relatively strong students. We expect that a more thorough test would yield even more striking levels of divergence as the groups from different socio-economic backgrounds got older.

<sup>15</sup> It could also simply be the case that chores in richer households are outsourced to domestic workers, or are less time-intensive. This would be a more conventional resources-based explanation.



**Figure 6.2**: Performance on aptitude test by income group, ages 17–19 years *Source*: CAPS Wave 1 (2002)



**Figure 6.3:** Performance on aptitude test by income group, ages 20–22 years *Source*: CAPS Wave 1 (2002)

#### **Policy discussion**

There appears to be sufficient evidence to suspect that South Africa is caught in an inequality trap where high inequality leads to low levels of skill accumulation, which in turn consolidates the high levels of inequality. The trap works particularly through tertiary education: it is at the tertiary level that access is very limited and that returns are very large. Credit constraints and social externalities are both likely to play a role in sustaining this trap, although we do not find evidence that lack of aspirations are part of the story. Credit constraints and social externalities matter for access to tertiary education directly, when making the actual decision, as well as indirectly, by limiting access to high-quality education at the primary and secondary levels. This in turn prevents students from qualifying for tertiary studies. Thus, policies that seek to break the South African inequality trap need to

address access to tertiary education as well as the large differences in education quality at the primary and secondary levels.

We first consider policies that focus directly on improving access to tertiary education. One branch of these policies needs to address the issue of credit constraints. Theoretical models that incorporate credit constraints often mention general progressive redistribution as a policy implication. In the context of South Africa, this message should probably be viewed more as an argument adding to the debate on the benefits and costs of redistribution, than as a practical means to increase access to education. The reason is that in South Africa, credit constraints in the tertiary decision are likely to apply to a minority of the population and are unlikely to bring about dramatic improvements in access: most prospective students from poorer backgrounds are not eligible to enter into universities. To this minority, however, credit constraints appear to be binding, and targeted redistributive programmes are likely to be effective. Currently, there is an extensive means-targeted public programme of financial aid, the National Student Financial Aid Scheme (NSFAS), which provides bursaries and loans. In principle, this should alleviate financial constraints for students willing and eligible to attend higher education.

However, even in the presence of this programme, there are reasons why these constraints may still bind. First, prospective students often appear to lack information regarding the NSFAS. Second, even if eligible for public financial aid, students typically need to pay registration fees up front. The existence of these fees deters applications to higher education institutions. Thus, for the public programme to be more effective, efforts should probably be directed towards extending the financing to cover registration fees as well as disseminating information regarding the benefits and procedures of the programme more widely.

A second policy intervention, which flows from our analysis, is to strengthen intermediate degrees, that is, qualifications between the high school certificate and a university degree. As mentioned earlier, enlarging the offer of intermediate skills can help to reduce inequality and promote skill acquisition. In South Africa, technical, vocational education and training (TVET) colleges in principle fulfil this role. However, there are reasons to believe that access to these colleges could be improved. Focus groups provide some evidence that a lack of information and the issue of registration fees might be most problematic with regard to TVET colleges. First, discussions made clear that prospective students have very little information on the types of studies and the financing possibilities afforded by public TVET colleges. As an example, several students had applied only to the TVET colleges that had visited their school, which often happened to be private colleges which typically charge higher fees. Second, there is evidence that school

performance is a poor indicator of skill in many South African schools (see Lam et al., 2011). This suggests that students face high uncertainty regarding the level of their own skills and the likelihood of being accepted into universities. In this case, registration fees might deter applicants, particularly to TVET colleges. When constrained by registration fees, students might put their resources into university applications rather than TVET colleges in order to avoid the frustrating eventuality of finding themselves eligible for university but not having applied.

Alleviating credit constraints and encouraging access to TVET colleges would help to improve skills and reduce inequality. However, to achieve a major improvement, eligibility constraints need to be addressed. This involves encouraging broad access to quality education at the primary and secondary level. There are two basic approaches to this: first, to increase integration of the poor into existing high-quality schools and, second, to improve the quality of poorer schools.

We first consider the challenge of integration of students from poorer backgrounds into high-quality schools. As mentioned earlier, the same type of constraints that prevent the poor from accessing higher education—that is, credit constraints and social externalities—can deter access to high-quality schools. High-quality schools demand not only higher transport costs and fees, but also higher expenses to ensure successful social integration (for example, via extra-curricular activities and lifestyle choices). Peer pressures (from one's own as well as other social groups) and role models may make it difficult for students from poor neighbourhoods to integrate successfully into schools dominated by students from rich backgrounds. Policy interventions to alleviate these constraints could include fee waiving for students from poor backgrounds (a policy already in place) as well as additional aid to cover transport and extra-curricular activities.

There are reasons to believe that these types of policies may achieve only limited success. First, it is difficult to conceive and implement policies that limit negative social influences on students from poorer backgrounds. Second, as argued by Selod and Zenou (2003), rich (typically white) families can adapt their behaviour to counter the effects of such policies. In their model, white parents raise fees to counter policy interventions to encourage black attendance to high-quality, formerly white schools. More generally, privileged families may increase all sorts of monetary and non-monetary barriers to outsiders. They may even leave the system altogether to set up private schools, where the potential of government intervention is limited, taking with them the very resources (for instance high-quality teachers) which made their schools of higher quality in the first place. Moreover, integration policies, even if successful, are likely to drain poorer neighbourhoods of their most able students, thus deepening potentially negative social externalities in the schools of those neighbourhoods. Finally, and

possibly most importantly, this type of policy can succeed in improving the skills of only a minority of poor students. The reason is that high-quality schools in richer neighbourhoods are so few in relative terms that they can productively absorb only a small proportion of students from poorer backgrounds.

A policy geared towards increasing the quality of poorer schools has more potential to be successful. Based on the evidence provided here as well as the work of several others, it seems widely accepted that improving school quality remains a fundamental developmental objective, which is also frustratingly difficult to achieve. The post-1994 era involved a shift in investment and redistribution towards historically disadvantaged schools, but research by Van der Berg and Burger (2003) suggests that this did not result in improved student performance. However, for a combination of methodological and interpretative reasons, we should interpret their findings with caution. Indeed, Case and Deaton (1999) found quite the opposite—that school resources in South Africa do, indeed, explain differences in scholastic performance.

One aspect of improvement, which we feel may be very important for improving school quality, is to improve teacher quality. When we looked at career aspirations in CAPS, we found that fewer than 10 respondents, out of approximately 4800, planned to be teachers at the age of 30. Teaching is clearly not seen as an occupation of choice for most young people. There are several reasons why this might be the case, and each of these could be addressed as part of a holistic approach to improving teacher quality. First, to qualify as a teacher generally requires a four-year university degree. As argued in this chapter, this comes with considerable costs and barriers. Second, the financial remuneration is not that attractive, given the cost of the qualification. Starting salaries for teachers were below R95 000 per annum in 2015, and while this could go up with seniority and qualifications, they remain relatively low when compared to private-sector employment which also requires a four-year degree. As such, the financial calculus and the time investment, combined with the stream of financial payoffs, may explain the low ranking of teaching as a career of choice.

More generally, there are other mechanisms that may also improve teacher quality. First, it might be worthwhile to reward teachers who display high levels of initiative and motivation. Second, there should be some negative consequence for poor behaviour. In the gift-exchange models of effort (Akerlof, 1982; 1984), people decide on what is fair effort for a given wage, and their concept of fairness is calculated by some reference group. Even if a small fraction of teachers are putting in low effort and obtaining the same wage, this could make other teachers resentful, and eventually the equilibrium might converge to a low-effort equilibrium.

There may be political constraints to implementing overall wage increases or incentive schemes for teachers. Some social actors traditionally oppose the former, while other actors oppose the latter. A possible politically feasible package would be to combine the two policies as a bundle: higher overall wages and incentive schemes. This could become palatable to a wide spectrum of social actors while promoting overall teacher quality.<sup>16</sup>

Moreover, our arguments, particularly those relating to remuneration, link almost directly back to inequality—there is a scarcity of high-quality education. Skilled people have to choose between medium-paid, skilled occupations (which have positive social externalities) or highly paid, skilled occupations in the private sector (which do not have the same social externalities), and this subsequently guarantees the lack of human capital in the following generation. This vicious circle is stable or possibly even widening, and will continue to replicate itself unless strong and well-directed government intervention is forthcoming.

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Note that these suggestions, while directed specifically at teachers, would also apply to any other professions that generate strong social externalities. Examples of these professions would include nurses, other health-care professionals and social workers.

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Part III
The rural sector





### Chapter 7

Contemporary agrarian transformation and rural development: Large-scale land investments and the question of labour

Wang Chunyu, Saturnino M Borras Jr and Carol Hunsberger<sup>1</sup>

## Introduction: Large-scale land investment as a narrative of pro-poor rural development

Large-scale land investments are not new when we look back at the history of huge plantations, *haciendas* or *latifundia* in the Americas, Africa and Asia. However, there has been a resurgence of these in the past two to three decades in response to convergent crises of food, energy, finance and the environment. Contemporary large-scale land investments, popularly known as 'land grabs', take many forms in terms of securing land, including land purchases, leases, contract farming and conservation concessions. In terms of the transnational, political–economic dimension, they show a variety of geographic patterns including North–South, South–South and domestic investment relationships involving both public and private actors. Land is grabbed to secure access to resources for a particular purpose: to produce crops, timber or livestock; for conservation (Fairhead et al., 2012); or to gain water rights (Mehta et al., 2012). 'Flex crops' — crops that have multiple and flexible uses within the converging food, feed, fuel, climate-change mitigation strategy complexes — are playing a particularly important role (Borras et al., 2012).

Official discourses have portrayed large-scale land deals in a way that suggests they can promote food security, rural development and economic growth, thereby benefiting both investors and local people on the land involved. In a national and global sense, they have been presented as contributing to food security by improving the efficiency of 'underutilised' lands, reducing energy pressures by producing biofuels, and protecting the environment by way of conservation, carbon trading and ecotourism. In a more local sense, land deals aspire to revive

<sup>1</sup> Corresponding author: chunsber@uwo.ca

agriculture, move rural populations out of poverty and improve infrastructure, health and education services. Specifically, some large-scale land investments have been promised to create more on-farm and off-farm jobs, as well as higher incomes through increased production, wages, and land rent or land payment. It is this last dimension—the outcomes of large-scale land investments for employment, labour and livelihoods—that we wish to examine here.

Initial empirical evidence challenges positive claims about social improvements resulting from large-scale land investments. Instead of a better life, local residents in many cases have faced a loss of livelihoods, loss of subsistence and safety-net functions of existing land uses, and loss of biodiversity to monocropping. Their assets may be undervalued. Promises of local jobs, facilities, and compensation may never be kept. A World Bank report (Deininger et al., 2011: 65) admits that in Liberia, investors 'encroached illegally on fertile wetlands', 1000 people were displaced (comprising 30% of those living in the area), and 'unskilled jobs [were] created but often filled with foreigners willing to work for lower wages'. In Mozambique, land purchase for biofuel production resulted in damage to nonrenewable natural resources, the jobs created were not paid enough 'to compensate for the lost livelihoods', and vulnerable groups were displaced; while in Zambia, 'negative impacts included displacement, loss of access to natural resources and land clearing for cultivation' (Deininger et al., 2011: 65). Although some farmers can benefit from outgrower models when they overcome 'thresholds of inclusion and exclusion' (Fortin, 2005) with external supports, such cases are presented more as models to be learnt from than a common phenomenon (McCarthy, 2010).

This chapter examines the implications of current trends in large-scale land investment specifically for labour, employment and livelihoods, based on evidence from examples of large-scale investments for agricultural production, conservation and water rights, from literature and from fieldwork conducted together and separately. We argue that contemporary land grabbing is generally labour-saving or labour-expelling, and that where labour is absorbed, it tends to be adversely incorporated.

The chapter consists of four parts. The first part reviews recent patterns in the character of large-scale investments. Many countries, including South Africa, are investing in land internationally while their own lands are also subject to similar types of deals. In the second part, data and case studies are used to demonstrate that in many cases, investors want land but not the people on the land, resulting in the expelling of labour. Where employment is offered, either through contract farming or plantation work, labour tends to be adversely incorporated into new regimes with relatively few employment opportunities or low and unstable payments. In the third part, 'green grabbing' and 'water grabbing' are analysed, where land is appropriated for water rights or environmental ends such as

conservation, carbon offsets, payment for ecosystem service programmes or ecotourism. In these cases, the livelihood activities of local inhabitants can be compromised in a variety of ways. In the fourth part, we discuss the implications of these trends for South Africa. We comment on the challenges that labour-saving land investments within South Africa's borders present for the country's employment-creation agenda, and consider both the historical context and potential impacts of pursuing this model of investment internationally.

# **Contemporary land grabs: Patterns, actors and processes**

Land grabs are real, despite the impossibility of accounting for the exact area of land involved. This can be seen in the seriousness with which the United Nations Committee on Food Security (CFS) has placed the issue on its agenda via the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests, endorsed in May 2012.

Land grabbing is not a single, coherent or new process; it takes many forms and is embedded in historical patterns. The most common narrative of land grabs involves foreign investors from the North causing dispossession and environmental degradation in the South (Borras & Franco, 2012). While investment originating from countries in the Global North is indeed one of the patterns involved, emerging countries and BRICS countries (Brazil, Russia, India, China and South Africa) have been increasingly active in pursuing land grabs (Visser et al., 2012; White et al., 2012). In many cases domestic actors are just as important as international ones, even if they have links to foreign capital. Local power relations are also crucial to understanding the dynamics of land deals, as exclusion can be perpetuated or facilitated through existing hierarchies (McCarthy, 2010).

Complicated dynamics arise: some countries, such as South Africa and China, experience land grabs internally, while also conducting land grabs elsewhere (Hall, 2012; HLPE, 2011). Others, such as Brazil, have enacted measures to discourage large-scale land acquisition by foreigners within their borders, albeit with limited success (Sauer & Leite, 2012), even as Brazilian investors engage in the same kinds of land deals in other countries (Mackey, 2011).

Often there is a long delay before land-use change occurs, and in many cases investors eventually abandon their plans to establish plantations. In such cases of 'virtual land grabs', investors may find it sufficient to secure rights to land in order to reap benefits (such as subsidies, tax incentives or the potential to profit later by reselling the land) without actually implementing their stated plans (McCarthy et al., 2012). While these grabs of control over land can produce long-term implications for local land users — for example, by changing access rights or being part of a transition to a later deal where land-use change does occur — this

chapter focuses on the labour and livelihood implications of large-scale land investments that have reached the implementation stage.

# Large-scale land investments and job opportunities: How unlikely it is

Analysing large-scale land investment and its impacts on rural development involves working with massive and varied data because these investments take many forms, have multiple drivers and cut across sectors, including food, feed and fuel. When large-scale land investment occurs, land-use change may happen within or outside the food sector; products may be produced for domestic or overseas consumption, or for another purpose, such as global environmental protection; and land may be purchased, rented or contracted, which may or may not change the social relations of production (Borras & Franco, 2012).

Cotula and colleagues' work investigates various agricultural labour regimes, looking at impacts on smallholders in a variety of cases: contract farming, management and lease contracts, tenant farming and share-cropping, joint ventures, farmer-owned businesses, and upstream/downstream partners (Cotula & Leonard, 2010; Vermeulen & Cotula, 2010a). These studies deal with how each model integrates local populations into agribusiness operations generally, rather than investigating large-scale land deals specifically (White et al., 2012). Using data from South Africa and partly borrowing Borras and Franco's (2010) model, Hall (2011) differentiates five types of large-scale land deals with distinctive institutional arrangements:

- 1. an 'extraction model' which is based on 'the stripping of resources without longer-term investment or production' and is unsustainable in the long run
- 2. an 'enclave model' which refers to 'outright takeover of land and related resources' that is 'poorly integrated into local society and economy'
- 3. a 'colonist model' which involves 'commercial operators who take over a block or area', such as the Zimbabwean commercial farmers in Mozambique
- 4. an 'outgrower model' which incorporates small producers into value chains through contracts, usually in conjunction with a commercially operated nucleus estate
- 5. a model of 'commercialisation in situ' that also incorporates small producers into commercial value chains, but without a core estate or processing facilities (Hall, 2011: 204). This is a very useful analytical handle.

We will employ this schema and bring in the questions of labour regime, labour processes and structures of accumulation.

In the following section, we examine cases in which labour is expelled (as in the enclave model and the colonist model), and cases where labour is incorporated

(as in an outgrower model and commercialisation in situ, depending on specific social and economic contexts). We argue that in spite of their differences, large-scale land investments share an essential common characteristic of either expelling or saving labour, or if labour is absorbed, incorporating it adversely.

# Large-scale land investments and labour expelling processes

The availability and quality of employment following large-scale land deals has major implications for the livelihoods of local people. Empirical data, however, suggest that such investments are unable to create enough jobs and improve rural development in a way that favours the rural poor. First of all, there exists a strong economic motivation for large agrarian enterprises to apply mechanised farming, partly to save the cost of labour. Second, the logic of capital tells us that capitalist enterprises constantly seek cheap labour, such as migrant labourers, guest or foreign workers who are willing to work for lower payments. And third, manual labour might not be needed in some areas like special economic zones, while other economic sectors may not be able to absorb the 'surplus labour' either. Ultimately, the core concern of a large-scale land deal is the profitability of the investment, not local livelihoods or rural development.

We draw on World Bank data again to display how many jobs large-scale land investments could create (Table 7.1), according to the different commodities these farms could produce. These figures were derived from the business plans of selected large-scale land investments.

Table 7.1 shows that for most large farms, only a few jobs would be provided for local people. If planted with grain, wheat, soya and fast-growing forests, less than 20 labourers would be needed for 1000 hectares of land. If planted with *Jatropha curcas* (hereafter jatropha) and rubber, less than 500 labourers would work on 1000 hectares of land. Even for sugarcane in irrigated areas, only around 700 jobs would be created in the harvesting season.

We would like to take jatropha as a detailed example. Estimates of the amount of labour needed to establish and maintain a plantation vary widely, ranging between 75–200 person days per hectare for the first year, and 40–110 person days annually from the third year onward (Grass, 2009). Some have argued that high labour intensity will allow the crop to create rural employment (Achten et al., 2007; Brittaine & Lutaladio, 2010), even to the extent that it might reduce rural—urban migration (Muok & Källbäck, 2008). However, field results suggest that jatropha has been much less productive than anticipated, leading some large-and small-scale growers to discontinue their activities (Ariza-Montobbio et al., 2010; Messemaker, 2008). Efforts to develop mechanical harvesters suggest that investors are actively seeking labour-saving measures for large plantations.

Table 7.1: Jobs created in case studies of large-scale investments

Commodity	Jobs per 1000 ha	Investment in US\$/ha		
Grains	10	450		
Jatropha curcas	420	1 000		
Oil palm	350	4 000		
Forestry	20	7 000		
Rubber	420	1 500		
Sorghum	53	900		
Soybean	18	3 600		
Sugarcane-ethanol (a)	153	5 150		
Sugarcane-ethanol (b)	150	15 500		
Sugarcane-ethanol (c)	700	14 000		
Wheat-soybean	16	6 000		

Source: World Bank (Deininger et al., 2011: 39)

#### Notes:

- a. Rain fed, one-third mechanised harvest (Brazil)
- **b**. Irrigated, mechanised harvest (Mozambique)
- c. Irrigated, manual harvest (Tanzania)

One industry website expresses this goal by saying: 'Mechanical harvesting is often regarded as the holy grail: it would substantially reduce jatropha oil production costs in many developing countries where levels of income are moving up to 5 to 10 USD/day' (FACT Foundation, 2010). The implication of saving costs by replacing human labour with mechanisation is clear.

Historically, large-scale farms have engaged with crops that can be planted, processed and harvested by machines, for example, the mechanised production of grains and soya in North America, Argentina and Brazil (Li, 2011). Plantations of rubber and oil palm can provide more jobs compared to grains and soya, but the number is still limited with the increasing use of machines, and figures are often exaggerated. For instance, the World Bank claims that six million hectares of oil-palm plantation can employ 1.7 to 3 million people, which means one person is hired for every two to three hectares (Deininger et al., 2011). But Li finds the ratio to be lower, at one person per four to 10 hectares (Li, 2011). In sugarcane plantations, jobs are usually seasonal. Holt-Gimenez (2007) compares jobs created by family farms and large farms planted with crops for biofuel, noting that in the tropics, 100 hectares of land can generate 35 jobs if they are used for family farming, whereas oil palm and sugar cane can provide only 10 jobs,

eucalyptus two jobs, and soybeans only 0.5 jobs per 100 hectares. Large farms are generally associated with relatively low-quality jobs (Gibbon, 2011). This finding is also shared by many other studies (Anseeuw et al., 2012; Cotula & Leonard, 2010; Oxfam, 2011; Vermeulen & Cotula, 2010b).

Reports from private equity do not seem optimistic for local people either, especially for local peasants. EmVest, in its Limpopo project in Mozambique, promised it would create jobs with 'majority employment from the local community' when it rented 2 000 hectares of land for 50 years (Oakland Institute, 2011). However, only 355 positions were created by December 2010, almost one year after the start of the project. That number reduced to 232 as of May 2011, including 97 positions for agricultural workers, of which 85 were seasonal (Oakland Institute, 2011). The majority of land investments in Ethiopia (130 of 150 recorded in a quantitative study) offered fewer than 50 full-time equivalent jobs; reportedly there are no signs that more jobs would be created with higher-capital investment (Vermeulen & Cotula, 2010a). Some consider such jobs to be 'ephemeral resources' in the rural environment (Swidler & Watson, 2009).

Even where jobs are created, local peasants may not get them. In some cases, for example rubber establishment in Kachin State (139 000 acres) and Shan State (360 000 acres) in Burma, projects were conducted by regional military authorities, who granted large-scale private concessions and used Burmese migrant labour not from the local ethnic population (Woods, 2011). In other cases, like Kazakhstan, investors may bring labour from their own countries (for example, 3 000 Chinese workers), further limiting the possibilities of improved livelihoods and rural development (GRAIN, 2008). The people whose land may have been affected by large-scale land deals are seldom employed there.

The employment ratio is even worse when compared to that of the previous land use. In Sambas district of West Kalimantan in 2006, about 15 large oil palm corporations held 199 200 hectares and employed 1944 people, a worker-to-hectare ratio of 1:100 (Li, 2011). Similarly, Andrianirina-Ratsialonana and Teyssier (2010) report that a large project in Madagascar was expected to create just 0.006 jobs per hectare, whereas every hectare of land could support 1.25 farm households before the projects began.

Those surplus populations could not be absorbed in manufacturing or elsewhere, especially in countries 'that [were] not about to embark on a labour-intensive industrial revolution generating thousands of new jobs for the dispossessed peasant farmers and their families' (Tanner, 2010: 125). In some enclave models, such as special economic zones (SEZ) in India, Levien finds that only 18% of households that were dispossessed of land were able to find some form of employment in SEZs (Levien, 2012). These peasants became gardeners, drivers or cleaners; since such jobs are subcontracted out, they tend to be

temporary, insecure and low-paid. The widespread participation of dispossessed people in the National Rural Employment Guarantee Programme (which pays even less than the market wage) further suggests that SEZs have limited capacity to absorb the labour of now landless peasants (Levien, 2011).

The labour-expelling and displacing aspect of large-scale farms is one of the 'comparative advantages' that would ensure lower costs of production and higher efficiency, which is attractive to investors. This is reflected in a scenario that Li has found in Brazil and South-East Asia, where 'people's land is needed for global production and corporate profit, but their labor is not needed' (Li, 2011: 283–286). They become 'surplus people' to the capitalist system (Li, 2010). Indeed, as Mathis (2008: 10) explains, 'the primary objective of public and private companies is to increase shareholder value, not to increase employment, which is a policy of government concern'.

# Large-scale land investments and adverse incorporation

What we observe here is that instead of replacing labour with machines or hiring migrant workers, in some outgrower models or commercialisation in situ, peasants retain land ownership but are incorporated into commercial value chains in one way or another. This is a model that proponents for large-scale land acquisition use to argue how small farmers would benefit from such investments. For instance, the International Food Policy Research Institute (IFPRI) identify contract farming or outgrower schemes as better than outright purchase of land because they 'leave smallholders in control of their land but still deliver output to the outside investor' (Von Braun & Meinzen-Dick, 2009: 3). Ideally, under such arrangements, small farmers are provided with business development services such as inputs, technical assistance, and credit by the private-sector actors, which could be domestic or international. In return, these farmers commit to sell their output to these providers, subtracting the cost of the supplied inputs from their total profits. This approach takes into account the threats posed by large-scale land acquisitions to the livelihoods of the poor and capitalises on the opportunities for smallholders to benefit, creating a win-win scenario for both local communities and foreign investors (Von Braun & Meinzen-Dick, 2009: 3).

In many cases, however, payments in the plantation are very low. For instance, a rubber project of 24000 hectares in the Democratic Republic of Congo was found to employ 1282 workers, paying them US\$3–5 per week along with some social benefits (Deininger et al., 2011). The livelihoods of poor individuals who are adversely incorporated into oil-palm plantations may deteriorate further (McCarthy, 2010). Peasants have to wait several years before their oil palm matures; in the meantime, they make a meager living by conducting casual work on the core estate, being paid Rp 1200 daily (or US\$0.60 at that time). McCarthy

(2010) reports that half of the Javanese migrants in a particular study sold their plots and went back to Java because the payment was so far below the poverty line. In another case, only two out of 10 villagers managed to remain in the business until their oil palm began to fully produce (McCarthy, 2010). Integration into such an agribusiness-dominated 'agriculture-for-development' approach seems to reinforce 'the path dependence of an exclusionary corporate agriculture' (McMichael, 2009: 244).

Contradictory arguments have been put forward about jatropha from a labour perspective. Some reports promote the view that jatropha could bring economic or livelihood benefits to farmers while requiring only a little time and energy to cultivate. This claim of low labour requirements fits with a model of small-scale cultivation or contract growing, where farmers could harvest 'something from nothing' by planting jatropha. Other studies show that jatropha needs extra labour (Ariza-Montobbio et al., 2010) at all stages, including planting, weeding, pruning, harvesting and processing. However, the claim that jatropha production is so labour intensive that it could create rural employment opportunities has also been challenged. Jongschaap et al. (2007: 23) summarise:

It is unverified that Jatropha curcas oil production requires minimum amounts of labour input. The claim that it would be an excellent choice in areas that have low labour capacity should therefore be strongly defied. Also, the noble thought of generating income in HIV-affected communities by planting Jatropha curcas as a low labour input crop, cannot be sustained.

Further, Ariza-Montobbio et al. (2010) point out that small-scale jatropha farmers are more vulnerable to the effects of delayed harvests or crop failure than large farmers, concluding that these pressures have contributed to pushing small-scale jatropha farmers in India to seek off-farm activities, potentially compromising their ability to live off of their own land.

Contract farming and similar collaborative arrangements with local farmers may also cause changes in land access, social differentiation, gender and age relations, even if no immediate land tenure rights have changed hands. As past studies show, with the outgrower contract model, the process of accumulation and dispossession may lead to class differentiation, causing the disappearance of some peasants while increasing the land size of some others; women may be systematically marginalised; and migrants may be dislocated from the places from which they originally came (White et al., 2012). Specific groups may suffer differential losses. For example, lands classified as 'wasteland', 'idle' land and waters can be essential for gatherers, pastoralists and fishers; the loss of these areas can disproportionately impact their livelihoods. In many cases, local elites are in

a better position to take advantage of any benefits from agricultural and landuse changes associated with large-scale land deals (Vermeulen & Cotula, 2010b). Regarding household gender relations, it is often males who hold the farming contract, even if women do the majority of the work (Vermeulen & Cotula, 2010b). Some crops place tedious work more on women, such as jatropha. Land used for food production, traditionally controlled by women, may be converted to cash-crop production controlled by men (Vermeulen & Cotula, 2010b). Eaton and Shepherd (2001) provide an example of crop change and gender issues, where conflicts arose between spouses when contract farming for rice was introduced into an area previously used for sorghum grown by women.

When seen from the logic of capital, the forms and mechanisms of land capture (be it purchase, lease or contract farming) are important but secondary; the most essential point is the capital's ability to capture land and, in some cases, the accompanying labour (Li, 2011). For instance, in the case of China, agrarian companies prefer to open up undeveloped land and then employ migrant labourers instead of renting land that is collectively owned and hiring local residents who previously worked on the land in order to achieve better control of labour (Zhang & Donaldson, 2010). In this sense, large-scale land investors strive to make sure that the terms under which peasants are incorporated are in their own favour. Indeed, 'poverty and disadvantage themselves can often flow not from exclusion, but from inclusion on disadvantageous terms' (Du Toit, 2007: 2).

# Large-scale land investment and some seemingly promising examples

Admittedly, large-scale land investments offer a plan that suits the dream of some peasants to escape from impoverishment. Under certain conditions, some farmers would take the risk to invest some or all of their land and labour in cash crops (by savings, loans or through incorporation with companies). A study of Laotian workers on Chinese farms found that, if employed and implemented in a proper way, contract farming can provide farmers with a secure income and access to new knowledge and expertise, meanwhile retaining ownership of their land (McCartan, 2008). In Indonesia, 'while rubber farmers struggled to afford rice and were selling land just to survive, the previously impoverished Javanese transmigrants (whose oil palm became highly productive) were buying motorbikes' (McCarthy, 2010: 831).

There are a few other relatively successful cases described by Li (2011). In the district of Morawali, smallholders kept control of the land they were allocated (two hectares), made their own decisions about how to do the farming, and were paid monthly by the company, depending on how much palm oil they produced. They faced tough conditions at the beginning when they had to work for the

plantation for low payment for many years to make a living before their own patch of land produced palm oil. When they began to harvest for themselves, these contracted smallholders and the local economy prospered with oil palm. Such wealth accumulation also stimulated other economic activities, increasing demands for houses, goods and services. The level of payment offered by contracted smallholders appears to have prompted the plantation to offer higher wages to attract labourers, which were sufficient for the workers to have some monthly savings. But even those workers who were paid sufficiently in the nucleus estate still aspired to exit the plantation, with the hope of buying their own land in the future (Li, 2011).

Two important factors contributed to the boom of rural development in the above case. First, the government (during the Suharto period) required investors to invest in infrastructure and land preparation, and provide post-harvest services to the growers in exchange for almost 'free' land. Therefore the smallholders could benefit from these facilities when their own plots of oil palm became mature. Second, peasants did not offer all their land to the investors, so villagers could still plant some rice, cacao and raise cattle to supplement their oil palm production (Li, 2011).

Another project in Buol did not follow the same pattern. The government did not press investors to provide infrastructure and other facilities; peasants were allocated a piece of land but had no control over its production and management; and the payment (as dividends) was much lower than what contracted farmers earned in Morawali and showed no sign of being increased by the company. Li (2011) identified this case as 'favoring capital' instead of 'favoring labour'.

The relatively successful examples reviewed here may seem encouraging for advocates of large-scale land acquisitions. However, major questions remain about how equitably the observed benefits were distributed in these cases, and what barriers allowed some farmers to access new opportunities while excluding others. A labour arrangement analysis of the examples cited in this chapter shows that, in most cases, when peasants were confronted with an alliance between the state and capital through large-scale land investments, they lost their means of production, and their livelihoods deteriorated rather than improved (see Table 7.2).

Table 7.2 reflects various emerging labour arrangements and different degrees of adverse incorporation. It shows that in most cases farmers lost control over their lands, and were generally on the losing end in emerging production and exchange relations, as well as in terms of valuing their labour. With a few relatively successful farmers in exceptional cases, advocates for large-scale land deals are often too eager to argue that land deals are benign as long as peasants go into contract farming, wherein they remain (formal) owners of the land.

Such contracts depend on multiple variables: power relations between peasants, investors and the state; economic and social conditions of peasants; gender, age and ethnicity, among others. In essence, contract farming entails a special relationship between agro-capital and growers, in which the former can 'regulate price, production practices and credit' (Watts, 1992: 91). The relationship between them and the terms of the contract often turn contracted peasants into 'self-employed proletariat' (Chevalier, 1983), 'slavers' (Weiss, 2010) or what Lenin called 'propertied proletarian' (Watts, 1992: 93).

Table 7.2: Emerging patterns of labour arrangements in selected large-scale land investments

Forms of incorporation	Examples and sources	Terms of incorporation					Impacts on	
		Separation of producers from means of production	Labour	Harvest	Payment	Products or services	Other conditions or supports	livelihoods
Wage labours in large plantations or SEZs	Plantation in Buol, 2009 (see Li, 2011)	Yes	Wage labour	No claim	Low, 1–1.5 million Rp. per month	Oil palm	Some social welfare	Not enough jobs and payments, livelihoods deteriorated for the majority
	Plantation in Congo (see Deininger et al., 2011: 65)	Yes	Wage labour	No claim	Low, US\$3–5 per week	Rubber, coffee and cacao	Some social welfare	
	SEZs in India (see Levien, 2011, 2012)	Yes	Wage labour	No claim	Low and unstable, US\$75 per month	Gardening, guarding, car driving	Supported by National Rural Employment Guarantee Programme	
Wage labours in 'partnerships' with corporations	'Partnerships' in Indonesia (see Li, 2011)	Formally no, effectively yes	Wage labour	No claim	low, 350,000 Rp.	Oil palm	No other supports mentioned	
Wage labours in contracted small farms	'Plasma' in Morawali, 2009 (see Li, 2011)	Yes	Wage labour	No claim	High, 2–3 million Rp. per month	Oil palm	Land prepared, infrastructure provided by the investors, and not all land was offered	Livelihood improved only for a minority who suffered years before the plant become productive
Contracted smallholders/ farmers	'Plasma' in Morawali, 2009 (see Li, 2011)	No	Family labour and hired labour	Required to sell to the companies	High, 4–5 million Rp. per month	Oil palm		

Source: Adapted from Chevalier (1983), Weiss (2010) and Watts (1992)

In this sense, the effect of large-scale land deals on rural farmers' livelihoods depends more on the terms under which smallholders are incorporated into global value chains than on the general forms of this incorporation. We agree that agrarian change depends on simultaneous interaction of processes leading to inclusion, exclusion and adverse incorporation (Hickey & Du Toit, 2007: 15).

However, with capital moving on a global scale and the large-scale production model in a prevalent position, governments in different countries and at different levels also compete with one another to entice investors. As a result, the terms of incorporation are generally unfavourable towards farmers and wage labourers. Governments often provide flexible institutional arrangements that favour investors in the areas of land control, labour policy, environmental protection and favourable taxation. Central states, as Fox (1993) explains, face a dual contradictory role in the context discussed earlier: to facilitate capital accumulation but at the same time maintain a minimum level of political legitimacy. This contradiction constrains the state's ability to protect farmers and wage labourers from the negative impacts of large-scale land investments in many ways. But the same contradiction also allows for occasional reformist concessions that favour rural working classes.

# Water grabbing, green grabbing and impacts on rural livelihoods

While they differ in important ways from the large-scale agricultural land deals described so far, 'water grabs' and 'green grabs' can also profoundly affect local livelihood activities. In this section we review selected examples of land and water grabs and discuss their impacts on labour and livelihoods.

'Water grabs' are receiving increased attention, both as a key component of land grabs and as a distinct phenomenon in their own right. Because of the importance of water to produce agricultural commodities and the close biophysical entwinement of land and water, securing water rights can act as an implicit motivation for land grabs (HLPE, 2011; Mehta, et al. 2012). In other cases, water itself is the primary target of a 'grab'; for example, when dams are constructed to produce hydroelectricity. Recent activity in the Mekong delta provides an example of this pattern, where investors in Thailand are converging with enabling factors in Lao People's Democratic Republic (PDR) to build dams and produce electricity for export, with very uneven distribution of benefits and risks (Matthews, 2012). In these different forms, competition for water resources can both worsen the livelihood impacts associated with land grabs and produce unique implications for local inhabitants.

Changes in control over water can affect livelihoods both upstream and downstream. Because water is fluid in time and space, meaning that it flows physically and also experiences seasonal fluctuations in availability, water grabs have even stronger potential than land grabs to impact people in locations outside the 'grabbed' area and also to have cyclical impacts in times of shortage (Mehta, et al. 2012; Woodhouse, 2012).

One of the situations in which water grabs can impact livelihoods occurs when irrigation for large-scale agriculture competes with the needs of small-scale users. For example, in Mozambique, the company behind a large-scale sugarcane enterprise stated that the government had pledged to protect its water needs as a priority, while reports suggested that insufficient water resources were available to satisfy competing demands from hydroelectricity-production commitments, the company's irrigation requirements and the needs of subsistence farmers located downstream (Borras et al., 2011). In the Sahel, Hertzog et al. (2012) predict a similar problem of competition for scarce water resources linked to demands from large-scale sugarcane plantations, particularly in the dry season and during years of low rainfall. If small-scale farmers lose access to sufficient water resources to meet their own needs in such situations, the water constraints attached to land grabs could have the effect of disrupting livelihoods over a much greater area than the land included in the deal itself (Woodhouse, 2012).

In addition to conflicts over water quantity and allocation, water quality problems caused by land-grab activities can also impair the livelihoods of downstream communities. This was the case in Tanzania, where runoff from a large-scale agricultural scheme in the Makete district contaminated the drinking water supply of 45 000 people in neighbouring Njombe district (Arduino et al., 2012). As with the water quantity issues just discussed, these water-quality issues provide compelling reasons to look beyond the boundaries of any particular large-scale investment and consider its potential livelihood impacts at a watershed or basin level.

Green grabbing refers to 'the appropriation of land and resources for environmental ends' (Fairhead et al., 2012: 238), particularly for conservation, carbon markets, payments for ecosystem services, bioprospecting or ecotourism. It can refer to the physical enclosure of land but also the establishment of new patterns of control over resources, including particular species (Peluso & Lund, 2011). Although research into on-the-ground social impacts of green grabs is still gathering momentum, the following examples show that green grabs in both of these forms can adversely affect local people in terms of labour and livelihoods.

Assigning land for conservation can limit the livelihood activities of local inhabitants in and around the designated areas. Kelly (2011: 683) argues that 'protected area creation is a particular form of primitive accumulation that involves both enclosure and dispossession of land and natural resources'. Where land is physically enclosed for protected areas, local users can lose access to areas that previously sustained their livelihoods. Kelly (2011) reviews a series of historical examples of 'fortress conservation', demonstrating that the enclosure of these areas was in some cases linked to a political agenda of forcing those who were practising subsistence livelihoods to sell their labour, thereby turning

people who had not previously relied on performing wage labour into those who did. In terms of changing livelihoods, Peluso and Lund (2011: 672) point out that '... from the prior (or contemporary) residents' points of view, expanding conservation land has the effect of removing land from their own and their children's future or reserve sites of production or accumulation', thus reducing the range of choices about livelihood activities available to inhabitants over the long term.

Management schemes that award compensation for protecting rather than using resources, such as carbon offset or payment for ecosystem-service programmes, can also limit local inhabitants' livelihood activities and cede authority over these decisions to distant actors (Peluso & Lund, 2011). In these cases, restrictions over resource use are key. As Corson (2011: 707) summarises:

... enclosure through restricting resource use can have the same impact on rural peasants as enclosure through the physical fencing of space. Restrictions that preclude peasants from current and future accumulation possibilities (as well as livelihoods) can serve to maintain the resources for future capitalist accumulation by others, be it via conservation or exploitation.

Rules around conserving particular resources can therefore shift potential benefits away from current inhabitants toward undefined future users.

In cases where land is not enclosed and formal rules around resource use do not change, 'green capitalist' activities related to pursuing specific species for their commercial value can, nonetheless, create incentives and penalties that produce exploitative labour relations. The case of bioprospecting for pharmaceuticals in Madagascar provides an example of adverse incorporation into this particular form of green grab. Neimark (2012) describes labour relations along the supply chain for rosy periwinkle, observing that peasant workers play a vital role in harvesting a consistent supply of the plant, but are paid low wages and carry a disproportionate share of risk compared to the research firms that employ them on a semi-contractual basis. Noting that a lack of other livelihood options is what entices peasants to keep collecting periwinkle at unfavourable prices, Neimark (2011: 442) concludes that 'bioprospecting is a distinct form of green grabbing highlighting capital's drive to seek out opportunities to exploit labour in order to extract the surplus value of previously uncommodified nature'. Thus, even without physically enclosing land or formally regulating access to resources, the pursuit of commercial value from a particular species can reformulate local inhabitants' relationship to land and resources in ways that exploit their labour in light of limited livelihood opportunities.

Although diverse in character, these examples of green grabs show a pattern of outcomes that supports Fairhead et al.'s (2012: 239) conclusion:

While grabbing for green ends does not always involve the wholesale alienation of land from existing claimants, it does involve the restructuring of rules and authority over the access, use and management of resources, in related labour relations, and in human-ecological relationships, that may have profoundly alienating effects.

For these reasons, the current and potential future impacts on labour and livelihoods of appropriating land and resources for environmental purposes warrant continued attention.

# **Conclusion: A double challenge for South Africa**

Large-scale land investment is currently a popular rural development strategy that many countries have decided to follow and encourage. The 'going global' policies in China (Hofman & Ho, 2012) and bilateral agreements pushed by the governments of South Africa and Congo (Brazzaville) are examples of this trend.

For South Africa, the issues raised in this chapter present a double question relating to patterns of domestic rural development and the country's role in undertaking large-scale land investment internationally. Regarding internal employment, to the extent that they expel or save labour, large-scale agricultural investments and green grabs for conservation provide a challenge to South Africa's employment-creation agenda. In particular, the recent increase in private wildlife ranching in South Africa, driven by declining financial prospects for commercial farmers and more immediately prompted by the Game Theft Act of 1991, regulations on fencing and the enrolment of many private ranchers in conservation schemes, has produced changes in patterns of labour and livelihoods (Snijders, 2012). Land enclosed by private game ranches has lower labour requirements than that used for agriculture, while farm dwellers may lose access to livestock, grazing areas, water resources, and access routes to school or work when wildlife ranches are created and fenced off (Snijders, 2012).

Contemporary large-scale agricultural investments generally take the form of mechanised, monocrop plantations that tend to expel or save labour. Not everyone sees this as a problem: as Li (2011) points out, the World Bank has advocated land markets to increase efficiency and promote a 'migration out of agriculture' (Deininger, et al. 2011), but crucially, it has remained silent on the question of what the people who make the transition out of farming could or should do instead. For countries concerned about high unemployment, the

potential impacts of large-scale land deals on labour and employment should be considered very carefully indeed.

In terms of outward investment, in recent decades both the scale and quantity of overseas investments by South African farmers have increased greatly, largely driven by white commercial farmers who face deteriorating political and economic environments at home and choose to move out of South Africa rather than diversifying or quitting farming (Hall, 2011). Current examples of South African investment in commercial agriculture across the continent resemble, in many ways, the expulsion of peasants and expansion of commercial agriculture that occurred within South African during the apartheid era. At the same time, the current movement of South African commercial farmers into other African countries is distinct in the degree to which it is centrally coordinated and relies on transnational financing (Hall, 2012). South African expansion in the region is not only for farming (or mining) but also for tourism, taking the form of coastal developments in Mozambique and Tanzania in particular, and game farms, safari and hunting operations in several other countries throughout the region. Enclosures for conservation and recreation have their own long history in this region, involving large areas and provoking (sometimes violent) contestations over resource rights (Hall, 2011). In all of these cases, the reality of spreading labour-saving or livelihood-limiting models of land use throughout the region is at odds with the pro-poor, rural development narrative attached to large-scale land investments.

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# Chapter 8

# The penumbra of employment: Impoverished rural livelihoods in South Africa<sup>1</sup>

David Neves and Andries Du Toit

### Introduction

The prospects for low and unskilled employment have for decades been constrained within South Africa. Impoverished black South Africans long sustained themselves through complex livelihood activities, with urban-based activities and locales frequently intertwined with those based in rural areas. This chapter examines the significance of the latter in the survival strategies of underemployed Africans. It examines rural livelihoods in the context of chronic mass unemployment through a number of case studies collected in South Africa's communal areas. These livelihoods are constituted in relation to four domains. The first is the land-based resources provided by rural areas, including their role as zones of retreat and retirement from urban labour markets. The second are various small-scale, survivalist informal economic activities. The third is South Africa's comparatively generous system of state cash transfers. The fourth and final domain comprises culturally embedded practices of social reciprocity, which channel resources (from labour markets and state cash transfers) to others. This chapter considers how contemporary, impoverished and vulnerable livelihoods are constituted within these domains, in the shadow of the formal economy and employment.

# **Rural livelihoods in South Africa**

Rural livelihoods in South Africa have long been subject to the social and occupational change associated with de-agrarianisation (Bryceson, 1996), with smallholder African agriculture undercut by racialised land dispossession and

<sup>1</sup> This chapter draws on an earlier version of this work: Neves, D. & Du Toit, A. (2013). 'Rural livelihoods in South Africa: Complexity, vulnerability and differentiation', *Journal of Agrarian Change*, 13 (1), 93–115. The authors gratefully acknowledge Michael Aliber for sharing the Limpopo case study.

underdevelopment to provide labour to industrial capitalism (Bundy, 1979; Wolpe, 1972). From the 1970s, opportunities for rural accumulation became further eroded by chronic African unemployment, amidst South Africa's increasingly capital-intensive growth path. The structural dynamics of jobshedding, urban-based, capital-intensive growth have continued since the advent of democracy (Aliber, 2003; Black & Kahn, 2002; Philip, 2010), sapping remittances and opportunities for rural reinvestment. Structurally unemployed Africans are therefore caught between the twin pincers of de-agrarianisation and de-industrialisation (Bank & Minkley, 2005).

Marginal livelihoods and the dearth of employment are patterned by the racialised and spatial legacies that mark poverty in South Africa. Thus the poor are overwhelmingly African and disproportionately rural, with 72% of the poor living in rural areas (May et al., 2000). The poorest provinces encompass the largest of the former homelands (Eastern Cape, Limpopo and KwaZulu-Natal [Aliber, 2003]), and are home to 43% of South Africa's population (Noble & Wright, 2012).

Despite the march of 'jobless de-agrarianisation' (Bryceson & Jamal, 1997; Du Toit & Neves, 2007b), the informal economy offers little succour. This sector is comparatively small (by developing country standards) and opportunities are limited (Lund & Skinner, 2003). Hence town and countryside, agriculture and industry, formal and informal sectors offer constrained opportunities for accumulation by the poor in contemporary South Africa. The problem of persistent poverty is, moreover, less one of the exclusion or estrangement of the marginalised from the economic mainstream, than their 'adverse incorporation' into the broader political economy (Du Toit & Neves, 2007b). South Africa's poor have long been incorporated into commodity relations as consumers, welfare beneficiaries, low-waged workers and informal-sector survivalists.

In this context, impoverished African livelihoods are constituted through migration that links rural households to urban opportunities and resources (Potts, 2000), with households stretched between urban and rural (Spiegel et al., 1996). Households are often characterised by both changing household membership and diversified repertoires of livelihood-supporting activities.

Constrained opportunities for employment and accumulation are enmeshed with social dynamics. The waning of formal, male-labour migration served to reshape entrenched practices of rural return, back investment and accumulation. Diminished prospects for male employment have reshaped household formation, and feed into larger, cultural demographic and social transitions. These are evident in household 'unbundling', namely increasing numbers of (often femaleheaded) households, but smaller, average household sizes (Pillay, 2008).

In this context of limited and declining employment opportunities, the question of how the underemployed survive is a salient one. Close attention to specific cases is a powerful lens through which to understand better the overarching trajectories of social, economic and occupational change.

#### Case studies

This chapter draws on four short case studies derived from data conducted between 2005 and 2010 in two separate former 'homeland' communal areas, in the Eastern Cape and Limpopo provinces respectively. The dynamic character of social life was captured using a variety of in-depth household interviews, detailed life histories and observational methods. In the analysis that follows, these are linked to larger structures and temporal trajectories.

The combination of detailed life histories and annual return visits lends a longitudinal quality to the case studies. Secondary interviews and analysis were also conducted with informants outside of the focal households, to understand the larger context.

Each of the case studies is specific and particular, and the analysis makes no claims as to their generalisablity to most impoverished, rural, South African households, nor does it offer these up as immutable 'models' of households. Instead, the case studies offer interpretative vantage points from which to consider the domains in relation to which rural livelihoods and lives are constituted in the context of persistent and pervasive unemployment.

#### Ramena

Energetic and elderly Ramena lives in a Limpopo village in a communal area, in a compound alongside a busy road, consisting of an informal abattoir, retail butchery and informal restaurant. Apart from rearing cattle (90 head), his household engages in other activities, including the supply of building sand using his two trucks. Gathered from the banks of a river, the sand is also used to make concrete building blocks for resale. Ramena's wife and daughter are paid for running the abattoir and butchery, in addition to an adult daughter undergoing training (who is supported financially, in anticipation of her improved employment prospects).

Ramena grew up locally but worked in a distant city as a bus driver for two decades, before returning with a retrenchment package. Drawing on his work experience and capital, he started a transport business and developed the current site. A concrete-block-making machine—used to build the compound and butchery—and refrigeration equipment were acquired at auctions.

The decade-old butchery resells boxes of purchased chicken, but focuses on beef. Ramena's cattle production, abattoir, butchery and 'eating house' are vertically integrated: with livestock reared and slaughtered, and the meat retailed.

Moreover, while some of his cattle are slaughtered at his abattoir, others are purchased from adjacent African smallholder farmers or from commercial farmers (via auctions). Conversely, Ramena auctions off his better-quality beasts, rather than processing them. Some of his own cattle are sold, and others are bought in because the local market is price sensitive and favours inexpensive meat. He explained, 'You see the people from here are not able to see the difference ... they think meat is meat.'

He slaughters one head of cattle a week, but only 10–15 of the cattle slaughtered annually are his. In 2009, he sold 16 of his animals, and complained that his butchery's profitability was undercut by high costs, such as electricity and transport. In 2010, a rough estimate gave a gross annual margin of R41 000 on the butchery, excluding his wife's and daughter's salaries, and R56 000 from livestock sales at auction. While he was not particularly rich, income from his enterprise represented a high, average household income by local standards.

#### Nosomsi

Nosomsi's household, in the deep, rural region of the former Transkei homeland, was among the poorest in a 2002 survey, with 'no paid work' and little income other than a state old-age grant. Yet despite being income poor, the household had been able to invest in several head of livestock and a (rare) gas-powered chest freezer.

Matriarch Nosomsi occupied a large and well-furnished homestead. An obese and relatively immobile grandmother, she relied on her adult children (employed in various distant cities), particularly her son, Fikile, who was a bakery manager and remitted R400 monthly in 2005. With numerous co-resident grandchildren, Fikile bought the freezer to enable his mother to augment her income through meat retail (sourced from town), and beer (from a rural bottle store). Her two teenage grandsons were integral to this, as they collected the beer and helped serve patrons; the small tavern was estimated to make R600 per month in 2005. Nosomsi not only used her state old-age pension to buy alcohol and offer customers credit but she also funded inputs for her small plot, worked by her grandsons and hired labour. In 2005 these activities saw Nsomsi more than double her pension income. Finally she also stored perishables for others in her freezer, a considerable favour in an unelectrified village.

The family routinely harvested maize from a large homestead garden. Labour was hired and Nosomsi's adult children, including Fikile and his family, also returned annually to help with the harvest. While the cost of the inputs was close to the value of the maize, Nosomsi explained that its cultivation was a longstanding tradition. It also kept both her grandsons occupied and enabled her to offer local employment.

The narrative of the benefactor son, Fikile, is revealing. Raised by grandparents locally while Nosomsi was a domestic worker in distant Durban, he later joined her in Durban, working his way up the ranks in a supermarket. Once Nosomsi secured a state pension, the pressure on Fikile eased. He cut back on his working hours to complete his education, and once qualified, was promoted, eventually to bakery manager.

Fikile supported not only his mother (with remittances and stock to resell) but also his other siblings, nephews and nieces. Nosomsi was proud of her adult children and explained that they all worked and supported her, leaving her to spend her old-age grant, which was spent only on funeral insurance, toiletries and smaller grocery items throughout the month.

#### Kwanele

Kwanele was a tall and imposing rural patriarch, who worked for decades in a Gauteng factory. Despite little formal education, he had risen through the ranks to skilled employment as a machine operator. He invested in his substantial rural homestead, and the education of his four eldest sons. In 2005, 55-year-old Kwanele had been retrenched and had returned to his homestead in the former Transkei. He supported a total of 13 dependants: his wife, two adult brothers (one mentally ill, the other reportedly a drunkard), five children (and a granddaughter born to an unmarried daughter), along with the four sons schooling in distant cities.

Two of the non-resident sons were schooling in the regional centre of Mthatha, and distant Sebokeng (where Kwanele had lived while employed). A third son, in Sebokeng, had completed an advanced certificate in 'mechanics' and his heavy-vehicle drivers' licence, and was seeking employment. The fourth was studying in Pretoria and repeating a failed course for his commerce qualification.

After his return in 2005, Kwanele farmed with the help of his children. He sold vegetables and planned to improve his small herd of cattle. His entrepreneurial efforts with vegetables were, however, stymied by villagers' requests for charity. He was critical of this and his adult brothers, whom he resentfully supported. In 2005, the household was living largely off Kwanele's retrenchment package, from which he also remitted at least R1650 monthly to his four sons. Both Kwanele and his wife were proud of their sons and anticipated their future support for the household.

In 2008 Kwanele was still farming but was opportunistically running a small spaza shop from his homestead, after a larger, local store had closed. However the certainty of the sons' employment prospects had faded. He and his wife recounted their sons' difficulties in finding solid employment and the failure of one son to complete his expensive education.

However in late 2009 their fortunes turned when two of their sons were accepted into an artisan-training programme of a large company. By this time his spaza shop had closed because the local store had reopened, but Kwanele, long active in the local church, was in the process of building his own church. Its construction was being funded by donations and his diminishing retrenchment savings. Kwanele confided that his R100 000 retrenchment package (equivalent to a decade of state old-age grant receipts) was almost exhausted, but he explained that he would soon qualify for a state old-age grant himself.

#### Chuma

Chuma, a woman in her thirties, lived with her three young children in rudimentary mud huts in a village in the former Transkei. Chuma was among the poorest and most marginalised of all households sampled. Between 2005 and 2006, her sole source of regular income was a single child-support grant, which she augmented with laborious local labour. Although all three of her children were entitled to a child support grant, two of them lacked the necessary documentation (failure to access it suggests extreme marginality or incapacity). Chuma engaged in no farming and had no livestock. Furthermore, unlike most respondents, Chuma remained a reticent interviewee during several visits.

The air of resigned passivity hung over Chuma in relation to various aspects of her life. So when a tractor struck and damaged her hut, she left it unrepaired and livestock entered and consumed her maize from a local development project. Similarly, she eschewed the customary Christmas-time repainting and tidying of homesteads. In the context of annual migratory returns and the high value placed on kinship, this indifference was noteworthy. However her deliberate inaction became comprehensible when viewed in the light of the micro-politics of her place within her kinship networks.

The composition of the household at Chuma's compound had changed radically in the recent past. In 2002, the household consisted of Chuma's three-year-old daughter, a 15-year-old nephew and her 69-year-old grandmother, while Chuma was staying in a distant city. Soon afterwards, her grandmother died and the nephew relocated to Cape Town. This catalysed Chuma's return to the village, with two of her older children, at the behest of her three half-brothers. Having reluctantly returned, Chuma readily admitted to finding village life arduous and monotonous but, with three young children, slim prospects for marriage or urban employment, and weak entitlements, she had little choice. She was dispatched to tend to the homestead, while her brothers were to remit money.

Over the course of several interviews with Chuma, two facts became apparent. The first was that her 'brothers' were in fact her cousins and they reneged on their agreement to send remittances. As a consequence, Chuma was marooned

in the rural Eastern Cape. Although she performed essential work by occupying the house (in a context in which property rights are bound up with communal recognition and use), she was marginal and relatively powerless within her family network. She survived on a single child-support grant, inconstant and poorly paid menial work and the patronage of village-based benefactors.

# Rural livelihoods in the context of chronic unemployment

This section draws on the case studies to consider how marginalised rural livelihoods are constituted in terms of the four domains. Firstly, the rural base affords opportunities for engagement with a variety of the livelihood-supporting activities (including farming), a site for engagement with urban opportunities and a zone of retreat from urban shocks. Secondly, rural areas are zones for complex repertoires of productive economic activity. Thirdly, South Africa's system of state cash transfers, and, fourthly, practices of social reciprocity provide the final pieces in the puzzle in conceptualising current-day, impoverished livelihoods in the context of mass unemployment.

### Impoverished livelihoods and rurality

Impoverished livelihoods in South Africa have long been linked through oscillatory migration connecting urban and rural locales and fortunes, linkages that have persisted in the post-apartheid era (Hart, 1996, 2002; James, 2000, 2001). Even in the absence of employment opportunities, urban sites offer superior access to infrastructural services (such as electricity, piped water and transport), and services such as schooling and health care. Conversely rural residents and urban returnees use the countryside as a retreat from urban labour markets. Rural locales remain common sites for rural retirement, and a safety net for livelihood shocks such as death, illness and job loss, as in the case of Kwanele. The persistence of oscillatory migration post-apartheid and slow 'urban transition', even with the collapse of apartheid-era influx control, reflects the enduring precariousness of urban labour markets and livelihoods (Mabin, 1990).

The poor readily describe the virtues of rural life in terms of its lower cost of living, through its (relatively) non-commodified land and resources (such as fuel and water). Rural sites also provide the 'back end' of spatially extended care chains (Hochschild, 2000), and are therefore important sites for social reproduction. For instance, a common response to an urban shock is to return household members who are not economically active, such as children, to rural areas (Du Toit & Neves, 2006). The small selection of vignettes presented here contain examples of both rural return retirement (Kwanele, Nomsomi and Ramena) and three generation or skipped generation (grandparent/s and grandchildren) households, such as those of Nomsomi and Kwanele.

As South Africa's rural residents have been incorporated into commodity relations and spatially extended systems of production and consumption for a long time, town and countryside are linked by patterns of migration and resource flows. The evidence suggests a decline in remittances over time (Seekings et al., 1990), attributable to a combination of declining employment opportunities, the need to retain resources for household 'unbundling' and weakening social mores (Seekings & Harper, 2010). Yet remittances are still significant resources for a stratum of rural households. The case studies reflect this and the complexity of remitting behaviour. For Nosomsi, for example, the ebb in remittances of her son Fikile enabled him to improve his education, employment and subsequently the flow of resources to her. Kwanele, on the other hand, contradicts the usual narrative of unidirectional remittances from town to countryside, since he sends money to his urban-based sons.

Apart from migration and remittances, South African's rural poor also engage in in-situ productive activity. Despite de-agrarianisation and wide variations in the agro-ecological, social, institutional and market conditions, which enable smallholder agriculture, land remains a significant resource for the unemployed and poor (McAllister, 2001). It is used in smallholder agricultural production (Aliber et al., 2006; Aliber & Hart, 2009), the intensive cultivation of homestead plots (Andrews & Fox, 2004), and practices of natural resource harvesting (Shackelton & Cousins, 2001). While farming is a precarious and small-scale activity, it remains crucial to the 1.25–3 million people who engage in it (Aliber & Hart, 2009). The case studies demonstrate (to varying degrees) how farming remains a key livelihood activity for many rural households, even if the small selection of case studies presented reveal quite different engagements with it.

In summary, rural livelihoods are sustained in contexts, shaped by histories of migrancy and cultural imaginaries of these as authentic 'home' (James, 2001). Kwanele's enthusiasm for his rural home and Nosomsi's assertion of the tradition of maize cultivation stand in contrast to Chuma's unhappiness with her rural lot. Therefore, understanding marginal livelihoods demands attention not only to the rural as livelihood ballast in relation to urban opportunities and resources but also to a zone in which individual aspirations and collective household-livelihood projects are enacted (Seekings, 2008). In the case studies, the rural is an important site of these complex projects and aspirations. Finally, these dynamics are often marked by a household politics of gender and generation—cultural and material contestation—of the sort evident in Chuma's alienation from her (male) kin's desires. Bank (2002) notes some of the recent gendered fissures in rural livelihoods: the proficiency with which women transact within networks of gendered, social solidarity is contrasted with the men, who are both distant from

the 'woman's work' of small-village livelihoods and trapped in a fading fantasy of formal, industrial employment.

### Rural livelihoods and economic informality

Rural sites are locales in which multiple productive activities are undertaken: farm and non-farm activities, waged and own account, formal and informal. Initially, 'economic informality' described marginal and low-productivity activities outside the regulatory ambit of the state and tax system (Hart, 1973), but more recent definitions are employment-based, defining economic informality in terms of the precarious and unprotected nature of employment. Both are applicable in South Africa, where economic informality occurs at the margins of a powerful industrial economy (predominantly by African women who glean low-average incomes) (Devey et al., 2006).

South Africa's informal sector is, by developing economy standards, comparatively small, despite high levels of poverty and unemployment (Cichello et al., 2005). This is attributable to colonialism and apartheid, which inhibited African entrepreneurship, along with various credit, information and skills deficits, and high infrastructure costs. These conditions occur in a context of a powerful and concentrated formal economy, which serves to 'crowd out' economic opportunities for informal enterprises (Neves et al., 2011; Philip, 2010). These factors inhibit informal economic activity and deepen the vulnerability of the poor and unemployed. Yet despite the constraints involved, many rural households engage in various forms of informal economic activity.

The case study material illustrates these activities and the 'survivalist improvisation' (Davis, 2006) of much informal economic activity. Informal economic activity may be directed to multiple potential objectives, and marked by a highly responsive and dynamic quality. The latter is well illustrated by Kwanele, who engaged in farming, then concentrated on a small 'spaza shop' during the closure of a larger store, but withdrew when his competitor reopened, to focus on building a church and congregation. Even Kwanele's ecclesiastical ambition should not be viewed apart from the imperatives of livelihood-making, since they bolster his status in the village and within local networks of patronage.

Informal economic activity in South Africa is typically tightly intertwined with the formal sector in terms of linkages of capital, inputs, production and employment—with churning employment between the formal and the informal sectors commonplace (Devey et al., 2006). Formal-sector employment confers the capital, skills and productive assets for informal economic activity. For instance, both Ramena and Kwanele retreated from urban labour markets with capital (retrenchment packages), material assets (cattle, vehicles) and skills

(driving, but also the social confidence and linguistic proficiency to engage with commercial farmers).

The capacity to engage in informal economic activity is not shared equally by all, rather it is an extension of the ability to leverage existing assets and labour capacity. For instance, higher informal-sector earnings statistically correlate with formal-sector employment and a marital relationship (Neves et al., 2011), as successful, informal economic activity demands that household labour constraints be overcome. Witness frail Nosomsi's agricultural production, which variously draws on hired labour, her grandsons and seasonal harvesting by non-resident kin. Kwanele's and Ramena's kin are similarly drawn into their farming, and Nosomsi's unpaid, minor grandsons regularly collect liquor and serve her tavern patrons. In resource-poor rural contexts, even children are routinely drawn into the demands of social reproduction (such as carework, water and fuel collection), quite apart from farming (Du Toit & Neves, 2006).

Successful informal enterprise operators frequently seek to exploit small niches and fine gradations of value between the formal and informal sectors (Neves et al., 2011). In the former homelands, local markets are often 'thin' and geographically isolated. The disadvantage that marks the informal sector is evident in the asymmetry of its linkages to the formal economy (Neves et al. 2011): backward linkages from the formal sector predominate as virtually all commodities in the informal sector originate in the formal sector (Philip, 2010). Conversely, there are few forward linkages from the informal sector into the formal sector. Beef producer, Ramena, was unusual for his adeptness at building forward linkages into the formal economy (via commercial cattle auctions). Ramena's sophisticated vertically integrated beef enterprise relied on arbitrage between the commercial cattle market and his price-sensitive, local village consumers (Neves & Du Toit, 2012).

Successful informal economic activity often relies on the ability of those in the sector to manage (and evade) formal, state-based economic governance. Wider regimes of governance, particularly in the liminal zones of South Africa's communal areas, consist of competing and overlapping layers of authority, including the institution of the hereditary chieftaincy (Ntsebeza, 2006). Chiefs exercise their authority in locales in which the appurtenances of the modern South African state are either relatively thin on the ground or absent. These patterns of rural governance create spaces where productive economic activities, such as Ramena's butchery, Nosomsi's liquor retail and even Kwanele's church building, are relatively uninhibited by regulations governing the environment, health, liquor retail and land-use planning. These petty entrepreneurs are less subjected to modern forms of economic governance in the ethnic enclaves of South Africa's 'black' and rural homeland spaces than elsewhere. Indeed, throughout Africa

much economic activity is subject to forms of economic governance, outside the purview of the formal state (Roitman, 2005).

Finally, the case studies suggest economic activity is shaped by social imperatives and networks (Meagher, 2010). Informal traders often seek to position themselves in social networks, but this forging of 'social capital' exacts costs in the forms of various entitlements and redistributive claims (for example, from kin, customers and in the form of crime). Much of the work of economic informality entails managing these claims (see Ferguson, 2013). Examining the growth of a class of African small retailers in QwaQwa, Bank (1997) noted how they mobilised their social and cultural capital in order to trade their cattle for stock in ways that did not repudiate the social and cultural values cattle typically embody (see Ferguson, 1992). In so doing, they were not simply a *homo economicus*, but rather social actors who developed a 'hybrid understanding of the meaning of property and the social relations within which their enterprises needed to be embedded in order to succeed' (Bank, 1997: 201). Economic informality is therefore simultaneously enabled and constrained by social relations.

#### State social cash transfers

A third component in understanding rural livelihoods is South Africa's system of state social grants. Comparatively extensive for a developing country, non-contributory, monthly, means-tested social-assistance grants are received by 15.7 million individuals, over a quarter of the population (SASSA, 2012). Children, the disabled and the elderly are the major categories of beneficiaries. Patterned on the classic European welfare model and an assumption that unemployment is a transient or exceptional event, there is no social assistance for non-disabled, working-age adults. Contributory unemployment insurance excludes most unemployed working-age adults, as most have never been employed.

Early twentieth-century social pensions for white people were slowly extended to 'natives' by mid-century and reached parity by the advent of democracy (Van der Berg, 1997). At R1200 per month (in 2012), the state old-age grant (SOAG) represents almost twice the median per capita income for Africans (Case & Deaton, 1998). The child-support grant has been the fastest growing and largest category of transfers in the post-1994 period (Pauw & Mncube, 2007), at R260 it is received by over 11 million beneficiary children.

The combination of a progressive tax system and (relatively) generous transfers serves to temper South African's globally leading levels of income inequality; receipt of a social grant effectively lifts many recipients' households out of the lowest-income percentile.

Robust welfare effects are associated with cash transfers, including health and educational outcomes (Budlender & Woolard, 2006; Case et al., 2005).

Furthermore, social transfer income is shared within households (Duflo, 2003). Apart from ameliorating poverty, state cash transfers have a range of other consequences, including various household demographic, labour-market and economic effects. In terms of demography, many households are effectively formed around a recipient pensioner (Woolard & Klassen, 2004). It is the material lynch pin for many rural households, particularly the ubiquitous, skipped generation (grandparent/s and grandchildren) rural household.

The evidence of SOAG effects on labour-market engagement is contested, but early research has suggested that an old-age pension is correlated negatively with labour-market involvement by working-age adults within recipients' households (Bertrand et al., 2003). Conversely, others suggest that pension income facilitates labour-market engagement (Keswell, 2004). Further research of non-resident household members inverted the original negative correlation and found that SOAG receipt has a positive effect on labour-market supply (Posel et al., 2004). Receipt of a SOAG is associated with a decreased number of prime working-age women and increased numbers of young children within rural households. The SOAG provides the resources for rural out-migration, and enables older women to look after grandchildren (Posel et al., 2004).

Gauging the economic effects of state transfers and their impact on productive economic activity is difficult, yet evidence from Latin America suggests that state transfers support investments in productive, physical capital and agriculture, generating multipliers in excess of 150% of the grant (Sadoulet et al., 2001). Much of the value of state transfers also resides in their predictability and regularity, particularly for beneficiaries whose lives are marked by contingency and vulnerability. Cash transfers potentially enable recipients to overcome liquidity constraints, transcend the need to engage in precautionary, low-risk activities and keep savings in liquid but low-yield forms.

In South Africa, evidence suggests that cash transfers support investments in productive assets and activities (Lund, 2002; Neves et al., 2009). The cases of Nosomsi and Kwanele show how grant income provides seed and operating capital for retail and small-scale farming. Barrientos (2008) notes that transfers have the greatest effects among rural households with deficits in complementary 'productive' assets such as inputs or labour.

Finally, the income from social transfers potentially serves as a Keynesian stimulus to local growth by increasing purchasing power and generating multiplier effects. International evidence finds increases in consumption and productive assets among non-beneficiaries in receiving areas (Andgelucci & De Giorgi, 2009), but the precise magnitude of the multiplier effects is difficult to judge and is typically calculated for grant recipients alone. Within South Africa, social transfers are received by large numbers of recipients in particular kinds

of spatial poverty traps—the ethnic enclaves of the former homelands and urban townships. These are resource-poor areas that bear the mark of apartheidera spatial planning, which repressed the formation of conventional settlement patterns and functioning local markets. Social transfers therefore provide some demand-side stimulus for local trade (Aliber et al., 2007; Neves et al., 2009) in otherwise impoverished areas.

# Social reciprocity

A fourth and final component in strategies to survive unemployment are elaborate, culturally embedded practices of social reciprocity. Social reciprocity underpins inter- and intra-household transfers, urban-rural linkages and household livelihood activities. These practices receive various explanatory inflections in the theoretical literature, including 'social capital', 'informal social protection' (Bracking & Sachikonye, 2006) or even 'ubuntu' (Du Toit & Neves, 2009a).

Although the poor do not have a monopoly on practices of mutuality and social reciprocity, these are significant given the precariousness of their livelihoods, their vulnerability to plunges into immiseration, and the relative paucity of their access to formal, risk-management arrangements (such as insurance).

These practices of mutuality are simultaneously specific and diverse: they inhere in specific relationships. They cannot be reduced to transactional exchange, but are instead rooted in obligation and claimed through the exercise of entitlement, cultural norms and moral claims (Du Toit & Neves, 2009b). Material and monetary exchanges of gifts, disbursements and remittances are one medium of exchange in relationships of social reciprocity; favours, gifts and unremunerated care work are others.

These circuits of mutual assistance are evident in the case studies; for example, in the relationship between Nosomsi and her son Fikile, who scaled back his remittance when his mother started receiving a state pension, but then increased it after securing solid employment. A similar interdependence is also evident in Kwanele's cash remittances to his urban sons; remittances made with the understanding that they would reciprocate once employed. For many households the imperative of educating children is part of a larger strategy to access the economic beachheads of urban labour markets. The expectation is they will support the household, even if these expectations can also be disavowed.<sup>2</sup>

These webs of social reciprocity are not limited to kinship relations; for instance, Nosomsi allowing other villagers and the petty elite teachers of the local school to store items in her gas-powered refrigerator was not simply an act of

For instance, disapprobation is reserved for *itshipa*, urban absconders or non-remitters that reject the obligations of social reciprocity.

magnanimity; it placed her favourably in local circuits of exchange. Similarly, Kwanele's dignified patriarchal deportment, reputation as a hardworking, urban returnee, and the considerable investment in his church-building, cemented his local respectability and place in village networks. These networks of social reciprocity are inexorably nested in larger relationships of kinship, clanship, village, ethnic affiliations and neighbourliness (Du Toit & Neves, 2009a).

Although practices of social exchange are crucial to the survival of impoverished South Africans estranged from employment, and serve to temper poverty and vulnerability, they are not without their costs. They exact resources in a context in which redistributive pressures are considerable and pervasive; for instance Kwanele's frustrated attempts to sell produce amidst requests that he provide it gratis. Practices of social reciprocity also potentially transmit shocks throughout a social network, such as the case of Chuma, a loser in the kinship compact of obligation and entitlement. The ambivalent relational dynamics of altruism are also evident in Kwanele's dutiful resignation at having to support his adult brothers.

The workings of social reciprocity are uneven in their benefits and distribution, and exchanges are mediated by gender, age, wealth and power (Spiegel et al., 1996), which can create net beneficiaries and losers. Those without material resources or labour power typically participate in these exchanges on disadvantageous terms (Du Toit & Neves, 2009a). A familiar fracture is gender, as the burden of household reproduction falls disproportionately on women (for example, Chuma). Resources are therefore not ordered according to the maximisation of household welfare, but reflect the outcome of intra-household power relations (Posel, 2001). Finally, notions of legitimate household membership and entitlement are not simply determined by 'norms of consanguinity, cultural codes of domesticity or normalised narrative of life cycle' (Du Toit & Neves, 2009a), but flow from culturally inscribed contests.

# Rural vulnerability, social differentiation and the labour market

This final section briefly considers how practices of livelihood-making shape social differentiation. South African society and the countryside are marked by widespread poverty and vulnerability, and high levels of social differentiation.

Rural households are shaped by their access to the various domains of livelihood-enabling factors described here: land-based endowments and linkages to urban resources, various informal economic activities, receipt of state cash transfers, and practices of social mutuality and reciprocity. As the extent and quality of access to these four domains vary between households, so too do the patterns of vulnerability and social differentiation that result. Within the case studies discussed, differential access to these four domains is a key factor in shaping the relative vulnerability of each case, and the differences between them.

Social differentiation is both cause and consequence: it reflects and simultaneously perpetuates differences between the poor and non-poor. It frequently reflects larger processes of dispossession, vulnerability and accumulation. Among the African poor and working poor, the four key domains discussed above pattern gradations of vulnerability and social differentiation.

Understanding social differentiation demands attention to the interconnections between the domains that generate it. Du Toit and Neves (2006) developed a four-part matrix of varieties of impoverished households' 'connectedness' between urban and rural (Table 8.1).

Table 8.1: The varieties of household connectedness

1. Rural households with an urban pole	2. Urban households without a rural pole	
3. Rural households without an urban pole	4. Urban households with a rural pole	

Source: Adapted from Du Toit & Neves (2006)

Rural households with an urban pole (quadrant 1) are analogues of the household diagonally across the typology: urban households with a rural pole (quadrant 4). United by widespread migration and reciprocity in spatially extended networks, these are often opposing poles of the same household. In relation to the small sample of households discussed, this variety of household is among the most diversified and (comparatively) least vulnerable, including Kwanele and (especially) Ramena. Households characterised by these linkages are among those most likely to accrue the levels of assets and labour required for productive activities. Unsurprisingly then, while rural households which successfully engage in petty farming are poor, they are statistically not the very poorest (Palmer & Sender, 2006).

Households with urban links are more likely to have the requisite resources and complementary assets such as cattle, correlated with crop production (see Heron, 1991). Cattle ownership is an important signifier of difference in the former homelands, where 1.4 million African households have no livestock besides poultry, and a million households report that they cannot access arable land (Aliber, 2003). Evidence suggests that ownership of cattle has become increasingly unequal (Cousins, 1996), concentrated in the hands of local petty elites and households with formal-sector employment. In this way, urban linkages and resources, either in the present or through previous employment (for example, retirement savings and retrenchment benefits), are significant. Conversely their absence typically coincides with vulnerability and social differentiation. While receipt of a higher-value social grant (SOAG or disability grant) elevates households above the most vulnerable and impoverished, it serves as a very complementary adjunct to urban linkages (for example, Nosomsi).

Quadrant 2 in Table 8.1 is occupied by urban households without a strong rural pole—this is a diverse group, some of whom have successfully made the urban transition and invested (materially and socially) in an urban livelihood project. While they may retain affective links to the countryside, for instance visiting during holidays or for traditional ceremonies, they typically reduce their rural links and commitments. These urbanites also include a potentially far more vulnerable subset of respondents, who have lost their rural linkages or claims to rural entitlements. Although this subset of households is beyond the current purview, Fergusons' (1999) account of decline on the Zambian Copperbelt documents the dislocation and adversity encountered by urbanites in their retreat to rural areas to which they have retained few connections or entitlements.

The final group in this typology (quadrant 3) are rural households without an urban pole (for example, Chuma), and often few links to the labour market. These were comparatively few in number, and represented some of the most vulnerable and marginalised of all households studied. These households were poorly located in circuits of mutual support, and noteworthy for the extent to which their members were socially atomised; they were extremely vulnerable, even by local standards (Du Toit & Neves, 2009a). This variety of household does not feature prominently in networks of social reciprocity and (as suggested by the dramatic changes in Chuma's household composition), teeters close to the prospect of household destitution and dissolution.

Finally, connections to urban opportunities and markets are dynamic, reflecting the developmental cycle of household formation, reproduction and dissolution, but also broader structural changes. Chronic African unemployment, intensified by practices of labour externalisation, has shaped the prospects for formal African employment and material provisioning for retirement. It also coincided with the changing regimes of retirement benefits since the 1980s, in the shift from defined-benefit, private pensions to defined-contribution retirement savings (including provident funds). Labour 'externalisation' and worker resistance to industrial paternalism means that (usually male) retired employees are increasingly unlikely to access a modest life-long pension, but instead access accrued provident fund savings, a sum sometimes equivalent to several multiples of the annual value of the SOAG (Du Toit & Neves, 2006). Many, such as Kwanele, draw these down and exhaust the funds relatively rapidly. Hence changing regimes of private retirement funding have displaced the responsibility and risks for managing the funds onto poorly educated workers, with relatively low levels of financial literacy. These developments are a new reality in the material base of many rural livelihoods, and a legacy likely to dissipate with the loss of formal workplace benefits by larger proportions of low-wage workers. Rural livelihoods are in this way shaped by changing urban gains and regimes of formal-sector employment. Poverty and vulnerability in the context of mass unemployment are not only ongoing processes, they ceaselessly assume novel forms and permutations.

# **Conclusion**

This chapter examines the interconnections between employment, vulnerability and rural livelihoods in contemporary South Africa. It suggests that combinations of land-based entitlements, informal farm and non-farm economic activities, state social assistance and practices of social reciprocity are key to the livelihoods of the African poor in the context of chronic mass unemployment. These constitutive elements are, moreover, conceptualised not as highly compartmentalised, but rather as tightly interconnected. They lead to impoverished rural livelihoods that are not only complex and vulnerable, but also acutely shaped by urban resources and labour-market access.

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## Chapter 9

# Is there a case for a greater support for agriculture?

Anthony Black, Beatrice Conradie and Heinrich Gerwel

#### Introduction

A major disappointment of South Africa's democratic transition is the relative lack of progress with rural development. Poverty remains to a significant extent, a rural phenomenon and in spite of rapid urban migration, the absolute numbers of the poor in rural areas have increased. Agriculture plays a key role here. The sector is labour intensive with a high demand for unskilled and semiskilled workers. It also has strong linkages to non-farm, rural economic activity. However, formal, large-scale agriculture has shed employment at a rapid rate and small-scale agriculture's modest contribution has declined even further. The key feature of agricultural policy over the last three decades has been a decline in state support to the sector. New programmes to support land reform and small-scale agriculture have met with very limited success. The result has been that market pressures on commercial farmers are driving consolidation of land holdings and the shedding of employment in formerly white, commercial farming areas. At the same time, rural development, especially in the former Bantustans, has been stymied by limited capacity and resources.

Given the policy objective of employment-intensive growth, key questions need to be asked about government policy and the role of agriculture. The first is, what impact has policy had on this employment-intensive sector? And following on from this, to what extent should state investment prioritise rural development and agriculture, given the pressing demands of the urban poor, as well as the need to upgrade urban infrastructure to support growth?

We argue that agricultural development is employment intensive and potentially pro-poor but that the sector has been subject to a drastic decline in support, which has in no way been compensated for by growing expenditure aimed at uplifting agriculture, especially small-scale agriculture, and facilitating land reform. We start with a brief review of the evidence on agricultural growth and pro-poor development and its relevance in the South African context. We then provide a critical assessment of policy support for agriculture over the past few

decades and illustrate the rapid decline in support for the sector. As development proceeds, the share of agriculture in the economy can be expected to decline, but it is argued that this decline has been accelerated by declining support.

## The importance of agriculture to employment-intensive growth

In most middle-income, developing countries, agriculture generally accounts for a small and declining share of output (World Bank, 2008). But its share of employment is frequently three or more times larger than its share of output, and its importance to the welfare of low-income groups is further heightened by the fact that poverty is disproportionately a rural phenomenon.

Valdes and Foster (2010) found that agriculture's contribution to raising incomes of the poorest groups is over two-and-a-half times that of other sectors. The multipliers in agriculture are also extremely high because of the association with labour-intensive, non-farm employment. Indeed, in the developing world, much of rural income generation takes the form of non-farm employment. According to Haggblade et al. (2010), it accounts for as much as 30–45%, and the share is rising. There is also evidence that urban consumption growth leads to increased inequality in urban areas, but growth in rural areas leads to improved distribution in the urban sector (Ravallion & Dutt, cited in Mellor, 1999). The reason, of course, is that rising rural incomes reduce the pressure to migrate and, therefore, the number of people seeking jobs in the urban sector. Kakwani and Pernia (2000: 4) refer to policies which tend to constrain pro-poor growth, including '... big city-oriented industrial location policies and public infrastructure spending biased towards urban areas and against rural areas'.

This nation-wide, pro-poor impact is not restricted to low-income countries. For instance, Anriquez and Stamoulis (2007) refer to empirical evidence suggesting that agricultural growth is pro-poor in both low-income countries like India, and middle-income countries such as South Africa, via the effect of agricultural growth on unskilled labour markets. But while there is significant evidence in favour of the argument that agricultural expansion is much more pro-poor than manufacturing growth, this does depend on the initial distribution of assets in agriculture—there are much less favourable outcomes where land is unequally distributed, as is the case in South Africa (Mellor, 1999). In this case, a large share of rising incomes in the sector would accrue to big landowners. There is also significant evidence that public-sector support is of particular importance

<sup>1</sup> See also Ligon and Sadoulet (2007).

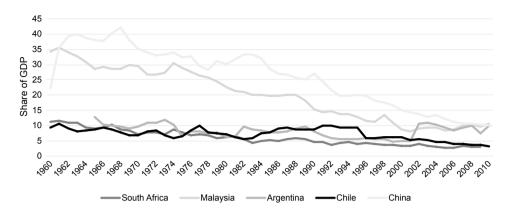
This could include small-scale agricultural processing or the provision of basic infrastructure and other goods and services to agricultural communities.

to agricultural development (Chang, 2009; Mellor, 1999). This includes rural infrastructure, marketing, extension services and research and development (R&D), and is particularly important for small farmers. At the same time, many argue that agriculture in developing countries has suffered from inadequate support. Lipton (1977) coined the term 'urban bias' to explain the political economy of low levels of support to agriculture, especially small-scale agriculture. Diao et al. (2010: 1376) cite numerous studies suggesting that agriculture's weak performance results from policies which are biased against the agricultural sector (see Fan et al., 2004; Schiff & Valdéz, 1992; Timmer, 2005). There is also considerable evidence that the support that went to agriculture disproportionally favoured large farmers (Birner & Resnick, 2010).

But while the importance of agriculture and rural development more generally are well recognised in pro-poor and pro-employment strategies, it is less clear how this translates into the South African context. Firstly, in terms of economic output and employment, agriculture is no longer of great importance in South Africa. Secondly, the vast bulk of agricultural production and formal employment is accounted for by large-scale, commercial agriculture. On equity grounds, it is difficult to make a case for stronger support, even though large sections of the sector are in financial difficulties, partly due to the reduction in previously lavish assistance levels. Thirdly, while poverty is concentrated in rural areas, particularly the former reserves, the historical underdevelopment of these areas limits their existing and potential employment capacity in the absence of substantial investment; and the provision of such investment is hampered by the weakness of rural administrative structures. These three issues are briefly considered below.

Agriculture's contribution to the South African economy has been declining over a long period and the sector currently accounts for less than 3% of GDP. The decline in agriculture as a share of GDP is, of course, a global phenomenon. As Figure 9.1 illustrates, the transition out of agriculture in Argentina, Chile and South Africa was already substantially in place by the 1960s, although in the case of Chile and South Africa, agriculture's share of GDP has continued to decline steadily.

However, the agricultural sector remains critical to a discussion of employment-intensive growth because it still employs around 10% of the formal sector workforce and is highly labour intensive. Pollin et al. (2006), using South African data, make the additional point that it also has very strong employment multipliers (Table 9.1). The employment multiplier takes account of the knock-on effects in other sectors and is 53% higher for agriculture than the next highest sector (apparel and textiles). Both upstream and downstream linkages are stronger for agriculture than for any other major sector (Pollin et al., 2006: 67).



**Figure 9.1:** Agriculture's share of GDP, selected countries 1960–2010 *Source*: World Bank (2013)

Table 9.1: Employment intensity by economic sector in South Africa

(A) Labour intensity by industry Employment levels in industry per R1 million in output		<b>(B) Employment multipliers by industry</b> Total employment created in South Africa per R1 million in industry sales		
Agriculture	18.6	Agriculture	27.9	
Apparel and textiles	9.0	Apparel and textiles	18.2	
Social and community services	5.6	Agro-processing	18.0	
Mining	4.0	Wood, paper and furniture	15.3	
Wood, paper and furniture	4.0	Social and community services	14.9	
Capital goods	3.9	Mining	13.0	
Motor vehicles	2.8	Accommodation and travel	11.7	
Accommodation and travel	2.2	Capital goods	11.3	
Agro-processing	2.3	Chemicals	9.5	
Chemicals	1.5	Motor vehicles	8.6	

Source: Pollin et al. (2006: 63)

#### Note:

Panel A measures the employment impact of output within the sector itself. Panel B includes the total employment impact (including downstream and upstream linkages) when an industry produces R1 million worth of goods and services.

Moreover, far larger numbers are engaged in small-scale agriculture or draw some income from agriculture. So the strong employment effects noted earlier are understated because the data measure formal-sector employment only and are therefore based on commercial, mainly large-scale, agriculture. Furthermore, the employment effects and linkages are likely to be greater with small-scale agriculture, which relies less on mechanisation.

In spite of rapid urbanisation and growing ranks of marginalised communities in the urban peripheries, poverty remains concentrated in the countryside, and the proportion of the population resident in rural areas is strikingly high when compared to the share of employment in rural areas (Makgetla, 2010). In large part this reflects a peasant and smallholder-sector economy that is extremely weak by comparison with comparator countries. In turn, this has negative ramifications for off-farm employment and the rural economy in general.

It would appear self-evident, given the concentration of poverty and underemployment in rural areas, that agricultural development would reduce poverty. But as we noted above, the international evidence is that this impact is much weaker when the initial distribution of assets, mainly land, is very unequal. Commercial (white) agriculture pre-1994 received generous support. This is no longer the case and the political influence of commercial farmers is now much weaker. Channelling support to the commercial sector would have a positive, albeit limited, impact on rural poverty. The effect would be felt mainly through raising employment, with a smaller impact on wages, given the slackness in the labour market in a context of high unemployment. It is, however, still highly probable that this would be significantly more pro-poor than supporting urban and industrial development, which would tend, first, to benefit enterprises operating in these sectors and, second, a smaller group of better-paid workers. If state support were to be channelled effectively to supporting viable land reform and small-scale agriculture, this would be much more effective as a pro-poor strategy. Agriculture is exceptionally dependent on the provision of infrastructure, extension services, and appropriate financing and marketing arrangements. In the case of small-scale agriculture, government's role in providing these inputs is even more critical because small-scale farmers are less able to provide such inputs for themselves. Increased public resources have been deployed to do just this but, as is demonstrated later, these have been insufficient and their effectiveness has been lessened by weak administrative capacity.

## The evolution of agricultural support policy

Fundamental to the understanding of South Africa's agricultural dilemma is the set of land and agricultural policies that led to the emergence of large-scale, white-owned, commercial agriculture alongside a dislocated, black, small-scale farming

sector earning extremely low incomes. Colonial policies of land expropriation were formalised in the Land Act of 1913, which allocated only 13% of South Africa's land surface to blacks. The concomitant destruction of the emerging black peasantry has been extensively documented by Bundy (1972) and others. Under apartheid, there was further dispossession and the relocation of millions to the Bantustans, which comprised the poorest regions of the country.

The white-owned farming areas were organised on a large-scale, capitalintensive basis and this sector received strong support over a long period. From 1948 to 1980, the quantity of agricultural output from commercial farms increased by 3.9% per annum (Feinstein, 2005: 194). This was the result of a growing area under cultivation, and especially from the 1960s, the growing use of inputs such as high-yielding seeds, chemical fertilisers and pesticides, as well as improved farming methods. There was also a rapid increase in mechanisation. Easy access to Land Bank finance at low interest rates and favourable tax provisions encouraged the substitution of capital for labour, in spite of very low wages (Feinstein, 2005). The major form of support to white commercial agriculture was the use of marketing boards and other measures to stabilise prices, together with the restriction of imports. Drought and flood relief, fuel rebates, fertiliser subsidies, concessionary railway transport, and support with irrigation and soil conservation, were other elements of the comprehensive package of measures supporting commercial agriculture. In the late 1960s, one estimate is that state aid to white farmers accounted for about 20% of their net farm income.<sup>3</sup>

In the reserves there was a very different picture. Resettlement policies and forced removals increased overcrowding. Subsistence farmers lacked land, resources and infrastructure; output declined and there were widening disparities between white and black agriculture. Agricultural income, as a share of household income, declined to very low levels as these areas became ever more dependent on remittances by migrant workers and, later, social grants (Daniels et al., 2013).

Although most countries are characterised by uneven land holdings and policies which support large-scale agriculture to a greater extent than small-scale farming, only in a few other instances was the unevenness in landholding and support so apparent. The result was the emergence of (almost exclusively white-owned) large-scale, commercial agriculture, alongside a dislocated black, rural economy of small plots and overcrowded land, which made only a minor contribution to national marketed output.

The following discussion focuses on agricultural support, but it is important to note two further sets of pressures impacting on commercial agriculture. Legislation designed to improve the conditions of farm workers, such as the

<sup>3</sup> Commission of Inquiry into Agriculture (1972), cited in Feinstein (2005: 198).

Extension of Security of Tenure Act (1997), the Basic Conditions of Employment Act (1997) and the introduction of statutory minimum wages, has raised costs to farmers (Conradie, 2005). Barrientos and Kritzinger (2004) argue that farmers also face pressures on the demand side, with the globalisation of agricultural markets leading to reduced commodity prices and increased costs, the latter being the result of increased regulation and standards, driven by large domestic and international supermarket chains, as well as by governments, for instance the European Union.

### The liberalisation of agriculture

The commercial agricultural sector has been through a major process of reform, which started in the 1980s and gathered pace during the 1990s. The deregulation of marketing and the liberalisation of pervasive price controls began in the 1980s and the favourable tax treatment of agriculture was partly removed. In the 1990s, there were further reforms to marketing policy in the form of the Marketing of Agricultural Products Act of 1996, which brought the sector much more in line with international prices (Tregurtha et al., 2010). Quotas, specific duties and price controls were phased down and, for the most part, abolished by 1995. The net effect is that South African agriculture went from being highly protected prior to 1994 to levels of support that, by 2000, were among the lowest in the world (Vink & Hall, 2010).

Producer support as a share of gross farm receipts has declined from approximately 15% in 1995 to 2% in 2010 (OECD, 2011: 29). This decline has been much steeper than the average decline in the Organisation for Economic Co-operation and Development (OECD) support levels, which, in any event, remain very high at approximately 17% of gross farm receipts. Producer support levels in South Africa are now even lower than in Brazil, one of the world's largest agricultural exporters, which has in fact increased support from negative levels over the period. In China, producer support increased from 6% to 17% over the same period.

Using the measure of total support estimates (TSEs),<sup>4</sup> which include general services expenditure, a similar picture of sharply declining support in South Africa is apparent. TSEs as a percentage of GDP for OECD countries and major developing-country, agricultural producers are indicated in Table 9.2. With the exception of Australia and New Zealand, South Africa had the lowest support,

<sup>4</sup> The total support estimate is a measure of the total value of all transfers from consumers to producers resulting from agricultural policies. The estimate includes price support, subsidies and budgetary transfers, for instance, via support for research and development, extension services and infrastructure.

with levels far lower than in major emerging markets such as Turkey, Mexico, China, Ukraine and Russia. It is important to note that South Africa's expenditure on land reform, the aim of which is primarily redistributive, is included in these estimates of support. This effectively further reduces government support to agriculture when comparing it internationally.

Edwards et al. (2008), analysing nominal rates of assistance to different sectors, found that agriculture receives minimal policy support and that the remaining distortions in the economy were located largely in the non-agricultural, tradable sector, which by raising prices has the effect of furthering the bias against agriculture. Herault and Thurlow (2009) similarly concluded that South Africa's own policies are biased against agriculture because tariff protection is significantly higher for non-agricultural commodities than for agricultural products. Budget outlays have been reduced and there has also been a significant shift in budget support from the commercial-farm sector to the small-farm sector (OECD, 2006).

**Table 9.2:** Total support estimates by country, 1995–1997 and 2008–2010 (% of GDP)

Country	1995–1997	2008–2010
South Africa	1.0	0.3
China	1.5	2.3
Brazil	0.2	0.5
Mexico	0.8	0.9
Russia	2.6	1.6
Turkey	4.4	3.2
Korea	4.9	2.2
New Zealand	0.3	0.2
European Union	1.5	0.8

Source: OECD, PSE/CSE Database (2011)

#### Infrastructure and extension services

Agriculture depends heavily on the provision of public goods such as feeder roads and other means of transport, electricity and irrigation. Infrastructure support in formerly white, commercial areas has declined sharply over the past three decades. One indication of this is the decline in subsidies on conservation works from an average of R6.4 billion per annum in the 1980s to R1.7 billion in the 1990s and R176 million in the 2000s (Liebenberg, 2012: 140). The latest Agriculture Census (2006) does not report on the area under irrigation but, according to Sender (2012), there has not been major infrastructure development for irrigation since the 1980s. The share of agricultural produce being transported by rail has also declined in line with the closure of many branch lines in rural areas.

In the former reserves, severe backlogs remain and, in some cases, have got worse. Programmes such as the Community-based Public Works Programme, Consolidated Municipal Infrastructure Programme and Poverty Relief and Infrastructure Investment Fund have had limited effect (Machethe, 2004). In addition, irrigation schemes have been poorly maintained.

Extension services have historically taken completely different forms in commercial and former homeland areas. In the former, extension services were undertaken by relatively small numbers of well-qualified staff who provided a focused service to a relatively homogenous clientele. In the latter, large numbers of less qualified staff were required to serve a comparatively large and diverse client base, which included subsistence, emerging and commercial black farmers. The public extension service provided to white farmers was considered highly successful until the mid-1970s, when commercial farmers found that the more specialised advice they needed could be better provided by the private sector. There has also been a loss of skilled extension officers from the public extension service to private-sector agents such as banks, co-operatives and input suppliers (Düvel, 2004).

Three agencies were involved in setting and implementing agricultural policy in the former homelands: homeland government departments, the advisory services branch of the Department of Bantu Administration and Development, and the Bantu Investment Corporation. Each of these had a different perspective. Homeland governments set out to provide basic extension services. Bantu Administration and Development focused on the implementation of 'betterment schemes', while the Bantu Investment Corporation favoured large-scale projects (Butler et al., 1978, cited in Phulisani Solutions, 2008).

Since 1994, agricultural extension in South Africa has undergone radical change from its abovementioned dualistic roots, which targeted commercial and small-scale agriculture separately, to a single amalgamated service that focuses nearly exclusively on previously disadvantaged small-scale farmers (Dövel, 2004). With the establishment of a new national Department of Agriculture, extension services were subsumed into the nine new provincial departments, which also absorbed the former homeland administrations. Provincial departments of agriculture became involved in farmer-support activities, including extension services in early 2001. However, agricultural extension capacity varies greatly over provinces, due to the legacy of the abovementioned dualistic extension system (Jacobs, 2003: 18). Although provinces which incorporated former homeland departments of agriculture, such as Limpopo and the Eastern Cape, have larger numbers of extension officers, there are vast differences in their quality. Dövel (2004: 2) states that, associated with this policy of decentralisation, was a newfound autonomy regarding management at provincial level, '... but no

improvement in the effectiveness and efficiency of extension delivery; in fact indications are that the impact decreased significantly'.

According to Liebenberg (2012), government expenditure on extension in 2010 was 0.5% of agricultural GDP, a substantial increase on 0.24% in 2000 but a sharp decline on the 0.81% of agricultural GDP spent in 1990. While direct government spending on extension services has recently shown an increasing trend, the effectiveness of this spending has been questioned by a number of analysts.<sup>5</sup> In a report commissioned by the Department of Agriculture, Düvel (2003) recommends a participatory programmed extension approach and given the low levels of qualifications and competence of existing extension officers, argues for the implementation of an extensive structured programme to upgrade this capacity.

Hall and Aliber (2010) further argue that even though real national spending on extension services to small farmers nearly trebled between 1996 and 2009, only a small percentage of small-scale, black farmers benefit. This is in spite of the fact that extension absorbs 58% of provincial agricultural expenditure. Further, it is stated that the

... current model of funding, which focuses on one-on-one assistance at 'project' level, has limited impact, cannot feasibly be scaled up, and does not lend itself towards indivisible public goods and regulation, which are effective ways of benefiting large numbers of producers, and which are among the key forms of support used in the past to develop the white farming sector.

(Hall & Aliber, 2010: 17)

## Agricultural research and development

Research is another public good which is crucial to agricultural development and can play a significant role (Correa & Schmidt, 2014). According to Vink and Van Rooyen (2009: 28), agricultural R&D investment as a percentage of agricultural GDP increased from 2.6% to 3.0% in the period 1993–2000—a level well above international norms of 0.5% for developing countries and 2.4% for developed countries. However, in real terms state funding of agricultural research has declined in recent years, and the capacity to deliver efficient research output has been hampered by the loss of large numbers of staff (Liebenberg, 2012).

The institutions responsible for R&D have been in a continual state of flux. In the 1970s, the Department of Agriculture was operated in two divisions, the

<sup>5</sup> See, for example, Hall and Aliber (2010), Phuhlisani Solutions (2009) and Düvel (2004).

Department of Agricultural Economics and Marketing and the Department of Agricultural Research and Agricultural Field Services. The two departments of agriculture were merged in 1980 to form the Department of Agricultural Development (Liebenberg, 2012). During this period the overall national research funding and direction was centrally determined, while being strongly influenced by regional development plans.

From the early 1990s, agricultural research activities were transferred to the Agricultural Research Council (ARC), after the promulgation of the Agricultural Research Act of 1992. Subsequent to 1994, the funding of agricultural R&D came from two sources—nationally to the ARC through the Department of Agriculture, and provincially by respective departments being allocated a portion of the former national budget.<sup>6</sup> A major review of the science councils in 1997 was highly critical of the ARC on the grounds of poor performance and its limited involvement in black agriculture (Liebenberg, 2012). This was followed by a series of annual budget cuts.

Currently R&D funding comes from a combination of four public and private sources. From national level, the budget is allocated mainly by the Department of Science and Technology, as well as commodity trusts and levies from producer organisations and private-sector enterprises. If South Africa is to improve on its productivity outcomes in agriculture, this crucial component of public-resource allocation needs to be managed and implemented much more efficiently.

## Agricultural finance

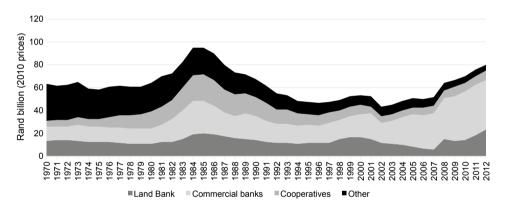
The Land Bank, established in 1912, has historically been central in providing finance to commercial agriculture. Figure 9.2 shows that commercial farmer debt increased in real terms (constant 2010 rands) from R64 billion in 1970 to R94 billion in 1985, followed by a sharp decline. Total farming debt has been steadily increasing since the mid-1990s. With regard to commercial agriculture, the role of the Land Bank has declined and, by 2012, commercial banks accounted for about 55% of commercial farm debt compared to less than 20% in 1970 (Abstracts of Agricultural Statistics, 2005, 2013).

While the commercial farming sector has been relatively well catered for, the position of smallholders, mainly in the former reserves, has been much more problematic, although the data on the availability of credit and debt levels among small-scale farmers are minimal. A number of the parastatals that were established in the former homelands have collapsed and the Land Bank was tasked with supplying services. By 2002 there had been a rapid increase in advances, with

According to Liebenberg, provincial funding for agricultural research declined and even ceased in some cases, such as the Eastern Cape.

R2 billion being advanced to 15 000 black farmers and assistance provided to 130 000 micro-enterprises (Machethe, 2004).

The Agricultural Credit Board (ACB) also played an important role in providing credit for farmers that did not qualify for loans from the Land Bank. In 1996, on the recommendation of the Strauss Commission on rural finance, the ACB was disbanded and replaced by the Micro-agricultural Finance Initiative of South Africa (MAFISA), the purpose of which was to increase the finance available for small-scale farmer development. Other sources of funding have included grants from the parastatal development finance institutions, credit from commercial banks, as well as funds from other agencies such as the National Development Agency, the Industrial Development Corporation, the National Housing Finance Corporation and Khula Investments, which finances the Land Reform Credit Facility. There is some evidence to show that farmers who borrowed from financial institutions achieved much better yields and higher incomes than those that did not (OECD, 2006: 55).



**Figure 9.2:** Total real farm debt (1970–2012) *Source*: Abstract of Agricultural Statistics (2005, 2013)

#### Land reform

While there have been significant efforts to reform land ownership since the advent of democracy in 1994, the amount of land being transferred has not come close to meeting targets. By 1999, only 1% of commercial agricultural land had been transferred (Vink & Hall, 2010: 77) and by 2007, this had risen but was still below 4% (Kirsten at al., 2007).

Small- and medium-scale black farmers who are commercialising, including those who were beneficiaries of land reform, have been important recipients of government support (Hall & Aliber, 2009). Government has invested increasingly in this group through programmes such as Land Redistribution for Agricultural

Development (LRAD), the Comprehensive Agricultural Support Programme (CASP) and AgriBEE. According to Dzivakwi et al. (2011), farmer support rose steadily from 2001 until 2004, after which it increased very rapidly. However, this support has not been effective in providing these new farmers with working capital to run their operations effectively and, in many cases, output has fallen (De Klerk et al., 2013).

With inappropriate and sometimes inadequate support to emerging black farmers — irrespective of the fact that CASP receives the lion's share of provincial agricultural budgets (Hall & Aliber, 2010) — it is not surprising that land-reform achievements still fall short of their ambitious targets. Direct government investment in land reform also seems to be waning and funding declined in real terms from 2007/08 to 2010/11 (Hall, 2011). The lack of clear direction in the Department of Land Reform and Rural Development's *Green Paper on Rural Development and Agrarian Transformation* does not bode well for the process to make a meaningful contribution towards poverty reduction in the near future.<sup>7</sup>

## The impact of policy

## Trade and production

The OECD's (2006: 4) *Agriculture Policy Review* argues that South Africa's wideranging reforms have created a good base for development. It is certainly true that South African agriculture is increasingly integrated with world markets; for instance it is now exporting about one-third of its agricultural production. However, South African agricultural exports as a share of world exports have stagnated in sharp contrast to middle-income developing countries such as Brazil, Argentina, Mexico, China and Thailand, which have significantly increased their share (Sender, 2012: 105).

Agricultural imports as a share of agricultural output increased from 6.8% in 1975–1979 to 13.6% in 1990–1994 and 26.2% in 2006–2008 (Sandrey at al., 2011: 15). Imports in this latter period almost reached parity with exports while in 1975–1979, they were only 20% of exports. Growing imports have been a contributory factor to stagnating gross farm income from the late 1980s until the early 2000s, when a depreciating currency led to growing incomes.

Over the period as a whole there has been a decline in investment both in terms of fixed improvements and machinery and equipment. Gross capital

See, for example, the joint submission by researchers at the Institute for Poverty, Land and Agrarian Studies (PLAAS) in response to the *Green Paper on Land Reform* released by the Minister for Rural Development and Land Reform in August 2011 (PLAAS, 2011).

formation figures show declining investment in land and fixed improvements, as well as in machinery and implements. The real value of capital assets on commercial farms declined nearly every year from 1980 until the early 2000s (Sandrey et al., 2011: 12). At the same time, expenditure on intermediate goods and services grew quite rapidly, indicating an increase in inputs as agriculture modernised. An indication of the pressures on commercial agriculture is the rapid consolidation of farmland into fewer, larger units, accompanied by growing corporate ownership. The number of farms, which peaked in 1953 at 120 000, had declined to approximately 40 000 by 2007 (Liebenberg, 2013: 29)

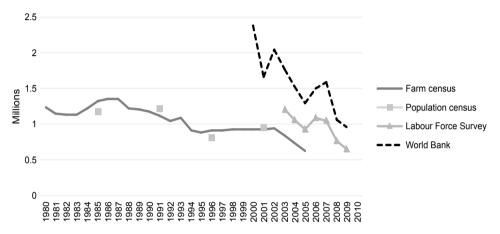
Agricultural output in the former reserves is limited and has declined. Drawing on three waves of the National Income Dynamics Survey data, as well as QLFS data, Daniels et al. (2013) conclude that only 4% of households derive their principal form of income from agriculture and that the importance of agriculture has declined over time. There is also evidence, particularly in the Eastern Cape, that in spite of overcrowding, increasing amounts of land are underutilised. Wilson (2009) cites a number of explanations that have been put forward to explain this, including out-migration by able-bodied, younger people, especially those with greater access to land in the rural areas, the rising cost of farm inputs, an increase in rural crime, the extension of social grants and changing social attitudes.

### **Employment**

In spite of agriculture's small and declining share of output, it remains an important source of employment because the sector is so labour intensive. Estimates of employment vary, depending on the sources and definitions used, but it is clear that employment has fallen sharply (Figure 9.3). According to the Labour Force Survey, total employment in agriculture in 2010 was 651 000. Liebenberg (2012) includes family labour and owners, and makes upward adjustments regarding seasonal workers so his numbers are much higher (832 348 people employed on South African farms in 2010, excluding domestic workers). But Liebenberg's data also show declining employment, as well as a significant shift to the use of casual labour over the last two decades (Table 9.3).

Estimates for small-scale agriculture are even more variable. In 2000, according to the OECD (2006: 51), there were approximately 240 000 small-scale farmers providing a livelihood for over a million family members, together with occasional employment of a further 500 000. An additional three million people lived in communal farming households, receiving some income from subsistence production. The OECD (2006: 51) cites more recent evidence from the PROVIDE project that, according to a broad definition, agricultural households numbered as many as 2.7 million, supporting 14 million people. On a narrower definition,

agricultural households numbered 0.8 million, supporting 3.3 million people. Hall and Aliber (2010) estimate that there are 200 000 commercially oriented, smallholder farmers and 2.5 million households involved in agriculture, primarily for subsistence purposes. Daniels et al. (2013) find that agricultural employment in the former Bantustans is generally extremely low, averaging 6% in the Quarterly Labour Force Survey data and 4% in the National Income Dynamics Survey (NIDS) data. In these areas, employment appears to be dominated by wholesale and retail trade and private household employment.



**Figure 9.3:** Agricultural employment according to various definitions and sources *Sources*: DAFF (2010); World Bank (2013)

#### Note:

Farm census figures include part-time workers and are for employment in commercial agriculture only (OECD, 2006: 40). World Bank data include estimates of employment in small-scale agriculture.

Table 9.3: Numbers	of farm workers	1960e to 2000e	Idecade average	UUUe)
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	1960s	1970s	1980s	1990s	2000s
Family	57	40	24	17	11
Regular	806	704	677	603	411
Casual	716	584	485	349	417
Domestic	123	94	61	20	0
Owners	86	64	54	46	37
Total (excl. domestic)	1 665	1 3 9 2	1 241	1014	896

Source: Adapted from Liebenberg (2012: 112) based on DOS (1971–1980), CSS (1982–1998) and Stats SA (1999–2011)

It is, however, clear that agriculture has been shedding labour at a rapid rate. If labour tenants are included together with farm workers, according to Wegerif et al. (2005),8 the numbers declined by almost two million from 1984 to 1994. The causes of this are manifold. In part, it is a result of the normal trend for agriculture to decline in importance. This trend was given impetus by the liberalisation of the sector and the reduction of subsidies. Mechanisation also played a role. Prior to 1994, commercial agriculture was heavily subsidised. Low interest rates and tax concessions for machinery contributed to the overcapitalisation of agriculture, in spite of the existence of large supplies of unskilled labour (OECD, 2006: 51). Subsectoral shifts in output, including the conversion of farms from agriculture to game farming, have also played a role. There has also been a shift to much greater use of skilled labour. For instance, the number of professional and technical staff employed in agriculture increased by 150% from 1970 to 1995. Farm workers were also evicted from commercial farms as a pre-emptive response to legislative reforms that were designed to provide them with greater security on the farms on which they were employed.

#### Conclusion

Agriculture's share of GDP is low, both in absolute terms and in comparison to other middle-income countries. The sector is growing slowly and is declining in relative importance. Its share of employment is also low and has declined sharply since 1990. The decline in the share of employment has been more precipitous than in comparator countries between 1990 and 2008 (OECD, 2011). This is particularly striking if one takes account of the fact that South Africa experienced rising unemployment in the economy as a whole over this period. Of course, how to interpret this is open to question. It may simply represent the inevitable processes of economic development spurred on by the liberalisation of the sector and the elimination of welfare-reducing 'distortions'.

We have argued that, in spite of its small and declining economic size, agriculture has an important role to play in an employment-intensive growth strategy in terms of generating unskilled and semi-skilled jobs, and self-employment for small-scale farmers. The sector, especially small-scale agriculture, is labour intensive and local linkages generated can be critical in creating non-farm employment in rural areas.

However, agriculture is South Africa's Cinderella sector. It receives limited attention and limited budget. While there has been a significant real increase in state expenditure on small-scale agriculture since 1996, this has been far outweighed by

<sup>8</sup> Cited in Makgetla (2010).

the steep decline in other (previously lavish) forms of support, especially producer support. While commercial agricultural output has grown at a moderate pace since 1994, employment has fallen sharply. The position in the former reserves has been worse. Output, always small, has stagnated or declined. Budgetary allocations to address the problem of chromic underinvestment in small-scale agriculture have increased but remain far too limited. Implementation of policy initiatives and budget support in areas such as infrastructure, extension services and R&D for small-scale farmers has been poor. This is particularly problematic given the importance of these public goods, especially for small-scale agricultural development.

This notion of state support for agriculture and rural development offering possibly high economic and social returns is by no means generally accepted in the sphere of development ideology and policy, let alone actual implementation. The political clamour for service delivery and associated infrastructure is also much louder in urban and peri-urban areas, and the influence of urban-based constituencies is reflected in the limited budget allocated to agriculture as well as the poor quality and neglect of agricultural-support institutions. Although there is significant government rhetoric in support of agriculture and rural development, the de facto weight of policy favours more urban-based development. The fact that 'not everyone will find jobs at Coega and in industry' was pointed out by the former Minister of National Planning, Trevor Manuel, who argued that an Eastern Cape programme to develop land and agriculture would deliver more employment than heavy industry.9 Indeed, the gleaming new, but underutilised, industrial development zone and port facility at Coega in the Eastern Cape provides a sobering contrast to the lack of progress in agricultural and rural development in a province with the highest level of poverty and unemployment in the country.

It can be argued that in South Africa since 1990, developments in agriculture, and rural development more generally, have contributed to rather than ameliorated South Africa's chronic unemployment problem in three ways. Firstly, there have been huge employment losses in formal agriculture. Secondly, the potential impact in terms of income generation and livelihood support in land reform has not been realised because of the slow pace of land redistribution, but also because of its limited effectiveness. Thirdly, while there has been some improvement in infrastructure provision in the former reserves, the reconstruction of these areas is far from being achieved. This chapter has sought to elevate the issue of agriculture in national development policy. With greater and more focused support, this sector could play an important role in addressing not only rural poverty, but also South Africa's unemployment problem.

<sup>9</sup> See 'Farms key to the creation of jobs', *The Herald*, 29 May 2012.

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Part IV
Policies for
employment





## Chapter 10

# International experience in assisting youth to find jobs and lessons for South Africa

Cecil Mlatsheni

#### Introduction

High youth unemployment in South Africa is not a new phenomenon. Many of the current troubling issues with regard to unemployment were evident prior to the mid-1990s. One example of such issues is the poor degree to which new labour-market entrants are absorbed into employment. The labour-absorptive capacity of the South African economy has dropped markedly since the 1960s (Standing et al., 1996). Similar results were reported by Loots (1996) and Ligthelm and Kritzinger-Van Niekerk (1990). Another longstanding troublesome issue is that of unemployment duration. In the mid-1990s, findings were that nearly twothirds of the unemployed had never worked for pay (Standing et al., 1996). This feature of the unemployed has persisted. Furthermore, a greater proportion of youth than adults is unemployed. Labour-force data reveal that 53% of individuals who are 15-30 years old are unemployed, compared to 25% of those who are 31-65 years old. Youth unemployment of this magnitude requires considered attention because prolonged unemployment of youth is associated with negative effects on well-being. The stress of not finding employment may give rise to demotivation and depression which, in turn, further hamper effective labourmarket participation.

The overarching requirement for employment creation on the scale required to significantly reduce youth unemployment in South Africa, is rapid economic growth. This means that the macroeconomic environment has to be considered alongside microeconomic policies directed at reducing youth unemployment. The view taken in this chapter is that job creation is not the sole responsibility of government. Instead, job creation should be led by the private sector because government cannot create a significant amount of sustainable employment. The role of government should be to facilitate employment creation through a range of policies, which will be discussed later. The fact that economic growth does not always automatically translate into employment growth makes the strategic role of government even more important. Industries, such as the automotive industry

in South Africa, may experience growth that is capital intensive, thus not creating substantial employment. A key role of government is to think more broadly, on a macroeconomic level, about facilitating employment-intensive growth, while considering microeconomic interventions to ensure that the unemployed youth remain connected to the labour market.

The following discussion focuses on the lessons that can be learnt from active labour-market policies implemented elsewhere. However, this is placed in context through a discussion of the importance of macroeconomic considerations, which cannot be ignored when pursuing the goal of employment-intensive growth. The discussion also points out that the quest to reduce unemployment—and youth unemployment specifically—should be seen as a partnership between government, employers and workers, rather than the sole responsibility of government.

## The macroeconomic role of government in facilitating employment creation

Economic growth is the minimum requirement for significant employment creation. This is evident from the two million jobs created in the South African economy between 2003 and 2008, when economic growth averaged 4.9% (National Treasury, 2011). In the absence of sufficient economic growth, microeconomic interventions such as active labour-market policies will not create a large number of jobs. At best, active labour-market policies may improve job matching, help counter underinvestment in training, and mitigate the effects of recession by providing temporary employment or creating incentives for employers to hire. Economic growth, however, depends on increased economic activity and this in turn depends on a conducive macroeconomic environment. Sustainable job creation is led by the private sector (ILO, 2013). Private-sector-led job creation requires macroeconomic stability, an enabling business environment, human capital and the rule of law (World Bank, 2012). In an econometric study of the macroeconomic determinants of youth unemployment, Matsumoto et al. (2012) find that the higher the rate of investment, the lower the rate of youth unemployment in both industrialised and low- and middle-income economies.

There is a clear role for government to create a conducive macroeconomic environment. However, a review by the International Labour Organization (ILO) of policy frameworks of a number of countries revealed a general underutilisation of policy interventions that aim to increase labour demand (ILO, 2013). The review also reported that it is uncommon to find a comprehensive set of policy priorities, targets and outcomes for youth. In creating an environment that supports job creation, macroeconomic fundamentals alone are not sufficient though. There is also a need for labour policies that encourage employer–employee relations

which favour employment creation. However, there is a fine balance that must be struck between one extreme, which is misguided intervention that clogs the creation of employment, and the other, which is a lack of voice and social protection of workers. Although discussion of labour-regulation policies is beyond the scope of this chapter, it is worth noting that a poorly-regulated labour market hampers formal-sector job creation. For example, economic growth in India has been relatively good, but this has not translated into formal-sector employment growth.

Another way in which to contextualise the seriousness of the unemployment issue in South Africa is to compare the employment rate, defined as the percentage of the working-age population with a job, which at 41% is far below global standards. In comparison, the employment rate in China is about 70%; in comparable developing countries, such as Brazil and Indonesia, it is approximately 65%, and approximately 60% in developed countries. The global norm is around 60%, and to achieve this figure there would have to be a 50% rise in the number of jobs in South Africa. Estimates are that the South African economy would have to grow at an average rate of 7% for about 15 years to reach the average global employment rate (CDE, 2013).

It is a difficult goal to achieve given the general trend of increasing mechanisation of production and the consequent fall in the labour intensity of production. The notion that South Africa should move progressively up the value chain and produce export-oriented goods, using skilled labour and advanced technology, therefore seems unrealistic. A more viable route is to find and fill niches in the global supply chain for goods produced with more basic technology, and utilising relatively low-skilled workers. In addition, the poor productivity of unskilled and inexperienced young workers has to be brought into alignment with the cost of employing them. A longer-term approach in relation to this is the general raising of the average human-capital level of South African youth. Policy-makers realise that one of the outcomes for the Department of Basic Education is to reduce drop-out rates before Grade 12 and to channel more students into tertiary education. The earlier discussion gives the context in which active labour-market policies, aimed at dealing with youth unemployment, have to be implemented. These active labour-market policies should therefore not be seen as the solution to the youth unemployment problem, but rather as one of the components of dealing with the issue.

The focus of this chapter is on youth unemployment interventions, which can be classed as either active or passive labour-market policies. Passive policies typically involve spending on income transfers such as unemployment benefits. Active measures, the main emphasis of this chapter, involve a wide range of interventions aimed at facilitating transition to employment. The most

common forms of active labour-market programmes are public training, job-search assistance, subsidies and public-works programmes. These interventions are discussed below; also discussed is the relevance of policies to increase youth entrepreneurship.

## A review of active labour-market policy interventions

As discussed, a key ingredient in large-scale employment creation is economic growth. However, economic growth may be sluggish, in which case microeconomic interventions, such as the active labour-market policies highlighted earlier, can be helpful. Active labour-market policies can improve job matching, fill the gap when employers and workers underinvest in training, and mitigate the effects of recession by providing temporary employment or creating incentives for employers to hire (World Bank, 2012). Even when active labour-market policies do not result in significant job creation, they are not a waste because they play an important role in ensuring that youth remain in touch with the labour market (OECD, 2010a).

The most vulnerable and marginalised group of youth is arguably that which is not in employment, education or training (the NEETs). Youth who find themselves in these circumstances are not acquiring human capital in the form of studies or training, nor are they gaining any on-the-job experience. This category of youth needs to be targeted for policy intervention as some of them have quit their studies prematurely (and the mechanisms behind these decisions have to be understood), while the majority lack skills that would give them an edge in the labour market. Furthermore, these idle youth generally come from disadvantaged backgrounds. In a sense, intervention at this stage is tantamount to an exercise in damage control because, as the literature confirms, the greatest rewards result from early and sustained interventions (Garces et al., 2000; Heckman & Lochner, 2000; Martin & Grubb, 2001).

In South Africa, the problem is not so much a premature exit from secondary schooling but rather the failure to pursue further studies. This is most likely driven by resource constraints, despite the recent campaigns by the South African government to ensure that a lack of finance is not an obstacle to further studies. The threat of labour-market discouragement is also always looming. The challenge is to ensure that youth remain active. With a given range of policies in place to assist youth, policy-makers have to recognise the importance of getting as many of the targeted youth to use the resources available to them to mitigate the ill-effects of unemployment.

The following sections discuss the main active labour-market policies that have been implemented globally and the lessons that South Africa can draw for these. However, it is important to note that although many countries have implemented

programmes to combat unemployment, not much can be garnered from these unless they have been evaluated. Furthermore, many interventions tend to be on a far smaller scale than the national need, and it does not necessarily follow that scaling up a small-scale programme would yield similar results.

## Public-training policies

Internationally, public training initiatives tend to be the most expensive and quite often account for the largest share of spending on active measures (Carling & Richardson, 2001; Heckman et al., 1999; World Bank, 2012). However, evaluations of the effectiveness of training programmes yield mixed results. In the past, the estimated effects of some programme on earnings or employment, compared to the cost of achieving those effects, yielded low or even negative effects in countries such as Canada, Ireland, Sweden and the United States (Heckman et al., 1999, Stanley et al., 1998). Lessons learnt subsequently highlight the importance of aligning skills taught with labour demand (World Bank, 2012). A number of other factors have been found to be useful in ensuring increased effectiveness of publictraining programmes: (1) tight targeting of participants; (2) keeping the scale of programmes relatively small; (3) training resulting in a qualification that is recognised and valued by the market; and (4) having a strong on-the-job training component and therefore strong links with local employers. There is evidence that the outlook of youth involved in training programmes improves (World Bank, 2012), which would be beneficial in the South African context of the high duration of unemployment and the subsequent discouragement.

However, there can be substitution and deadweight losses associated with training. In some instances, individuals that are hired after training would have been employed anyway. Therefore, evaluation should indicate whether the hired workers substituted others, or whether they were hired because the training signalled higher productivity to employers.

Training for job-seekers in Latin American countries has been particularly successful as a result of integrated programmes, which include both on-the-job and classroom components. The Jóvenes en Acción (Youth in Action) programme in Mexico combines life skills and technical training with work experience.

However, public-training agencies are often too slow to respond to the changing demands from firms and jobseekers. To counter this, where feasible, public-training funds could be directed to private and non-profit providers on a competitive basis. Performance-based tendering can create incentives for more relevant training.

In South Africa, the National Skills Development Strategy (NSDS) gives direction with regard to training. The National Skills Fund (NSF) and the Sector Education and Training Authorities (SETAs) are responsible for implementing

the NSDS. The most significant role-players as far as provision of training in intermediate-level technical and vocational skills would seem to be Technical and Vocational Education and Training (TVET) colleges. However, according to the White Paper on Post-School Education and Training, even though numbers of students enrolled in TVET colleges have increased over the past few years, enrolment is still lower than that of universities, whereas the reverse has to be the case in order to plug the gap in mid-level skills effectively. In addition, the TVET offering of programme and qualifications (PQM) is reported to be complex to administer, difficult for students to understand and often poorly administered. Many lecturers do not have the necessary workplace experience that would enable them to deliver effective vocational programmes (Department of Higher Education and Training, 2014). Furthermore, technical skills acquisition has declined since the introduction of the SETA system, and apprenticeships have also declined, partly because of a mistaken perception that they have been replaced by learnerships. The decline in apprenticeships impacts on youth disproportionately because youth make up the bulk of the unemployed and unskilled. Furthermore, learnerships are more suited to workers employed in the formal economy, whereas the most vulnerable youth are either unemployed or engaged in survivalist microenterprises. In addition, the learnership contract requires a willing employer, but many employers have traditionally been discouraged by the heavy administrative burden involved in the process. However, the NSDS has undergone a revamp and the Department of Higher Education and Training (DHET) has implemented reforms to make the system more effective and accountable.

#### Job-search assistance

Job-search assistance is usually the least costly of active labour-market programmes. It can either be personalised, where the unemployed receive close personal support and attention, or the unemployed can simply be afforded access to resources at a local labour office. Where close personal support is provided, the recipient would have regular meetings with a job counsellor who would monitor the job search and provide useful information to aid the process. In some instances, financial support for job search is provided to cover transport and moving costs. International evidence suggests that unemployment duration is reduced as a result of job-search assistance (Smith, 2006).

In the South African context of mass unemployment, passive job search may be due to financial constraints that are brought about by the high costs of actively searching for a job, accompanied by the low probability of finding employment. This is a factor that predominantly affects black youth, as townships are often situated far from business centres. Indeed, in the labour-force surveys, the majority of non-searchers indicated that their location

constrained them from looking for work. The formal exposition of the effects of distance on labour-market outcomes was first given by Kain (1968) as the 'spatial mismatch hypothesis'. In the United States context, the location of jobs was becoming increasingly decentralised and poor minority households (mainly black) were being left behind in central cities as a result of the constraints on housing choices. These developments decreased the employment prospects of the individuals concerned through lesser job access and earnings. The South African situation is similar in as far as individuals from poor households (mainly black) are often far from where the jobs are located. However, the difference in South Africa is that, historically, the jobs have been concentrated in the cities while poor households have been located on the outskirts.

Over the past 10 years, many high- and middle-income countries have overhauled their job-search services with a move towards private provision as opposed to public provision (World Bank, 2012). Furthermore, there is increasing use of new technologies, such as mobile phones, to establish job-search networks. In the context of South Africa, useful measures to consider would include investment in active placement methods, raising the motivation of the unemployed, as well as taking steps to encourage and monitor job-search behaviour—all of which aid in facilitating a quicker transition from unemployment to employment. With a policy of job-search assistance, there is, of course, an underlying assumption that there is a significant degree of frictional unemployment within the economy.

In South Africa, the National Youth Development Agency (NYDA) provides a number of avenues to assist job search and improve matching. The Graduate Development Programme (GDP) and Job Protection Programme (JPP) help jobless graduates and matriculants to find jobs; the National Youth Service allows youth to gain work experience while providing community service; the Jobs and Opportunities Seekers (JOBS) and graduate database aim to link jobless youth with employment opportunities; and youth advisory centres (YACs), which are walk-in centres in communities, where youth can access all NYDA resources, including career counselling.

## Subsidies to private-sector employment<sup>1</sup>

Subsidies to private-sector employment can be directed either at the employer or the worker. Employer-side subsidies provide financial incentives to firms to hire workers by reducing hiring and employment costs. The structure of the subsidies varies greatly across countries because they are likely to be targeted at different

<sup>1</sup> Wage subsidies are dealt with in more detail in Chapter 11.

specific groups in each country. The subsidies can be in the form of reimbursing a firm for a fraction of the wages of the covered workers or training costs or a one-off bonus. The subsidies usually carry a stipulation that employment must last a certain minimum period. Employer-side subsidies can be either targeted or untargeted, but targeted subsidies are more common, and indeed found to be relatively more successful. A disadvantage of untargeted subsidies is that they could lead to a substitution by individuals who would have found employment anyway.

One method of implementing targeted employer-side subsidies is for eligible workers to be given certificates that get presented to employers. This method is often less successful at improving employment because of the stigma of being in the targeted group. The other alternative is a requirement that employers determine the eligibility of new workers and apply for the subsidy themselves. International evidence suggests that targeted subsidies are not highly effective at increasing employment levels, partly because of the administrative burden placed on firms, which have to submit proof to government of the eligibility of their newly hired employees (Smith, 2006). Most evaluations, which focus on firm behaviour, indicate that subsidies to private-sector employment have both large deadweight and substitution effects, such that most schemes yield small net employment gains, especially in the short term when aggregate demand and vacancies are fixed.

Policy-makers may not be too concerned about high deadweight and substitution effects which often result from employment-subsidy programmes because part of the objectives of the policy would have been to rearrange the queue of jobseekers, such that the individuals who struggle most to find employment move further forward in the job queue. In addition, the real costs of wage subsidies are often not easy to calculate (World Bank, 2012).

When a subsidy is in place, monitoring the employer behaviour is very important because a firm may refuse to hire an unemployed individual unless it stands to receive a large subsidy for doing so. A firm could also set aside positions that are contingent on receipts of a subsidy (Fay, 1996). Taken to the extreme, this sort of abuse of the programme could amount to the firm using the scheme as a permanent subsidy to its workforce. However, it has been found that the more controls that are put in place to reduce abuse of the programme and maximise the net gains from wage subsidies, the less willing firms are to participate in such programmes and employer take-up tends to diminish rapidly (Martin & Grubb, 2001). In addition, the larger the scheme, the more costly and difficult it is to enforce controls.

Another variation of the employer-side subsidy is to have jobseekers carry vouchers or certificates which explain the structure of the subsidy and the eligibility of employers. In a randomised experiment in Dayton, Ohio, in 1980,

the results reflected worse outcomes for voucher holders, possibly because of the stigma attached to being eligible (Burtless, 1985). In addition, less than a quarter of those employers who hired workers on the scheme actually redeemed the vouchers, suggesting that the process may have been burdensome. However, research findings are that vouchers may increase employment through intensified job search (Smith, 2006).

A more common policy is that of a worker-side wage subsidy. It is usually implemented as a tax credit, which is a function of either labour hours or labour income. A number of prominent regions have implemented worker-side subsidies. The United States has in place the Earned Income Tax Credit (EITC), implemented since 1975 and targeted at low-income families with children, to offset a portion of worker contributions to the social security payroll tax. The United Kingdom implemented the Working Families Tax Credit (WFTC) in 2000, which was also directed at wage earners with children. Countries within the Organisation for Economic Co-operation and Development (OECD) also began implementing subsidies similar to the EITC and WFTC in the 2000s. In some countries, like the United States for example, the worker-side subsidy is available as long as household income is below a certain threshold, regardless of the hours worked. The subsidy would normally be an increasing function of income at lower levels and a decreasing function at higher levels of income. In other countries, the subsidy is available only if the worker works a minimum number of hours per week (usually 15 to 20) and has earnings below a threshold. A larger subsidy is granted for individuals who work the minimum weekly or monthly requirement, and it declines as a function of labour supply after the minimum is reached.

In terms of applicability to South Africa, worker-side subsidies look more appealing than employer-side subsidies because of the lesser burden of proving eligibility and the fact that the administrative burden is borne more by the government rather than firms. The subsidy schemes of the kind mentioned would be a challenge for a developing country though, because it would be difficult to assess earnings in the case of informal employment—which is commonplace in developing countries—and so it would be difficult to assess subsidy amounts (Smith, 2006). A subsidy scheme targeting the formal sector only (where incomes can be ascertained with certainty) would therefore be less effective at increasing labour-force participation and reducing poverty among the lower-income groups. Furthermore, the stigma that often accompanies a targeted subsidy scheme is a factor favouring an untargeted subsidy scheme.

## Direct job creation in the public sector

Chapter 14 deals with public employment and only a few general observations are made here. Internationally, there has been a marked move away from public

sector job-creation programmes in favour of other active measures because of the disappointing results that are achieved in terms of helping unemployed people get permanent jobs in the labour market (Martin & Grubb, 2001; OECD, 2010b). It is becoming increasingly clear, though, that public-works programmes have a better chance of becoming jobs ladders when they also offer additional technical and life-skills support.

However, there is still a great deal of debate around the use of these programmes because they can fulfil objectives other than just the creation of permanent jobs. Public-sector employment-creation programmes can be used to help the most disadvantaged unemployed to maintain contact with the labour market, especially in times of weak aggregate demand and scarcity of vacancies (Fay, 1996). In countries in which unemployment compensation schemes are not widespread, public job-creation schemes act as an important safety net. Among the developing countries that have implemented these schemes are Argentina, Bangladesh, Bolivia, Chile, Colombia, Ethiopia, India, Malawi, Mexico, Peru and South Africa.

Some countries, like India and Argentina, have gone as far as offering guarantees of employment to targeted workers. India has a long tradition of public-works schemes, which progressively evolved until the National Rural Employment Guarantee Act of 2005 (NEGRA) — recently renamed the Mahatma Gandhi National Rural Employment Guarantee Act — was passed. The main difference between this Act and previous schemes is that, for the first time, it commits the government to providing any adult living in a rural area with employment, paid at the minimum wage. The job must be provided within 15 days of registration and must provide employment for a minimum of 100 days per year, otherwise the claimant has the right to an unemployment allowance of 30–50% of the minimum wage. Argentina also ran a programme called *Plan Jefes y Jefas de Hogar Desocupados* (the Employment Road to Economic Recovery), which guaranteed jobs to heads of households from poor families (Tcherneva & Wray, 2005). The programme created two million jobs, as well as needed services and free goods to poor neighbourhoods.

Public employment-creation programmes in countries such as South Africa and India have attracted women mainly, providing temporary earnings opportunities to many poor households. The number of days of work offered have not been enough to significantly lessen poverty (OECD, 2010b), but this is not necessarily a bad thing as governments needs to be cautious about the possibility of setting up a disguised form of heavily subsidised, permanent employment (Martin & Grubb, 2001).

## Strategies to support self-employment

Promotion of entrepreneurship—and especially small, medium and micro enterprises (SMMEs)—is a concrete intervention strategy in the face of high levels of unemployment. Indeed, the ILO estimates that 93% of new jobs in Africa—and virtually all new jobs for youth on the continent—are generated in the informal sector. Furthermore, results from the Global Entrepreneurship Monitor (Von Broembsen et al., 2006) research project indicate that the highest prevalence of entrepreneurial activity is to be found among 25- to 34-year-old men (20 per 100), followed by 35- to 44-year-old men (15 per 100) and then 18- to 24-year-old men (13 per 100). There is, therefore, a significant representation of youth in global estimates of entrepreneurial activity.

From international evaluations of programmes to assist the unemployed to start businesses, the following points emerge: such programmes are effective for a select group of the unemployed, typically men under the age of 40 years who have relatively high education levels and whose current spell of unemployment is relatively short. Other forms of support may also be helpful, such as mentoring and counselling (Fay, 1996). Furthermore, many countries realise the importance of promoting entrepreneurship among young people. The following are examples of countries' commitments to increased entrepreneurial activity:

- Canada provided CAD10 million of funding in 2009–2010 to the Canadian Youth Business Foundation, a national organisation that supports youth entrepreneurship through mentorship, learning resources and start-up financing.
- In Spain, self-employed youth under 30 years of age are entitled to a 30% reduction in social-security contributions for 30 months.
- In the Slovak Republic, a 2009 amendment to the Employment Services Act allows school-leavers, who express a desire to be self-employed, to be paid a self-employment grant as soon as they register, rather than having to wait the usual three months as registered jobseekers before obtaining assistance.

In South Africa, youth entrepreneurial activity is relatively low at 6% for youth between the ages of 15 and 30 years. Early-stage entrepreneurial activity is relatively low at 7% (the lowest of the surveyed sub-Saharan countries) (Turton & Herrington, 2013; Xavier et al., 2013). Evidence from South African surveys indicates that most young people are motivated to start their own businesses because of the limited opportunities in the labour market, but that sustainability is a major constraining factor. Such sustainability is governed by a person's intrinsic entrepreneurial ability (which can be cultivated), availability of investment capital, risk-absorption capacity, financial-management skills, enterprise development and—very importantly—market accessibility. South Africa's education system and the hostile and highly concentrated market

structure leave participants short of skills in a skewed market, and this impacts negatively on the success of SMME ventures.

SMMEs are not the biggest generators of employment currently. However, with low rates of both necessity entrepreneurship (2.24% of the population) and opportunity entrepreneurship (2.8%), there is immense potential for employment creation in this area (Turton & Herrington, 2013; Xavier et al., 2013). The Global Entrepreneurship Monitor (2008) reports that only a small percentage of start-up entrepreneurs can expect to create 20 jobs in their first five years of business. The reason for this is that entrepreneurship in South Africa tends to be skewed towards low-impact or low-expectation entrepreneurship. This is because it is driven by necessity or the absence of other viable sources of income, rather than being driven by vision.

Not many conventional, new, smaller firms last up to five years, and fewer still develop into high-growth firms. In view of this, there have been ongoing initiatives to promote the development and sustainability of SMMEs in South Africa. The Small Business Act was passed in 1995 and subsequently organisations such as the Small Business Council and Ntsika Enterprise Promotion Agency were established, as well as the Small Enterprise Development Agency in 2004. However, despite these initiatives, SMMEs struggle to thrive. Adding to the challenge is the existence of a dual economy. Estimates are that one million businesses, employing 1.8 million people, operate outside the formal economy (Roux & Klaaren, 2002; SBP, 2005). As a result, a distinction should be made between business owners in the formal and informal sectors. It is those in the informal sector that are driven mainly by necessity, while those in the formal sector are motivated by opportunity.

Furthermore, when looking at the profile of individuals engaged in SMME activity, very few are long-term unemployed workers that have taken advantage of SMME-support programmes. An overwhelming majority saw profitable opportunities while working in the formal sector, and consequently set up SMMEs. Some joined a family business, while others had experience from operating in other countries. In addition, the racial composition of SMME ownership is heavily skewed away from black people (Mlatsheni & Leibbrandt, 2011).

## Lessons learnt from evaluation studies and how these relate to South Africa

High youth unemployment relative to non-youth unemployment is a source of concern globally. Part of this concern stems from the recognition that a troubled transition from schooling to work may have negative labour-market-related ramifications that last well into adulthood, while a smooth transition would

allow youth to become independent and productive sooner. Countries therefore devote a significant amount of resources towards tackling relatively high and/or prolonged youth unemployment. All policies have their benefits and drawbacks, as discussed earlier, and implementing some combination of policies seems to be the best strategy to achieve meaningful results.

Countries that have traditionally been successful in integrating youth into the labour market have achieved success through ensuring youth contact with the workplace relatively early (Bowers et al., 1999). Germany, a country that has traditionally achieved an admirable level of youth integration into the labour market, operates a dual system of bridging the transition from schooling to work. This dual system entails a significant degree of integration between schools and the labour market in the form of on-the-job apprenticeships by enterprises, together with school-based education. A key component of the German dual system is the involvement of the private sector and community (in this case workers and unions) in the content and certification of vocational training, as well as the content and conditions governing on-the-job training. This level of coordination is the ideal that countries battling to facilitate the smooth transition from school to work should be aiming for.

The system that prevails in most countries is the sequential system, in which youth are first educated exclusively at school and then enter the labour market after their schooling. This system prevails where there is no tradition of vocational orientation within the secondary-school education system. Countries that adopt the sequential system, while having relatively tight labour markets, run the risk of having undesirably high enrolment rates in tertiary education, which may lead to credential inflation or over-education, and relatively high unemployment rates among highly educated youth (Van der Velden & Wolbers, 2001).

Most of the OECD countries, from which some of this discussion is drawn, have traditionally not battled with chronic unemployment but, instead, have grappled with the challenge of voluntary unemployment in the face of well-developed social-security systems. Some of the policies geared towards incentivising job search, for example, are couched in the framework of inadequate efforts to find employment being punished by a reduction in benefits. Job-search assistance, together with other accompanying strategies such as the placement of unemployed individuals, points to an emphasis on the view that unemployment is mainly frictional, if not voluntary.

However, recent bouts of economic upheaval have led a number of countries to redefine the nature of their unemployment (youth unemployment in particular) and to accept that structural issues exert a greater force than previously thought. In the OECD countries, youth unemployment reached 19% in 2010, the highest levels recorded for the post-war period. Between 2008 and 2010, the highest

increases in youth unemployment were in Spain (up 18.5 percentage points), Ireland (up 13 percentage points), the Slovak Republic (up 13 percentage points), and Greece and Iceland (up 11 percentage points). The most recent recession has hit youth hard, such that youth unemployment exceeds 25% in Spain, the Slovak Republic, Greece, Sweden, Ireland, Italy, Finland and Hungary. Spain in fact had the highest unemployment rate in 2010, at 42%. As a result, a number of countries have introduced measures to combat the structural issues they have identified as impacting youth unemployment. Among these measures are the following:

- 1. investing in funds to promote new skills for new jobs, targeting young entrants;
- 2. reducing the cost of employing low-skilled youth; and
- 3. continuing efforts to reduce labour-market duality overall (OECD, 2010a). It seems then that there is going to be some convergence among developed and developing countries in approaches to dealing with youth unemployment.

Nevertheless, South Africa presents unique challenges owing to its demographic characteristics, the socio-economic profile of its citizens and the limited nature of welfare directed at the unemployed. As such, policies that are being used effectively in other countries may not be directly transferrable to South Africa. What follows is a brief summary of the effectiveness of popular policies to date to address youth unemployment, and commentary on the desirability and the likelihood of the effectiveness of such policies in South Africa.

International evidence suggests that job-search assistance works well for most groups of unemployed persons and, relative to the other strategies, is more cost effective. As mentioned earlier, within the South African context of mass unemployment, inactive job search may be due to financial constraints that are brought about by high costs of active job search, accompanied by low probability of finding employment. To the extent that one believes that some youth unemployment in South Africa is frictional, one would expect a policy of jobsearch assistance to yield positive results. A clear advantage of this policy over others is that it is relatively less costly. However, the key behind the success of the job-search-assistance policy is the enforcement of a few additional measures. Where there is provision for unemployment insurance, tying job search to unemployment insurance often enhances the effectiveness of the policy. This is not a tool at the disposal of South African policy-makers at present, however. Other additional measures include investment in active placement methods, raising the motivation of the unemployed, and taking steps to encourage and monitor job-search behaviour - all of which aid in facilitating a quicker transition from unemployment to employment. These additional measures also translate into additional resource inputs, however, which may or may not be available.

The provision of training for the unemployed is usually the costliest of the range of interventions to combat unemployment. International evidence indicates that the outcomes of training policies, as measured by increased employability and increased earnings of the recipients, often fall short of the expenditure. This is not a universal outcome, however, as targeted training, together with close links with employers in setting up training programmes, can improve the effectiveness of training. There is scope to improve on these two areas within the context of South Africa.

Subsidies to employment, a new avenue for consideration in South Africa, can be effective—particularly for the long-term unemployed and women reentrants. Employment subsidies, however, can result in large deadweight losses and substitution effects. Once more, these factors can be reduced through close targeting, although in some instances a redistribution of job opportunities may be an explicit objective of the intervention, such that substitution effects and deadweight losses are not seen in as bad a light. Other important considerations which enhance the effectiveness of subsidies include reducing the stigma attached to subsidy receipt, as well as reducing the administrative burden on employers who participate in the subsidy programme.

Providing assistance to the unemployed to start a business is fruitful for a small group of individuals, according to international evidence. Careful screening of possible participants is an important determinant of the success of such programmes because not all individuals have an aptitude for self-employment. There is scope for significant growth of self-employment in South Africa, as entrepreneurial levels are relatively low.

Globally, public-sector employment-creation programmes are generally not effective in creating permanent jobs for the unemployed. The situation in South Africa is no different. However, public-sector employment-creation policies can be useful in facilitating attachment to the labour market by the unemployed. It is therefore important that the objectives of such policies are not overstated.

In sum, the lessons for South Africa are not so much in what policies to implement but in how they should be designed in order to avoid the pitfalls that have been experienced elsewhere.

## **Conclusion**

Youth who are neither studying nor active in the labour market are at high risk of social exclusion. The literature surveyed suggests that early intervention is critical, and it should be comprehensive, sustained and coordinated in order to avoid long-term scarring. The success of interventions should not be judged solely by the number of jobs they create, because such interventions also play an important role in keeping the youth connected to the labour market.

The success of intervention strategies depends on youth attitude and motivation. Therefore programmes that offer interventions geared towards youth should also have a requirement that youth take measures to remain active, either through further study or through active job search. Most of the policies discussed earlier are certainly familiar in the South African environment; indeed, there is a fairly extensive system of training within the labour market, for example. The preceding discussion, however, highlights that all of these policies can be either effective or ineffective, depending on their accompanying conditions. Successfully combating youth unemployment is not just a matter of prescribing a basket of policies but also focusing on the design of such policies in order to maximise their impact.

Achieving employment-intensive growth requires the creation of an enabling environment through a combination of microeconomic and macroeconomic policies. One goal must be to raise the average human-capital levels of the workforce. Furthermore, conventional wisdom must be challenged in order to arrive at strategies that are suitable for the South African context; for example, it is unlikely that large-scale employment is going to be created through the pursuit of an export strategy of skill-intensive, high-technology goods. Instead, identifying niches in the global supply chain of goods that can be produced with basic technology and low-skill workers would probably have better chances of success. Identifying these niches will not be an easy task, but consideration of this option increases the set of possible solutions to the crisis of persistently high employment.

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## Chapter 11

# Wage subsidies and employment creation in South Africa<sup>1</sup>

Justine Burns, Karl Pauw and Lawrence Edwards

## Introduction

The extent and persistence of unemployment in South Africa is well documented and acknowledged across the political and economic spectrum. The labour-market policies required to deal with the unemployment problem, however, remain highly contentious. This holds too with regard to the use of wage subsidies, such as the Employment Tax Incentive for young people, which came into effect on 1 January 2014. The wage subsidy scheme is a source of contestation between various political parties, labour unions and the government. Behind these debates lie important questions about the efficacy and appropriateness of wage subsidies to deal with the unemployment problem in South Africa.

In this chapter, we draw on earlier work (Burns et al., 2010a, 2010b; 2013) that models the effects of a wage-subsidy programme in South Africa. We first focus on the rationale for wage subsidies by highlighting the characteristics of unemployment in South Africa, and then we evaluate the extent to which wage subsidies have been shown to boost employment internationally and locally. We then draw on empirical simulations, presented in our earlier work, to provide some insight into the possible effect of a general wage-subsidy programme on employment and poverty in South Africa. This is followed by a more detailed discussion of the appropriateness of a wage subsidy to deal with the unemployment problem and, finally, the conclusion summarises the key findings.

This chapter replicates, with permission from the publishers, much of the article by Burns, J., Pauw, K. & Edwards, L. (2010a). 'Wage subsidies: Not the silver bullet, but a good start to address unemployment'. In: J. Hofmeyr (ed.). 2010 Transformation Audit—Vision of Vacuum: Governing the South African Economy. Cape Town: Institute for Justice and Reconciliation. The analysis also draws on the empirical estimates presented in Burns, J., Edwards, L. & Pauw, K. (2013). 'Revisiting wage subsidies: How pro-poor is a South African wage subsidy likely to be?' Development Southern Africa, 30 (2): 186–210. We would to thank an anonymous reviewer for excellent comments.

The results presented in this chapter suggest that a general wage subsidy could create nearly half a million new jobs that could be filled by low- and medium-skilled workers. As a policy instrument, the wage subsidy can therefore be effective in reducing unemployment in South Africa. However, the design, implementation and administration of the subsidy programme are critical for its success. Much more research, including the possible piloting of proposed programmes, is required.

Even with a successful wage-subsidy programme, unemployment rates will remain untenably high. Ultimately, wage subsidies cannot be a permanent solution to unemployment in South Africa, as they do not target the underlying constraints to employment growth. Nevertheless, they provide the government with an opportunity to stimulate job creation, while complementary, longer-term growth, education and labour-market policies are being implemented.

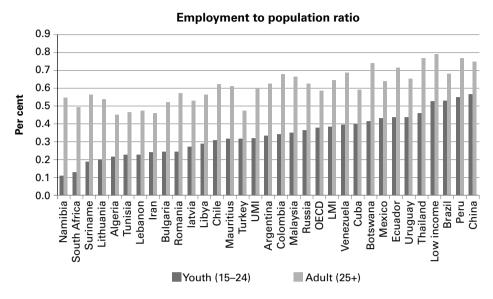
## Characteristics of unemployment in South Africa<sup>2</sup>

The severity of South Africa's employment problem is clearly illustrated in Figure 11.1, which presents the ratios of employment to working-age population for youth (15–24 years) and adults (25 plus years) for various upper-middle-income countries, including South Africa. The ratio is a useful indicator of the extent to which labour supply is absorbed into economically productive activities. The striking difference between South Africa and other major emerging-market economies is its exceptionally low ratio of employment to working-age population (OECD, 2010: 92). While in other upper-middle-income countries the employed account for 53% of the working-age population, in South Africa this figure is only 39%.

The difference is most evident among the youth, where only 13% of the working-age population between 15 and 24 years old is employed. Contrast this with the 32% average for upper-middle-income countries, or the above 50% ratios for Brazil and China. As Hausmann (2008) noted, if South Africa had comparable employment rates to other countries at similar levels of development, over six million more South Africans would be working. For youth, the increase is even more dramatic: 1.9 million more jobs or close to a 150% increase in employment levels.

Employment to working-age ratios by brackets reflect a combination of two interrelated effects: (1) labour-force participation rates; and (2) levels of unemployment of those in the labour market. Comparatively, South Africa features poorly on both counts (see Table 11.1).

<sup>2</sup> See Banerjee et al. (2008) for a review of unemployment in South Africa.



**Figure 11.1:** Employment to working age population ratios *Source*: Own calculations using the ILO KILM database

#### Note:

LMI denotes low- and middle-income countries. UMI denotes upper middle-income countries.

For example, only 52% of the working-age population participates in the labour market (versus 60–62% in other middle-income countries) and of these, only 75% find a job (versus 89–91% in other middle-income countries). For youth, the participation rate, at 26%, is less than two-thirds the rate in other middle-income countries. Of these, just over a half are unemployed. Africans are the most severely affected, with unemployment rates three times the rate for whites, and coloured and Indian populations having intermediate rates (OECD, 2010: 92). The implication of high unemployment rates, as well as low participation rates, is that a very low proportion of the working-age population have jobs.

A further feature of the employment problem in South Africa is the persistence of high unemployment rates and relatively low participation rates over time. There has been very little change in the share of the working age population with jobs over the past decade and the unemployment rate continues to hover around 25% (30–33% using the broad measure of unemployment). As argued by Banerjee et al. (2008), the relatively stable unemployment rate is consistent with structural inefficiencies in the labour market which hinder transition. Consequently, without intervention or an external shock, high unemployment rates are likely to persist well into the future.

Table 11.1: Employment rates, labour-force participation rates and unemployment rates, 2010

	Employment/ population	Labour-force participation (labour force/ population)	Employment rate (employment/ labour force)	Unemployment rate
All				
OECD	0.56	0.61	0.92	0.08
Low income	0.70	0.74	0.94	0.06
Lower-middle income	0.57	0.62	0.91	0.09
Upper-middle income	0.53	0.60	0.89	0.11
South Africa	0.39	0.52	0.75	0.25
Youth: 15—24-year-olds				
OECD	0.38	0.46	0.81	0.19
Low income	0.53	0.59	0.89	0.11
Lower-middle income	0.38	0.46	0.82	0.18
Upper-middle income	0.32	0.41	0.76	0.24
South Africa	0.13	0.26	0.49	0.51

Source: Own calculations using the ILO KILM database

#### Note:

The narrow definition of unemployment is used in the cross-country comparison. The unemployment rate therefore excludes 'discouraged' jobseekers. Each value in the table reflects the simple average of the variable across countries in each group. The income categories are defined according to the World Bank classification of countries according to their gross national income.

The underutilisation of labour imposes severe costs on the economy. Unemployment is closely linked to poverty (Hoogeveen & Özler, 2006; Van der Berg et al., 2005). The lack of jobs inhibits social mobility and contributes towards crime. Extensive social grants have helped mitigate some of the adverse effects associated with unemployment, but these constitute a burden on tax payers and could strain fiscal sustainability (Leibbrandt et al., 2010; OECD, 2010). Work experience has also important non-wage benefits, including self-esteem and self-satisfaction, in contrast to receiving income grants.

The long-run costs of high youth unemployment are particularly large. Young individuals who spend time unemployed early in their career paths risk seeing

their skills base depreciate over time, as well as their self-confidence erode, thereby making it increasingly difficult to find employment later on. Early labour-market experience is a predictor of longer-term labour-market status (Kingdon & Knight, 2004). This makes the design of labour-market interventions to raise the rate of successful transition from study to first job vitally important (Burns et al., 2010a).

## Wage subsidies as a policy option<sup>3</sup>

The structural characteristics of unemployment in South Africa have stimulated much debate on appropriate policy interventions, including labour market interventions, to stimulate employment growth. One policy response, which has received widespread attention, is a wage subsidy programme.

Wage subsidies were considered by the presidential commission to investigate labour-market policy in South Africa in the mid-1990s (Heintz & Bowles, 1996). A wage-subsidy scheme for young workers was also proposed by the International Growth Advisory Panel, which advised the South African government on economic policy in the late 2000s (Levinsohn, 2008). The adoption of wage subsidies was also considered within South African government departments during this period, most notably the Department of Social Development (2004) and National Treasury (2007b).

The Minister of Finance, Pravin Gordhan, formally announced the introduction of a youth wage subsidy during his 2011 budget speech, but it took until 1 January 2014 for the policy to be implemented. On 1 January 2014, the Employment Tax Incentive for young people came into effect. This policy provides a tax incentive to firms that employ workers aged between 18 and 29 years. Employers can claim the subsidy for a 24-month period for all employees who qualify. The size of the tax incentive diminishes in the second year and is lower as a proportion of income for workers with higher levels of remuneration. The motivation for the wage subsidy is clearly articulated in discussion documents produced by the National Treasury (2007a; 2011).

The use of wage subsidies, nevertheless, remain controversial, with various business organisations, policy research and advocacy organisations, labour

This section draws extensively from Burns et al. (2010a).

The tax incentive in the first year is equal to 50% of the monthly remuneration for employees earning R2000 or less per month. This falls to 25% in the second year. For employees earning more than R2000 but less than R4001, the incentive amount is R1000 in the first year and R500 in the second year. For employees earning between R4000 and R6000, the incentive is given by the formula:  $Z - (0.5 \times [monthly\ remuneration - R4000])$ , where Z = R1000 in the first year and R500 in the second year.

federations and political parties posing contrary views on the merits, demerits and effectiveness such programmes.<sup>5</sup> To a large extent, these different viewpoints reflect different interpretations and understandings of the mechanisms through which wage subsidies affect employment. In what follows, we present a brief overview of the channels through which wage subsidies affect employment levels.

## How do wage subsidies work?

The primary aim of a wage-subsidy programme is to increase employment. How this outcome is achieved is strongly influenced by the design and implementation of the programme. This includes choices about targeting (workers or sectors), coverage of the subsidy (that is, whether all workers in a target group receive the subsidy or only the 'marginal' or newly-employed workers), calculation of the subsidy value (fixed value versus percentage of the wage, or a combination of these), and financing of the scheme (for example, through general taxation or reallocation of government expenditure) (Burns et al., 2013; Levinsohn, 2008).

A key choice for policy-makers is whether the wage subsidy should be disbursed to firms or workers. Examples of both approaches can be found in the international literature (Smith, 2006). In both cases, the intended outcome is that the subsidy should alter firms' and workers' behaviour to improve employment outcomes. However, the channels through which the employment outcomes are achieved differ in important respects.

Wage subsidies granted to workers primarily aim to influence the supply of labour. By raising the effective wage, the wage subsidy granted to workers is supposed to encourage existing workers to increase the quantity of labour that they supply (that is, a move up the individual labour-supply curve, assuming that it is upward sloping) as well as induce greater labour-force participation and active job search on the part of work seekers which shifts the aggregate labour-supply curve outwards. This shift in labour supply reduces the market wage, which in turn encourages firms to increase employment.

Firm-side wage subsidies are designed to provide financial incentives for firms to hire more workers by reducing their cost of employment. Aggregate demand for labour increases in response to two effects: (1) an increase in the employment intensity of production within existing firms (a shift down their labour-demand curves); and (2) the entry of new firms, particularly those producing labour-intensive products that have become relatively profitable.

Theoretically, in well-functioning markets, it makes no difference which party receives the subsidy. The wage subsidy alters the labour-market equilibrium by

<sup>5</sup> See, for example, ANC (2012), CDE (2011), COSATU (2012) and DA (2011).

raising the effective wage received by workers and reducing the effective wage paid by the employer (the difference in each case being the subsidy). The size of the employment impact depends critically on the labour and product markets that characterise the economy. If either the labour supply or labour demand is highly inelastic, the wage subsidy is unlikely to be effective in creating employment. Careful evaluation of the factor and product markets that are to be targeted is therefore required.

Within the South African context, where labour demand has been fairly static in the face of an influx of work seekers into the job market, a subsidy that can be claimed by the firm, and which targets labour demand directly, would appear to be the most appropriate option.<sup>6</sup> Given the high unemployment rate, low participation in the labour market does not appear to be the primary constraint to employment growth. Further, the employment outcome with a firm-based subsidy does not require a reduction in the market wage accepted by workers, as is the case with a worker-side wage subsidy. Such reductions may be socially and politically difficult to implement. However, the effective wage for the firm, which is inclusive of the subsidy, falls, thus encouraging them to employ more labour.

There are, nevertheless, some important considerations that affect the outcome of the wage subsidy, particularly if granted to firms. The weight of available evidence suggests that firm-side subsidies may not be that effective at stimulating employment (Dar & Tzannatos, 1999; Smith, 2006), particularly in developing and transitional economies (Betcherman et al., 2004). The poor success of firm-side wage-subsidy schemes may be attributable to the relatively high administrative burden that is borne by the firm, both in applying for the subsidy and in certifying eligible workers in the case of a targeted subsidy. This is likely to be exacerbated where subsidy amounts are low, and where eligibility may be difficult or time-consuming to verify. Thus, firms may either ignore the eligibility criteria in their hiring decisions altogether, thereby undermining the programme's effect, or they may simply go ahead and make their hiring decisions irrespective of eligibility criteria, and claim any available subsidy ex-post as a bonus (Dar & Tzannatos, 1999).

Firm utilisation of wage-subsidy schemes may also be dampened where the availability of the subsidy and details thereof are not widely known. This is more likely to occur with a targeted subsidy than an untargeted subsidy, since targeting inevitably limits the scope of applicability and requires more information by the firm on which workers are eligible. Low take-up rates may be especially endemic

A contrary view is put forward by Smith (2006), who argues that worker-side wage subsidies may be preferable given the administrative and logistic costs and uncertainties associated with firm-side subsidies.

among smaller firms, or those firms not party to bargaining-council agreements, where the details of such schemes may be debated. Moreover, where the total subsidy amount claimable is capped (for instance, as in the case of the New Jobs Tax Credit in the United States), this may limit the take-up of the subsidy scheme among larger firms (Hamersma, 2003; Katz, 1998).

A wage-subsidy programme may result in the displacement of existing workers in favour of workers targeted by the wage-subsidy scheme. Indeed, without proper monitoring, subsidised workers themselves might be replaced by new subsidised workers at the end of the subsidy period, in what could be called a churning effect. Designing the subsidy as a marginal one, where it is paid only for new hires made over and above status quo employment levels in a firm when the subsidy programme is introduced, can mitigate this kind of negative outcome. Deadweight losses may nevertheless arise, even with a marginal subsidy, if firms use the subsidy to employ workers they would have employed anyway. Further, marginal subsidies targeted at specific individuals may stigmatise the targeted group (Katz, 1998). These were central concerns raised by COSATU (2012) on the proposed wage-subsidy programme.

How large the substitution and deadweight losses are is subject to debate. The International Labour Organization (ILO, 2011: 76) reports that research in various countries has shown that wage subsidies lead to a combined deadweight and substitution effect in the order of 70–90% of the number of jobs created. The National Treasury (2011) estimates that 58% of the job creation under its proposed youth wage-subsidy programme would have taken place in any case.<sup>7</sup>

These numbers may exaggerate the substitution effects and deadweight losses within firms. Rotger and Arendt (2010) (reported in National Treasury, 2011: 31) estimate a negligible deadweight loss or substitution effect for firms using a wage-subsidy scheme implemented in Denmark in 2005. Moreover, to the extent that existing workers will have valuable on-the-job experience, and will have demonstrated satisfactory productivity, this reduces the likelihood of employers foregoing these benefits simply to claim a cash bonus (Levinsohn, 2008). This view finds support in a survey of South African firms conducted by Rankin and Schöer (2011) (reported in Prophet, 2012) in which three-quarters of the respondents stated that they would not replace existing workers for young subsidised workers, the main reason being the work experience of these older workers.

The National Treasury uses an employment elasticity of GDP growth of 1.2 to predict the growth of youth employment. The predicted growth in employment makes up 58% of the gross change in employment predicted under the wage-subsidy scheme (National Treasury, 2011).

Nevertheless, a wage-subsidy scheme will entail some deadweight losses and substitution effects. Concerns about these losses do not necessitate a rejection of wage subsidies as a policy option; rather they point to the importance of explicitly including provisions in the subsidy agreement to limit the extent of these losses. Careful monitoring by the state is also required, although there is the danger that the administrative procedures associated with this add complexity to the scheme, leading to reduced take-up by firms (OECD, 2010).<sup>8</sup>

The macroeconomic and industry-level effects arising from the wage subsidy also need to be considered, as these may offset or complement some of the employment gains at the firm level. For example, the wage elasticity of demand for labour is lower at the industry level than at the firm level as the increased output by existing firms and new firms in response to the wage subsidy lowers product market prices, depressing demand for all factors within existing firms. Employment responses will be further constrained if complementary production inputs, such as skilled labour, are scarce.

The aggregate employment impact also depends on the way in which the subsidy is financed. A wage-subsidy programme, financed through higher taxes, would erode household disposable income and consumption, reducing the potential positive effects on aggregate demand. Alternatively, a subsidy financed through a higher deficit would reduce national savings and investment, which undermines growth in the long run. These macroeconomic considerations suggest that the aggregate effects on employment may differ in magnitude from estimates predicted on the basis of individual firm responses.<sup>9</sup>

The competitiveness of markets is also relevant. The effectiveness of the wage-subsidy policy is dependent not only on increases in employment within existing firms, but also on the entry of new firms that demand labour. In economies with highly concentrated industrial structures, as found in South Africa (Aghion et al., 2008; Fedderke et al., 2006), the output response from the wage subsidy may be muted, leading to little increase in demand for labour (see also COSATU, 2012).

Ultimately, the success of a wage-subsidy programme in raising employment will depend on the size of the subsidy offered, the strength of the relationship between wages and employment, and the degree of market competition in

For example, the employment-subsidy programme in Denmark required a net increase in the firm's normal employment. Firms also needed the approval of the employee's representative to hire a subsidised worker. Rotger and Arendt (2010) reported in National Treasury (2011: 31).

Estimates based on randomised control trials that target existing firms will also not fully capture the macroeconomic effects of the subsidy, including the employment effects arising from the entry of new firms.

product and factor markets. If the relationship between employment and wage costs is relatively elastic, a reduction in wage costs will produce a relatively strong, positive employment response. However, if the wage-employment relationship is relatively inelastic, lower wage costs will not produce much meaningful change in employment outcomes. Moreover, in the absence of competitive pressures from other firms, firms with market power may be less inclined to respond to the subsidy by raising employment or reducing output prices. Similarly, workers may try to capture a share of the subsidy for themselves by bargaining for higher wages in the presence of a subsidy that lowers firm costs.

## The South African experience of wage subsidies<sup>10</sup>

South Africa has had some experience with using wage subsidies as an employment creation policy. The 1960s apartheid state, alarmed by the rate of black urbanisation, incorporated wage subsidies as part of a policy aimed at encouraging decentralisation of industries to peripheral areas. Firms that chose to relocate or expand their activities to these peripheral areas were able to claim generous financial concessions and wage subsidies for a specified period. The wage subsidy took the form of a non-taxable cash grant, which was calculated as a percentage of the wage bill and subject to a maximum given amount per worker. Firms could receive this subsidy for a maximum of seven years. In addition, firms were also eligible for a capital subsidy, as well as transport and electricity rebates.

There seems to be widespread consensus that this policy failed for a number of reasons. These include, inter alia, the fact that many of the chosen decentralisation areas were relatively remote and economically backward (Wellings & Black, 1986), leading to smaller economic-multiplier effects than anticipated. In addition, Harrison and Todes (1996) make the point that the Regional Industrial Development Programme (RIDP) simply reinforced spatial processes of location and expansion that were already in motion prior to the implementation of the subsidy scheme, and the increases in employment associated with the RIDP would probably have occurred, even in the absence of the policy. In 1991, this policy was revised-incentives were reduced and were linked to profit and productivity as opposed to production inputs (Harrison & Todes, 1996). Despite these modifications, reviews of the RIDP again suggest that the employment gains associated with this policy would probably have occurred even in its absence. In a series of firm-level case studies in KwaZulu-Natal, Harrison and Todes (1996) report that firms complained of the administrative burden associated with applying for the subsidies and the complexity of the paperwork, with many firms

<sup>10</sup> This section draws extensively from Burns et al. (2010a).

having to rely on outside consultants for assistance in completing the necessary documentation, thereby raising the cost to the firm. Firms also experienced delays in the processing of applications and the payment of subsidies. Take-up rates of the subsidy were higher among larger firms relative to small, medium and micro enterprises (SMMEs), very few of the firms that took advantage of these incentives engaged in export activities. The policy also did not have any explicit focus on training. All of these factors held implications for the sustainability of the firms themselves over time, as well as the employment opportunities created, with many firms closing down once the subsidy period ended.

## Modelling the impact of a wage subsidy on employment<sup>11</sup>

Insufficient time has passed to assess the long-run employment consequences of the recently implemented Employment Tax Incentive. The Employment Tax Incentive also targets only young workers and is thus relatively narrow in its focus. The potential impact of a wage-subsidy scheme on employment has therefore been assessed using primarily modelling exercises.

Some estimates (Levinsohn, 2008; National Treasury, 2011) are derived from simple, partial equilibrium models built around an aggregate wage elasticity. More recent simulations, using a structural search model, have been reported by Levinsohn and Pugatch (2014). One concern with these approaches is that the wage subsidy is anticipated to have macroeconomic and industry-level effects. For example, the impact of wage subsidies will differ across industries, depending on their labour intensity and their ability to substitute labour for capital. A wage-subsidy scheme may therefore give rise to changes in the industry composition of employment. To the extent that the lower production costs now faced by firms are passed on to consumers in the form of lower prices, this may indirectly stimulate additional consumption activity, which in turn will impact positively on the demand for labour in these sectors. Further, as noted earlier, the way in which the wage-subsidy scheme is financed has an important bearing on the outcome.

An alternative modelling approach, using a computable general equilibrium (CGE) model of the South African economy, has been applied by Burns et al. (2013), Go et al. (2010), Pauw (2009), and Pauw and Edwards (2006) to simulate the economy-wide effects of a wage-subsidy programme. An economy-wide modelling framework is useful in this context, since it allows for an examination of the quantitative effects of the wage-subsidy policy across all factor and

<sup>11</sup> The explanation of results draws extensively from Burns et al. (2010a).

<sup>12</sup> Arden and Ranchhod (2014) use Quarterly Labour Force Survey data to estimate the short-run effect of the Employment Tax Incentive on youth employment probabilities. They find no statistically significant effect in the short-run.

product markets, while also considering the cost and financing implications. The results generated from a CGE-modelling exercise can also be fed into an accompanying household-survey-based, micro-simulation model to produce estimates concerning the distributional implications of a wage subsidy for poverty and inequality.

Despite the popularity of CGE models, their results should be treated with caution. As with any modelling exercise, the underlying assumptions made can have a significant bearing on the results. Moreover, CGE models are not forecasting tools. They simply measure the additional employment opportunities induced by a specific wage-subsidy programme, holding all else equal. Important aspects related to the design, administration and implementation of the wage-subsidy scheme are also not captured in the CGE model simulations. As noted earlier, administrative hurdles required by firms to comply with wage-subsidy schemes have an important bearing on their success in raising employment.

Nevertheless, simulation modelling exercises provide a framework for thinking through the possible economic impacts of a policy intervention. In this tradition, Burns et al. (2013) use a CGE model, coupled with a micro-simulation exercise, to explore the impact of a firm-side wage subsidy offered to all formal-sector, semi- and unskilled workers in the manufacturing sector and certain service sectors. The results of this study are presented here.

The data underpinning both the CGE analysis and the micro-simulation exercise of Burns et al. (2013) are based on the merged 2000 Income and Expenditure Survey and the September 2000 Labour Force Survey (IES/LFS, 2000) conducted by Statistics South Africa (Stats SA, 2002a; 2002b). The subsidy is modelled as a general subsidy, that is, one that can be claimed by the firm in respect of existing employees, as well as new hires, as opposed to a marginal subsidy, which would apply only to new hires. This choice simply reflects the difficulties of modelling a marginal subsidy within this framework.<sup>13</sup>

The wage simulations follow the proposal in the National Treasury's 2007 Budget Review (National Treasury, 2007b) where the wages of only low-skilled workers earning less than R45 000 per year are subsidised. The subsidy itself is equal to R5 000 per worker, but is capped at 50% of the wage for workers earning less than R10 000 per annum. This translates into a 12.5% subsidisation of the total wage bill in targeted manufacturing sectors and a 9.1% subsidisation in targeted services sectors based on existing employment levels. At the economy-wide

<sup>13</sup> Modelling a marginal subsidy will require the specification of additional labour demand relationships that apply only for employment levels above current employment levels within firms. This introduces a discontinuity in the labour demand function that is difficult to model.

level, the programme subsidises 5.2% of the current wage bill. It is assumed that government finances the subsidy by raising household income taxes uniformly across household groups.

This simulation differs from the recently implemented Employment Tax Incentive, which applies only to young workers. The employment outcomes will therefore be greater than can be anticipated under the Employment Tax Incentive policy. Our results nevertheless illustrate the potential employment response by firms to a wage subsidy, as well as the general equilibrium effects of the policy. Key results from this analysis are reported here.

## Employment effects of a wage-subsidy programme

Table 11.2 summarises some of the key results obtained from the CGE model simulations presented in Burns et al. (2013). Employment results are presented for different labour-demand elasticities, as the responsiveness of labour demand to wages has a crucial bearing on the employment outcomes of the wage subsidy.

The hypothetical wage-subsidy scheme is simulated to generate anywhere between 228638 and 738235 low-skilled jobs. The estimates vary, depending on the strength of the relationship between wages and employment. Where this relationship is assumed to be strong (high elasticity), the employment gains are largest, while the converse holds true for the low-elasticity case.

The benchmark scenario is represented by the case in which the relationship between wages and employment is assumed to be relatively strong (mediumhigh elasticity). This is based on estimates of the wage-employment relationship in previous work (Fallon & Lucas, 1998). In the benchmark scenario, more than half a million jobs are created, which translates into a 6% increase in low-skilled employment. Most of the additional employment takes place, as expected, in those sectors targeted by the subsidy. In fact, when the wage elasticity is low, the non-targeted sectors shed low-skilled jobs. However, at higher wage-elasticity values, larger-scale effects ensure that low-skilled employment increases in the non-targeted sectors as well, and this is consistent with the knock-on effects of a wage-subsidy programme operating through increased consumption and demand for labour, described earlier.

While the wage subsidy is targeted at low-skilled workers, the policy affects employment opportunities for skilled workers too. Skilled workers and low-skilled workers complement one another in the production process in the model. Any increase in the employment of unskilled workers therefore requires some increase in the employment of skilled workers, who may assume a supervisory

<sup>14</sup> See Behar (2010), who finds support for this assumption in South African manufacturing.

or managerial role, or provide specialised labour inputs that are important for production (for instance technical or planning expertise). The CGE results suggest that the wage subsidy for low-skilled workers will lead to skilled workers moving from non-targeted sectors into new employment opportunities in the targeted manufacturing and service sectors. However, the size of this migration is relatively small. In total, the wage-subsidy policy raises overall employment by 4.7% in the benchmark scenario. The increased employment results in a reduction in the unemployment rate from 36% in the baseline to 32.9%.

In terms of income, low-skilled workers benefit the most, with increases of between 2.1% and 6.6%. Increases in income for skilled workers are much smaller. The policy also has a positive, albeit small, impact on GDP, which suggests positive growth benefits for the economy; for example, in the benchmark scenario, GDP increases by 1.2%.

Estimates of the programme costs are presented in the final section of Table 11.2. These range from R11.7 to R13 billion in 2000 prices, or R16.9 and R18.7 billion, respectively, in 2007 prices. The total cost is therefore considerable relative to the 2007 total welfare budget of about R90 billion. In the benchmark scenario, the cost per new job created is estimated at R23 860 (in 2000 prices). This is slightly higher than the average low-skilled wage of about R20 000 (Stats SA, 2002a; 2002b). Note that because we model a general wage subsidy scheme, which applies to all low-skilled workers in the targeted sectors and not only the new workers, the cost per new job created is substantially higher than the value of the wage subsidy per employee, which is capped at R5 000. Consequently, the estimated cost-per-job created more than doubles to R51 264 if one assumes that employment is relatively unresponsive to the subsidy programme (see the low-elasticity case), at which point the programme becomes more difficult to justify.

Table 11.2: Employment, factor incomes, gross domestic product and programme costs

	Responsiveness of employment to wages						
	Low elasticity	Medium-low elasticity	Medium-high elasticity	High elasticity			
Change in low-skilled employment (number of jobs)							
Manufacturing	76 424	121646	164921	228 743			
Services	155 690	252 026	345 642	484 091			
All targeted sectors	232 114	373 672	510 563	712834			
Non-targeted sectors	-3 476	2308	10392	25 401			
Net employment change	228 638	375 980	520 955	738 235			

Continued

		Responsiveness of employment to wages				
		Low elasticity	Medium-low elasticity	Medium-high elasticity	High elasticity	
Change in skille	ed employment (nur	mber of jobs)				
Manufacturing		2,940	3,789	4,167	4,204	
Services		2,298	2,483	2,164	1,091	
Non-targeted sectors		-5,238	-6,272	-6,331	-5,295	
Net employment change		0	0	0	0	
Change in real	factor incomes and	Gross Domestic Pr	oduct (percentage	change)		
Low-skilled labour		2.1%	3.4%	4.7%	6.6%	
Skilled labour		1.6%	1.7%	1.8%	2.0%	
Gross operating surplus		2.0%	1.9%	1.9%	1.9%	
Total factor income		1.9%	2.3%	2.6%	3.2%	
Real GDP (value added)		0.5%	0.8%	1.2%	1.6%	
Programme cost and financing						
Subsidy cost	(R billions, 2000 prices) (R billions,	R11.7	R12.1	R12.5	R13.0	
	2007 prices)	R16.9	R17.4	R17.9	R18.7	
Cost per job (2000 prices)		R51364	R32 173	R23 908	R17627	
Required tax rate increase		10.9%	11.4%	11.8%	12.5%	

Source: Compiled from Table 2 in Burns, Pauw and Edwards (2013: 196)

*Notes*: In the model, skills are differentiated by occupation group. Real factor incomes reflect the inflation-adjusted changes in payments to labour and capital. The change in total employment of skilled workers equals zero as the model assumes these workers are fully employed. The required tax increase reflects the percentage increase in the initial average tax rate that applies to each household.

The financing of the programme in these simulations requires average income tax rates to rise by between 10.9 and 12.5% of their initial values. Thus, average tax rates of households in the top third of the income distribution rise from 15% to 16.8%. Because the tax rate increase is assumed to be uniform across all households in the model, these households will also finance the bulk of the wage-subsidy cost in absolute terms.<sup>15</sup>

<sup>15</sup> It is also possible for the government to finance the wage subsidy scheme through increasing corporate tax rates or indirect taxes such as VAT.

## Poverty and inequality

To evaluate the possible poverty and distributional effects of the modelled wage subsidy programme in more detail, the CGE results are fed into an accompanying micro-simulation exercise. <sup>16</sup> For the benchmark case, assuming medium-high wage elasticity, the micro-simulation exercise indicates that approximately 54% to 55% of new jobs will accrue to the poor. This is consistent with a wage subsidy targeted towards semi- and unskilled workers.

In addition, while the CGE model results show that aggregate real disposable household income increases by 1.2% on average in the medium-high elasticity case (see Table 11.2), income gains are larger by percentage for poorer households. In fact, for households in the bottom six quintiles, incomes increase by between 2.7% and 3.0%, while households in the seventh to ninth quintiles experience declines in net disposable income, due to their higher tax burden brought about by the financing of the subsidy scheme. Moreover, if one alters the microsimulation model, such that the subsidy is targeted at semi- and unskilled youth workers, the model reveals a more pro-poor distribution of gains. With a youth-targeted subsidy, poor households see their disposable income levels increase by an average of 9%, while households in the top two deciles of the income distribution experience declining disposable income. This leads to a decline in measured income inequality.

This suggests that a wage-subsidy programme may have an important role to play in reducing poverty, although the primary objective is to increase employment. Figure 11.2 presents estimates of the reduction in poverty achieved. In both panels, the horizontal axis provides the benchmark values for a range of possible poverty lines. Conventionally, South African poverty lines range from R2 000 (extreme poverty) to R4 000 (normal poverty line) in 2000 prices (see, for example, Hoogeveen & Özler, 2006 and Van der Berg et al., 2005).

The first plot  $(P_0)$  presents estimates of the percentage reduction in the proportion of people living below a specified poverty line. In the medium-high elasticity scenario, the proportion of people living in extreme poverty, with incomes below the R2 000 poverty line, declines by 5%. At the R4 000 poverty line, the number of people living below the poverty line declines by 3.4%. This is equivalent to about 630 000 fewer people in extreme poverty and 800 000 fewer poor people. Similar results are reflected in the second plot, where the poverty gap measure  $(P_1)$  reflects the depth of poverty, that is, how far below the poverty

<sup>16</sup> See Burns et al. (2013) for further details on the micro-simulation model. Note that the micro-simulation model does not take into account the potential impact that the wage subsidy may have on household composition and intra-household income allocations.

line impoverished households lie. In the medium-high elasticity scenario, the depth of poverty  $(P_1)$  declines by just over 4% at all poverty lines.

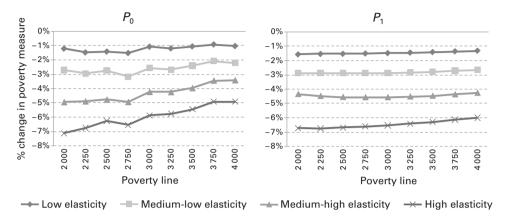


Figure 11.2: Percentage changes in poverty head count ( $P_0$ ) and depth of poverty ( $P_1$ ): youth-targeted scenario

Source: Burns, Pauw and Edwards (2010a, 2010b)

*Note*: The headcount index  $(P_0)$  measures the proportion of the population that is poor. A value of 2% denotes that 2% of the population live below the poverty line. The poverty gap index  $(P_1)$  is an indicator of the depth of poverty and measures the extent to which income of individuals on average falls below the poverty line, expressed as a proportion of the poverty line.

Some preliminary conclusions can be drawn from the CGE micro-simulation exercise. First, the strength of the existing relationship between wages and employment is important for the success of the policy in terms of creating jobs. If employers are relatively unresponsive to the subsidy, it raises the cost-per-job created quite substantially. A low employment response may, in fact, be quite likely if the administrative burden of participating in the programme is high. Moreover, these simulations assume that the unemployed possess the skills necessary to engage in employment immediately. To the extent that this is not true, even with the subsidy, firms may simply be unable to find suitable workers. The simulated outcomes are therefore likely to be biased upwards.

Finally, the model results show that the funding burden falls predominantly on wealthy households, while the gains accrue to the unemployed, who are more likely to be located in poorer households. This means that the policy is relatively pro-poor and reduces inequality. Although the decline in poverty is not negligible, it should be clear that wage subsidies alone cannot achieve ambitious goals, such as halving poverty.

## Comparison with other estimates

Other studies have also estimated the employment effects of a wage-subsidy scheme in South Africa. Comparisons across these studies are difficult, given the different groups targeted, the differing subsidy amounts and differing assumptions regarding spill overs to other sectors and the substitutability of different types of labour. Nevertheless, Table 11.3 compares the different employment and cost estimates for some of the available studies.

The table presents CGE-based simulations from four different studies. Go et al. (2009) simulate a 10% wage subsidy for low- and medium-skilled labour, whereas Pauw and Edwards (2006) simulate a fixed, annual-wage subsidy of R2 400 per semi- and unskilled worker, which is equivalent to 10% of the average annual salary of semi- and unskilled workers (in 2000 prices). The average size of the wage subsidies (as a proportion of the wage bill) is similar to those of Burns et al. (2013) and the National Treasury (2007a), who both simulate the wage subsidy published as part of the 2007 budget documentation (National Treasury, 2007b).

The results of the CGE-based studies are broadly consistent with one another. Go et al. (2009) and Pauw and Edwards (2006) simulate a slightly lower increase in total employment (3.5 to 3.8%) than the 4.7% increase simulated by Burns et al. (2013). All these estimates are substantially higher than the 1.8% increase in employment modelled by the National Treasury (2007a) (Sim 1 in Table 11.3), but their estimates are not directly comparable because they include an offsetting social-security tax, implying a much lower effective net subsidy.

The National Treasury (2007a) also published estimates based on simulations using partial equilibrium models (Sim 2 and Sim 3). These estimates range from 1% to 3.6% depending on the methodology. This wide range reveals the sensitivity of the simulations to different elasticity of substitutions between factors and different model parameters. More recently, Levinsohn and Pugatch (2014) used an estimated, structural search model to simulate a youth-wage policy in South Africa. They found that a R1000-per-month wage subsidy paid to employers leads to a decrease of 12 percentage points in the share of youth experiencing long-term unemployment.

Finally, the National Treasury (2011) simulated the employment effects of a youth-wage subsidy granted to existing workers and new workers. Their calculations suggest that up to 423 000 new, formal-sector jobs could be created over three years, but only 178 000 of these are new jobs that would not be created in the absence of the subsidy. This is, nevertheless, equivalent to over 20% of the 800 000 young workers who would be eligible for the subsidy (National Treasury, 2011: 50). The overall impact is therefore considerable.

Table 11.3: Comparison of employment and cost estimates of a South African wage-subsidy programme

	Pauw & Edwards (2006)		Go et al. et al.	Burns	National Treasury (2007a)			National
Study				(2013)	Sim 1	Sim 2	Sim 3	Treasury (2011)
Method	CGE	CGE	CGE + micro- simulation	CGE + micro- simulation	CGE + micro- simulation	Partial equilibrium	Partial equilibrium	Partial equilibrium
Details	General subsidy, deficit financed	General subsidy, tax financed	General subsidy, tax financed	General subsidy, tax financed	Deficit financed plus social security tax	General subsidy	General subsidy	General subsidy
Target	Medium & low skilled	Medium & low skilled	Medium & low skilled	Medium & low skilled	Low wage	Low wage	Low wage	Low wage, youth
Total employment gain (%)	3.5	3.6	3.8	4.7	1.8	1	3.6	22.5
Employment gain for unskilled workers (%)	8.7	9.0	5.4	6.0				
Subsidy cost per job created	R28 835 (2000 prices)	R28 259 (2000 prices)	R47 407 (2003 prices)	R23 908 (2000 prices)	R98 500 (2003 prices)	R49 000 (2003 prices)	R15 714– R18 333 (2003 prices)	R27 900 (2011 prices)

Notes: Go et al. (2009) simulate a 10% subsidy applied to low- and medium-skilled labour with the cost financed through increased household taxes. Their employment estimates vary according to the choice of elasticity of substitution between factors and equal 1.9% (low-substitution elasticity), 3.8% (medium elasticity) and 7.2% (high substitution elasticity). The National Treasury (2007a) CGE estimates (Sim 1) assume a 10% ad valorem wage subsidy provided to medium- and low-skilled labour employed in the formal sector, combined with a social security tax to offset two-thirds of the wage subsidy cost. The partial equilibrium estimates (Sim 2 and Sim 3) are based on projections of South Africa's population, labour force and formal employment from 2005 to 2010. They simulate a subsidy equal to one-third of the wage for wage levels up to R1 000 per annum, a subsidy of R7500 minus one-sixth of the wage for wages between R15000 and R45000 per annum (where the subsidy equals zero) and a compulsory social-security tax of 15% of gross earnings, up to a ceiling of R60 000. Pauw and Edwards (2006) simulate a fixed annual wage subsidy of R2400 per semi- and unskilled worker. The National Treasury (2011) youth-employment subsidy equals 20% of income for workers (aged between 18 and 24 years) earning up to R24000 per year. For new workers aged between 18 and 29 years, the subsidy amount is 50% in the first year if the worker is earning up to R24000 per year. Both wage subsidies taper to zero at R60 000.

## Are wage subsidies appropriate for tackling unemployment in South Africa?

The modelling simulations show that a wage-subsidy scheme can significantly raise employment if markets work well, that is, if employment is responsive to the subsidy, and if workers possess the appropriate skills to take up the new employment opportunities. However, the international evidence is less sanguine about the merits of wage subsidies in a developing country context. Part of the reason is that the wage-subsidy scheme may not adequately deal with the various sources of the country's low-employment problem. A wage subsidy targets wage-induced unemployment, so to the extent that high labour costs drive unemployment in South Africa, such a policy would represent an appropriate intervention.

The role of labour costs, as a major determinant of the unemployment problem in South Africa, is widely debated and contested, and the evidence is mixed. At best, the evidence on labour costs as a contributing factor in rising unemployment suggests that wage costs per se may not be as important as productivity concerns. Indeed, real wages have been falling over time (Banerjee et al., 2008). However, non-wage costs of employment, due to stricter labour-market legislation and regulation, the emergence of a strong trade-union movement, and rigidities imposed by bargaining councils have increased in the post-apartheid era (see Bhorat, 2008; Fedderke, 2006; Nattrass, 2000; and Chapter 14 in this volume).

To the extent that onerous labour-market regulations and high labour costs are perceived as significant barriers to employment by current South African employers, the design of any wage-subsidy scheme for work-seekers should also consider the provision of a probationary period—during which time the subsidised worker could be fired at will—as part of the scheme (Levinsohn, 2008). While the possibility exists that such provisions might be abused by unscrupulous firms, the risk should be minimal since firing a productive worker simply to exploit the provisions of the probationary period does not make good business sense, and the firm in question would face additional hiring and training costs associated with subsequent hire.

Arguably the most important factor influencing employment in the long run is economic growth. Unfortunately, South Africa's GDP growth during the post-apartheid era has been lower than expected, remaining stuck in a band of 2% to 3% per year until the early 2000s. Growth then improved to between 5% and 6% per year until the onset of the current financial crisis. South Africa's historical growth in GDP per capita is poor, even in comparison to other middle- and low-income countries. Between 1980 and 2008, South Africa experienced only a 0.3% growth rate in GDP per capita, compared to a 1.15% growth for other upper-middle-income countries. Hence, South Africa's relatively poor growth

performance has certainly acted to constrain job-creation efforts. Arguably, a wage subsidy is not the first, best policy response to addressing inadequate employment demand associated with slow economic growth. Rather, aggregate investment, education, infrastructure, market power, and industry concentration and openness have all been found to be important determinants of South Africa's growth process (Fedderke, 2006).

The economy has also experienced structural shifts in output, which in turn hold implications for employment. Structural shifts in output from the tradable sector to the services sector have reduced the employment intensity of output (Rodrik, 2008). These structural shifts in production have been accompanied by technological change that favours demand for skilled workers over unskilled workers, which has contributed towards a skills shortage in the labour market. This skills shortage matters not only because firms who are unable to fill key positions will be constrained in their production decisions and activities, but also because skilled and unskilled labour in South Africa appear to be complements (Behar, 2010). Thus, raising the supply of skilled workers and filling these positions would generate an increase in the demand for unskilled workers.

Structural unemployment in South Africa is unlikely to correct itself without some form of policy intervention (Banerjee et al., 2008). Certainly, wage subsidies will, through raising the attractiveness of low-skilled jobseekers relative to others, lead to an increase in overall employment. However, such a policy still does not directly address the underlying problems of inadequate or irrelevant education, skills and experience, which lie at the heart of the structural unemployment problem. International experience indicates that wage-subsidy schemes are often combined with training programmes, especially in developing countries. This need for an additional training component may be especially true in the case of a subsidy targeted at a high-risk group, such as unemployed youth. South Africa has an established learnership programme. Maximising the complementarities with these learnership programmes could be considered when expanding on the existing wage-subsidy scheme.

## Conclusion

South Africa's unemployment situation is untenable. It constitutes a significant loss in current output in the economy, while the long-term unemployed lose their skills. This loss negatively affects the economy's future production capacity. Unemployment is further closely associated with various socioeconomic problems — in particular, the high incidence of poverty. Lowering unemployment is, therefore, of utmost importance.

CGE estimates suggest that a wage-subsidy scheme could make a contribution in terms of raising employment and reducing poverty, under the assumption of

well-functioning markets, and a fairly strong employment response by employers to the subsidy.

The international experience of wage subsidies, however, provides important lessons for the success of wage-subsidy policies. Care should be taken to target sectors in which employment will be responsive to lower costs of labour. In addition, the subsidy value should be high enough and administrative requirements should be minimal enough to promote participation by firms. An additional consideration is linking a training component to the wage-subsidy scheme, which would enable workers to adjust to the changing job requirements associated with technological advances and structural changes in the composition of production.

Ultimately, however, wage subsidies should not be regarded as permanent solutions to unemployment, nor are they necessarily the first, best solution to the true underlying sources of unemployment. These subsidies do not overcome the various constraints to economic growth and job creation, which are best addressed through long-run initiatives that encourage firm entry and growth, and that improve workers' skills and education. Nonetheless, a wage-subsidy scheme may be an indirect way of stimulating employment while complementary growth, education and labour-market policies with a longer-run focus are being implemented.

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## Chapter 12

# Public employment and inclusive growth: Unlocking the transformative power of labour

Kate Philip

## Introduction

The government should pay people to dig holes in the ground and then fill them up. This quote is so widely ascribed to John Maynard Keynes that it barely seems to matter that he never actually said it. Economists in the Keynesian corner have been at pains to explain that the emphasis of his (much distorted) argument was on the significant multipliers that a government stimulus could be expected to have, over and above the direct value of any work performed.

The inadvertent effect of this widely misused quote has, however, been to tarnish public employment with an image that is often reduced to the unproductive digging of unnecessary holes, and its social and economic impacts are dismissed accordingly.

In the context of a global economic crisis, there has however been a renewed search for the forms of stimulus most likely to unlock employment creation. With this has come a renewed interest in the role and impact of public employment and its social and economic multipliers — and the potential of these to contribute to inclusive growth.

Implicit in the concept of inclusive growth is recognition of the damage to society caused by economic inequality, economic exclusion and high levels of poverty. A focus on inclusive growth arises in contexts of high inequality—or where growth is having disequalising effects—and is concerned with issues of distribution. In addition, the concept introduces a focus not only on the outcomes of growth, but also on the processes of growth, and the levels of participation—or inclusion—in these processes. As such, the concept introduces a set of social dimensions into the growth debate.

A strong focus of this book is on the role of employment as the single most important instrument in relation to distribution, as well as to participation and inclusion. The focus of this chapter is on the role of public employment within the wider spectrum of employment policy, and its scope to contribute to inclusive growth.

The challenge of employment creation is typically seen as belonging in the domain of economic policy. The significant social impacts of unemployment mean, however, that the issue of employment should instead be seen as being at the interface between the social and the economic in society. Few failings in the economy impact as directly on social outcomes and social costs as unemployment; few failings in the economy have as huge an impact on the well-being of individuals, of families and of communities. The social problems that arise from unemployment—direct and indirect—raise the costs of poverty for the rest of the economy and for society, and can also translate into economic and social instability.

Despite the importance of employment to society, and despite the fact that public employment is able to create employment when markets fail, there is, nevertheless, a sense in some quarters that this is a form of 'cheating'; that employment creation 'counts' only if it is market generated, and that public employment is legitimate only as a short-term crisis response, seen largely as a holding strategy. Unemployment is not, however, a problem only in times of crisis. Instead, in many parts of the world, the employment content of economic growth was in decline well before the crisis (see Chapter 2).

In response to this reality, recent innovations in public-employment programmes (PEPs) include a shift towards longer-term programmes, institutionalised as an ongoing part of counter-cyclical employment policies. Where this takes place at sufficient scale, new opportunities arise for PEPs to have more systemic impacts — including on inclusive growth.

At the most obvious level, PEPs contribute to inclusive growth by increasing the employment intensity of whatever growth takes place; but their inclusive effects go well beyond this statistical sleight of hand. Investment in public employment also acts as a form of stimulus, targeted directly into local economies. Multipliers from this investment into employment then trickle up into the wider economy—rather than employment being the trickle-down variable that often never quite gets where it was intended to go. If the purpose is to reach poor people and marginalised areas, PEPs provide an instrument that can do this.

This chapter highlights current innovations in public employment, particularly in India, before focusing on the South African context and using evidence from South Africa's Community Work Programme (CWP) to illustrate the potential for PEPs to impact on inclusive growth.

## **Innovation in public employment**

In India, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) of 2005 introduced a rights-based approach to employment, with the introduction of a rural-employment guarantee. In terms of MGNREGA, every

rural household that needs to participate is guaranteed 100 days of work per annum in public employment: creating a right to a minimum level of work for those who need it in rural areas (Sharma, 2010).

In this way, India has given effect to the concept of the state acting as the employer of last resort, developed by neo-Keynesian economist Hyman Minsky. He argued that policies for achieving full employment should not be based on subsidising demand, but on providing employment to all those willing and able to work at (or slightly below) the minimum wage. Minsky argued that only government can create an infinitely elastic demand for labour, and that such an approach has less detrimental effects on inflation than the alternatives, with social and economic multipliers that give it a clear advantage over welfare options for the working-age population (Papadimitriou, 2008).

While the guarantee provided by MGNREGA is qualified in certain respects, it nevertheless creates an entitlement to work for rights-holders. Over 60 million people have thus far worked on the scheme since programme implementation began in 2006. It is not without challenges and implementation problems — hardly surprising given its scale and the rapidity with which it has been rolled out. It is also not immune from corruption. What differentiates it within India, however, is its strategy of dealing with corruption through unprecedented levels of transparency: all work performed and all wage payments made — to all 60 million participants — can be viewed on the public website.¹ This is complemented by statutory social audits, which take place every six months, at which relevant officials report back on all aspects of the programme to local citizens. Support documentation for all contracts and transactions are expected to be placed in the public domain.

This policy innovation in India has shifted the terrain of debate. Up until now, the right to work has meant the right to work when work is available. In the context of an employment guarantee, it becomes a right to work when work is needed: up to the limit of 100 days per annum. Such a shift has potentially profound implications at many levels which are still becoming manifest in India. These include shifts in migration patterns, with reductions in distress migration; it has caused increases in real rural wages, reduced the wage gender gap, and significantly increased the labour-force participation of women (Chandrasekhar & Ghosh, 2011; Sharma, 2010).

Not surprisingly, there is much contestation over the programme. The most controversial of the impacts have been on wage levels and minimum labour standards. MGNREGA has a national minimum wage that is higher than market wages in most of rural India. This was a policy decision, intended to have the

<sup>1</sup> Available from: http// www.nrega.nic.in

effect of raising labour standards in a context in which working poverty is one of India's biggest challenges, and in which minimum wage rates are honoured mainly in the breach (Lieuw-Kie-Song et al., 2010).

In a context of an employment guarantee, the wage rates in a public employment programme become the *de facto* minimum standard, because — for nearly half of the year at least — workers have an alternative to exploitative conditions of work. The existence of such an alternative is proving to be a far more effective instrument for raising market wages than previous strategies that relied on the enforcement of minimum wages — giving rise to substantial opposition from rural employers.

While MGNREGA is certainly the most dramatic innovation in policy in this area, other forms of innovation are taking place in other parts of the world, in ways that open new policy opportunities. In Ethiopia, for example, the Productive Safety Nets Programme combines social protection and public employment, with a cash grant for those unable to work, and public employment for those who can. It is designed to provide an alternative to Ethiopia's dependence on food aid, in the context of predictable, cyclical food shortages. Like MGNREGA, it is a long-term programme, institutionalised at the local level, and has achieved significant scale — reaching over eight million people in its first five years (Lieuw-Kie-Song et al., 2010). Cambodia also has a programme that combines public employment with social protection. Nepal has tabled an Employment Guarantee Act in its parliament, and countries including Mexico, Kosovo and Pakistan are designing large-scale programmes. The director of the International Labour Organization (ILO) has called for employment guarantee schemes for youth in Europe.

### Taking public employment to scale in South Africa

A policy commitment to public employment is not new in South Africa. Innovation in the Expanded Public Works Programme (EPWP) includes the mainstreaming of labour-intensive approaches within public infrastructure development, the focus on environmental works—before this became a wider trend internationally—and the introduction of work in the social sector as part of public employment. However, one of the biggest challenges in the EPWP has been to achieve meaningful levels of scale. Labour intensity is also relatively low, which raises the costs of expansion. A review of phase one highlighted that many participants were exiting back into poverty after short-term episodes of work.

Against this backdrop, the Community Work Programme (CWP) was developed as an outcome of a strategy process initiated by the Presidency and included as part of phase two of the EPWP. CWP was designed to enable public employment to go to greater scale, and to target areas of greatest need. It was designed to be quick, easy and cost-effective to implement—and to be

community driven. It is also designed to adapt the concept of an employment guarantee to South African needs, and demonstrate how such an approach might be implemented (TIPS, 2009).

The rationale for an employment guarantee in South Africa is certainly compelling (see Philip, 2011). The critical policy moment to take this forward was in the National Planning Commission's (NPC's) National Development Plan — and the merits of such a policy were debated as part of its deliberations. The NPC baulked, however, at the implications of such a policy, for two main reasons.

Firstly, fiscal concerns about the likely scale of demand translate into high levels of policy anxiety. Such demand is likely to include not only the formally unemployed, but also those currently 'discouraged'—and may even include some of the working poor too, in a context in which incomes in the informal sector are often below the current minimum wage promulgated for EPWP. The scale of demand is therefore potentially massive.

A guarantee can, however, be limited in ways that reduce the fiscal risks. India's guarantee, for example, is restricted to rural areas and the 100-day allocation is per household not per individual. While limits placed on the scope of a guarantee will restrict its impacts, good design should be able to find a compromise that optimises targeting, at the same time as limiting the level of fiscal uncertainty and the costs.

The second key concern related to the absorptive capacity of public employment programmes. Given the likely scale of demand, can meaningful work be identified at the scale required? This is an open question, but one that the CWP model starts to put to the test.

Instead, the NPC proposed a formula that—while not a guarantee—would nevertheless constitute a significant expansion of the scale of public employment.

The target should be to achieve 100-days of work opportunities for 50 per cent of the unemployed, per year using the expanded definition of unemployment. The sectoral programmes of the EPWP should continue to be implemented wherever the relevant outputs are required, while the Community Work Programme target should be based on a ratio of unemployment levels to population levels per municipality, so that it is targeted towards areas of greatest need.

(National Planning Commission, 2011)

### The nature of the beast

Like so much else in South Africa, unemployment is unequally spread—and its costs unequally shared. While the national unemployment statistics are bad enough, they represent an average figure. If these are disaggregated to the

local level, too many rural municipalities have unemployment rates of over 50% — with some claiming unemployment levels of over 80% in their integrated development plans. Contested though these local level statistics are, the point is that unemployment is an uneven burden, and in the poorest areas, over half of the people who could be economically active are unemployed. This impacts on the whole community and local economy.

There is also a trend to longer-term unemployment in South Africa, with 67.8% of the unemployed having been unemployed for more than a year in 2012 (Stats SA, 2012). Just under 70% of these are under 35 years of age; 93% have a matric or less, and 60% have not completed secondary school. They are unskilled. Many have never worked.

This is a terrible mix, concentrated in marginal areas that crowd in disadvantage. Its implications include the following: when people lose their employment, they become progressively less employable over time, because they lose the skills, habits and disciplines of work. Those who have never been employed may never learn these. A lack of work skills also limits people's chances of success in self-employment. The rise in long-term unemployment is, therefore, associated with a progressive decline in the capabilities associated with productive work and increasing numbers of people becoming effectively unemployable.

The scale, duration and age profile of unemployment means that an unacceptably high proportion of people are simply not exposed to the world of work during the prime of their productive lives — with their chances of productive inclusion declining over time. In communities in which the majority of people are unemployed, young people are growing up with limited role models of people in employment. For many, the link between work and remuneration is also simply absent from their experience — and absent as a norm in their communities. The real possibility exists of a generational decline in the capabilities associated with work.

The aggregate effect of all of this in eroding the productive potential of the economy as a whole is simply unknown, as are the intergenerational effects; but it is unlikely to be a positive story.

To make matters worse, there is no meaningful social protection targeted at the unemployed. South Africa's extensive social-protection system is targeted mainly at people whom society does not expect to work: at old people, children and those with disabilities. Unemployment insurance covers only 3% of the unemployed at any given time (Klaasen & Woolard, 2008), leaving them dependent on goodwill transfers from within their communities: either from wage remittances or from indirect access to social grants.

This is impoverishing for households, most of which are already in the lowest two income deciles, and it has a further disequalising impact on society as a whole, because the significant cost burden of unemployment is borne disproportionately by the poor. Such dependence has negative impacts on both genders. For women—particularly those without indirect access to the child-support grant—it deepens power imbalances in the household and in their communities, with a range of negative consequences. For young men, such dependence is emasculating in a context in which the ability to start a home and support a family marks a critical transition to adulthood. Although such 'masculinity' may be socially constructed, its impacts are no less powerful for that.

In this context, the overriding priority is to create a mechanism that gets people to work, whether markets are able to do so or not. Exposing people to work experience and making the world of work a real place that is part of people's everyday lives is a vital investment in the future potential of the economy as a whole—and of its potential to achieve inclusive growth.

### **The Community Work Programme**

The essential logic of the CWP is that in poor and marginalised communities, there is no shortage of work to be done; these communities are dysfunctional at many levels. High levels of unemployment compound this, creating a negative downward spiral. The rationale behind the CWP is to get people to work, to get communities to work, thus creating a positive cycle instead.

The CWP was designed in recognition of the deep structural nature of unemployment, which means that, particularly in the poorest and most marginalised areas, market-based employment will be a long time coming. Rather than being a short-term intervention, the CWP is designed to be institutionalised as an ongoing programme at local level. The CWP has the following design features:

- The CWP is an area-based programme that offers regular part-time work to participants on an ongoing basis. This is two days a week, sometimes managed as eight consecutive days a month, adding up to 100 days a year.
- The work in the CWP is not prescribed, but is decided at local level. It has to be 'useful work', which serves the public good and/or improves the quality of life in communities, and is decided through local participatory processes.
- The work has to have a labour intensity of 65%, making the programme highly cost-effective with impacts on the kind of work that can be done.
- Although it is a government programme, currently managed by the Department of Co-operative Governance (DCoG), it is implemented by non-profit agencies. Local government and other local stakeholders participate in advisory reference groups at site level.
- The conditions of work are covered by the Ministerial Determination of Working Conditions in EPWP; the wage paid in 2016 is R76 a day, which translates into R608 per month for part-time work.

By the end of March 2016, the CWP was operating in 228 sites, with approximately 210 000 participants. Its current target is to have a site in all 257 municipalities by March 2017, which means starting an additional 29 sites with the target participation rate per site growing over time to increase local coverage. This would mainstream the CWP across the society, enabling systemic-level impacts instead of project-level impacts and creating the institutional architecture for an employment guarantee, if policy processes were to support such an outcome in future.

A key feature of the programme is its emphasis on community participation in the identification of the work to be performed. The assumption is that in poor communities, there is no shortage of work to be done, and that communities are best placed to identify it. This leads to a multisectoral portfolio of work that typically includes the following, plus a range of more skilled work:

- care of many kinds including for people with HIV and/or TB, for orphans and for elderly people
- food security
- youth recreation
- support to schools
- community safety
- minor infrastructure works
- maintenance and clean-up activities
- environmental rehabilitation river cleaning.

### Trajectories of impact on inclusive growth

The CWP illustrates the range of ways in which public employment can impact on inclusive growth, in terms of both its social and economic impacts, in relation to inclusion effects, as well as in relation to a range of social and economic multipliers.

### Dimensions of inclusion

### The impacts of income

When you work you exercise your mind and body. (Joe Morolong, CWP participant; Vawda et al., 2013)

While closely interlinked, the impact of participation in CWP on the lives of participants can be broken down into three distinct dimensions: (1) the impacts of the incomes in their lives; (2) the impacts of having earned this income; and (3) the impacts from participation in work. While the impact of the first of these is likely to be little different from the impact of an equivalent cash transfer in the

same hands, the latter two are part of the added value of a public-employment programme.

In CWP, part of the rationale for providing regular part-time work is to provide regular and predictable incomes; to provide participants with an earnings floor. The impacts of this can be expected to mirror those of social grants, and research has shown that a small but sustained increase in incomes is more likely to contribute to a sustainable improvement in indicators such as nutrition, health and school attendance than windfall income from a short-term opportunity, in the absence of other opportunities (Dev, 1995, in McCord, 2005). This is a key part of the rationale for the CWP offering regular and predictable work because this translates into regular and predictable income. As might be expected, the spending patterns of CWP participants show priority being given to food, clothing, education, housing and health (Vawda et al., 2013). At the most immediate level, these incomes allow participants to remove the sharp edge of hunger and deprivation in their households. 'It allows me to put food on the table,' is a common response from participants. For those such as work team coordinators, who work more days and earn more, the incomes also allow small investments that change the quality of their lives.

The sense of relief at being able to earn an income makes it clear that dependency is not a state that people choose to occupy; instead, through earning an income and participating in work, participants derive a sense of self-worth; they see themselves differently—and believe they are seen differently by those around them. Phindile Ntshangase is an orphan looking after four siblings. She is also the Njoko community garden coordinator in Nongoma:

When my mom died in 2008, I thought it was finished for my family, I felt helpless. I am really happy that now I am able to care for my siblings and myself. This has brought hope into my life. Every month I am saving R200 because I want to further my nursing studies. As long as I am employed, I will not be helpless—it is not nice for people to feel pity for you because you are an orphan.

(DCoG, 2011)

There is no doubt that the incomes are, however, low: a 'safety-net' for those in greatest need rather than a solution to the challenge of unemployment in their lives:

I think this job from CWP only helps with our CVs but the money is too little, it is almost like you are moving back, not progressing. (Randfontein CWP participant; Vawda et al., 2013).

Payment in the CWP is made through bank accounts. This is primarily an issue of audit control, but it also drives financial inclusion. Many participants do not have bank accounts when they join, and this has to be enabled. Its effect is reflected in the following words of a song that was sung by the CWP members in Nongoma, KwaZulu-Natal:

We used to go bed with empty stomachs but now we are swiping cards like educated people.

(Translated from Zulu; DCoG, 2011)

### Participation in work

There is plenty of evidence that unemployment has many far-reaching effects other than loss of income, including psychological harm, loss of work motivation, skill and self-confidence, increase in ailments and morbidity (and even mortality rates), disruption of family relations and social life, hardening of social exclusion, and accentuation of racial tensions and gender asymmetries.

(Amartya Sen, 1999, quoted in Papadimitriou, 2008)

Public employment offers participation in work. To a large extent, the impacts of such participation are the counterfactual for the impacts of unemployment: starting with self-esteem and people's view of their place in the world. A significant indicator that participation in work has meaning beyond the wage received derives from the instances where people choose to volunteer extra days of work. According to the CWP site manager in Randfontein, many participants put on their uniforms and leave their homes early even on the days they are not working, and volunteer in the fields beside those whose turn it is to work.

Harries Mathe is a participant in Ekurhuleni; his story illustrates some of the psychological impacts of being unemployed—and the role of participation in work. It also highlights that not everyone who joins the CWP is unskilled.

I was studying towards a chemical engineering degree at Wits but I couldn't finish because of financial problems. I joined CWP in 2010 after being tired of doing nothing and being called a crazy person—because of the depression I was going through with the frustration of not being able to pursue my dreams. Thanks to the CWP, I now see things in a different perspective and I'm a better person with hopes for the future and no longer called a crazy person. I am able to go to the internet cafes and surf the net for job opportunities and bursary applications. I am able to help at home

because I have something in my pocket. My biggest dream is to go back to school and pursue my career so that I can help other people who are in a similar situation as mine.

(DCOG, 2011)

Participation in work gives structure to people's lives, and regular forms of social interaction that translate into networks and access to information. These inclusion effects need not be limited to the participants in a PEP; the work outcomes can create new forms of engagement and inclusion at wider levels within a given community, impacting on the quality of social institutions, networks and people's access to support and to services.

Participation in work also creates access to skills and capabilities — some of this skills development is formal, but much of it is on-the-job. Agnes Moswale is a coordinator of the Bokfontein CWP:

When I started CWP, I was a participant and couldn't read and write. I used to sign with an X and I hated it. At our site, participants attend ABET [adult basic education and training] classes. I attended the classes and worked hard, and was promoted. As a coordinator I must write a weekly report on the work that is done by my participants. I find that I can do this as well as manage my registers. (DCoG, 2011)

It is taking us up because we are now called Health Workers. We communicate easily with nurses in hospitals. Sometimes nurses call us to come and look after people if they are too sick. We are actually growing. (Umthwalume CWP participant; Vawda et al., 2013).

Participants also report a decline in a range of forms of antisocial behaviour:

It is good to have a job, it protects one from having anger in your heart and thinking bad things, like if I can rob someone, yet when you are working, you become loving, even at home you can support the kids at home. (Randfontein CWP participant; Vawda et al., 2013)

There's no domestic violence at home, because it's a lack of money that causes it most of the time.

(Randfontein CWP participant; Vawda et al., 2013)

It has really helped me because I no longer drink that much, I am able to stay at work and keep myself busy.

(Joe Morolong, CWP participant; Vawda et al., 2013)

By contrast, in Cata in the Eastern Cape, it has been claimed that access to incomes—particularly among young men—has lead to a rise in alcohol consumption: an unintended consequence.

### **Expanded livelihood opportunities**

Even in the absence of full-time employment opportunities, many unemployed people are finding occasional casual work or engaging in livelihood activities to eke out an income — but without such activities occupying all of their time. Some of the unemployed may, in fact, more accurately be described as underemployed, without this necessarily changing their poverty status.

Part-time work is able to supplement such initiatives, rather than replacing them, creating the scope for a more diverse set of livelihood activities. At a macro level, too, this reduces any estimated losses in terms of the opportunity costs of participation.

Access to regular income, coupled with work experience and the skills derived from work, can also enhance the capabilities of participants to engage in additional livelihood activities. One of the clearest examples of this is the spill-over effects from work in food security, with the CWP participants taking the skills learned on site—and some of the income earned—to initiate household food gardens.

In the CDI study, the CWP participants at the four sites surveyed were significantly more likely to have a food garden than any of the other community members: 34% of the CWP participants had vegetable gardens, compared to only 18% of the 'very poor' group into which they fall; 93% of this food production was for their own consumption (Vawda et al., 2013).

A note of caution is needed here, though. The desire to see participants in public employment exit into market-based activities or decent work shouldn't translate into unrealistic expectations of the prospects for success. The structural constraints that provide the rationale for the CWP still apply, and if the CWP's targeting is good, most of its participants are among the poorest and most marginalised people in the country. They are not first in line for any jobs that the economy does create; for example, nearly 250 000 university graduates would be among those ahead of them in such a line — and their profile makes them the least likely to earn a decent living from self-employment either. Instead, the potential impact on livelihoods needs to be understood as occurring at three levels:

1. Increased livelihood activity (such as homestead gardening) and other forms of economic participation (such as participation in savings clubs or

- consumer co-ops) which enhance existing incomes: reducing poverty, but without being able to lift people *out* of poverty nor to replace the need for incomes from public employment or other transfers.
- 2. Increased forms of early-stage market participation: earning marginal additional income from market-based activity, increased participation in casual-labour opportunities, increased work-search. Again, reducing poverty by augmenting incomes but without being able to replace existing income sources, including from the CWP.
- 3. Access to formal employment and/or self-employment, on terms that secure a sustainable income able to replace dependence on part-time employment from the CWP or goodwill transfers from others. While this is the most desirable level of impact, it is likely to prove the most elusive under current economic conditions.

The examples given by participants highlight how they supplement their CWP incomes with income-generating activity—but highlight also just how marginal many of these activities are.

I say, being self-employed is good because work is scarce these days, so we cannot just sit and say the government will give us work, so at least so that the kids can have food, you can sell paraffin, crisps and tomatoes. (Randfontein, CWP)

Even when I'm selling chips, I wish that I can succeed. That small thing that I'm doing to support my salary from CWP. (Umthwalume, CWP)

I pick up bottles and sell them and get that little bit. It's okay, and at times other women join in with me. (Randfontein, CWP)

Like chicken feet we sell that also. At the end of the day you have R30 and the kids have bread and pocket money for school the next day. Moderator: Do these things make a difference?

More than the word, it makes a difference.

(Randfontein, CWP; all from Vawda et al., 2013)

In contexts of dire poverty, even marginal increases in income can have important effects — with public employment providing an avenue for productive inclusion and an entry point into enhanced economic activity: and a mechanism able to animate this and provide a supportive framework for it.

### Multipliers in the local economy

CWP incomes have an impact on aggregate demand, with income in the hands of participants trickling up into the local economy—'thickening' local markets and creating new opportunities as a result. Multiplier effects at this level will depend on the extent to which the income circulates locally.

Although 66% of the CWP participants in the CDI study spend at least some of their money in local spaza shops, the local economy increasingly includes Spar, Jet, Pep and Kentucky Fried Chicken. One local Spar has commented to the implementing agency that they have seen increases in turnover as a result of the CWP (Teba Development, 2011). While this means much of the money is returning all too rapidly to the core economy, consumption spending by the poor has a far higher South African content than spending by the middle classes. So, even if it is supporting the bottom lines of monopoly industry in the food sector—it is nevertheless contributing to sustaining jobs at this level.

At the same time, the Spar's increase in turnover creates an opportunity for a discussion about enhancing its local procurement, with fresh vegetables a good starting point—and, in fact, Spar is one of the retail chains that has taken the initiative to support and procure from local smallholder farmers, in Thohoyandou for example.

In addition to consumption spending, there is also evidence of increased participation in savings schemes and stokvels. In Sterkspruit, for example, 480 participants and 20 coordinators initiated a stokvel to which each member contributes R100 on a monthly basis for a year. The participants have also established a burial scheme to which members contribute R20 per person (Kganya-Ka-Kitso, 2011).

In the CDI study, the CWP participants show a slightly greater propensity to save than other members of the community (although how anyone can be expected to save at these income levels is another question). While they also have debt, their reported debt levels are not greater than wider community averages (Vawda et al., 2013).

There is also some scope for local procurement of tools, materials and safety gear, with the volume requirements creating economies of scale for suppliers, potentially strengthening local distribution systems and enhancing the viability of other forms of enterprise. For example, the implementing agency, Teba Development, has promoted local seedling production by placing large orders from local suppliers, stimulating local seedling production and making seedlings available in the wider local economy, with knock-on effects on subsistence agriculture and local food production (Teba Development, 2011).

### Multipliers from the assets and services delivered

Public works programmes have traditionally had a strong focus on infrastructure development. Where infrastructure is needed — and where technically appropriate — they use labour-based methods to enhance employment creation in the process. Where basic services and economic infrastructure are lacking, such an investment can be a 'game-changer' in terms of the quality of life, as well as local economic development, enhancing the scope for growth. The increasing focus on forms of work in the environmental sector can also have systemic effects on access to water resources and on local productivity, translating into enhanced local growth.

Most forms of infrastructure are not, however, able to achieve labour intensities much above 35%, even using labour-based methods, which makes this an expensive option if employment creation is the primary purpose. In the EPWP, for example, the average labour intensity achieved in the infrastructure sector in the 2011 financial year was 5.8% (Gamoo & Johanssen, drawing from the EPWP MIS system). While this rose to 11.8% in the 2012 financial year, it does highlight the extent to which the rationale for expanded infrastructure development must lie in the purpose and value of the infrastructure itself, with enhanced employment outcomes an added benefit, rather than it being a cost-effective vehicle if the primary purpose is to scale up public employment.

MGNREGA has a mandatory labour intensity of 60%; over 70% of the work is in environmental infrastructure, with a focus on drought protection and irrigation, with impacts on agricultural productivity.

In the CWP, the work has a mandatory labour intensity of 65% at site level. While this ensures maximum income transfer into the hands of poor people, there is a trade-off in relation to the types of works that can be undertaken. The work in the CWP must be 'useful work' which contributes to the public good and/ or improves the quality of life in communities. The work to be done is identified and prioritised at local level, using participatory approaches. In practice, partly because of the high labour intensity required and partly in response to the scale of need, a strong focus on social services has emerged. Food security is also a strong theme, with different models of support emerging in practice. By 2011, more than 45 000 home food gardens and 5 000 community clinic, crèche and school vegetable gardens had been established at CWP sites around the country, with the CWP providing the labour for these, as well as supporting food production at HIV-affected households and at child-headed households (DCoG, 2011).

Unlike many community food gardens, which rely on voluntary labour and typically underestimate how much work is involved, the CWP is paying for the labour, and is also able to provide an ongoing institutional framework to address the need for tools and materials, and provide technical support. This enhances the potential sustainability of such initiatives, and creates an implementation platform

for achieving zero hunger and targeting nutritional support to vulnerable groups: a vital contribution to future inclusive growth.

The focus on food security is closely linked to care work. Community mapping and consultation processes undertaken by the CWP have highlighted serious deficits of care at the local level. In addition to home-based care for those with HIV/Aids and TB, this includes care of the elderly and child-headed households. While much of the work involves cooking, cleaning and assisting with access to other government services, the CWP workers are often confronted with situations that require basic health-worker skills, and this in turn requires formal links to the clinics, as well as accredited training. In Bohlabelo, a team of CWP participants is supervised by the matron in charge of the clinic. They visit people on TB medication twice a day and distribute vegetables from the food garden run by the CWP at the clinic. According to Matron Eunice Malibe, the incidence of TB has declined as a direct result of the CWP's assistance, which has also released nursing staff to focus on tasks that require their skills (Teba/Lima, CWP, Bohlabelo News).

In many communities, the state of education is a concern, and a range of forms of support needs have been identified, in partnership with principals, school-governing bodies and the district. This includes functions as diverse as cleaning school toilets, maintaining the grounds, assisting with photostatting, building jungle gyms and sports facilities, helping to maintain schools as alcohol-, drugand weapon-free zones, and organising sports activities and homework classes after school.

In Bohlebelo, 550 education assistants have been allocated to 30 secondary schools, one school for the disabled, 48 primary schools and 10 crèches. All of these CWP participants are unemployed matriculants (DCoG, 2011).

Pferfferville is in arguably the Eastern Cape's poorest township, with high levels of unemployment, alcohol abuse and crime. The CWP at Pfefferville is involved in a range of support activities at schools but it is the focus on sports coaching that sets Pfefferville apart.

In addition to soccer, the CWP also coaches netball, rugby, cricket, and gumboot dancing. 'And we want to start a programme of indigenous games like klip-klippie,' says Clinton Morrow, the CWP supervisor who is in charge of the sports programme ... But soccer is the big game and the CWP are coaching at seven schools, including organizing friendly matches and a winter league for boys and girls. (TIPS Case Study Series, 2011a)

These activities link to wider programmes focused on youth recreation, and on creating public-recreation facilities. In Manenberg, this included transforming a wasteland dump and crime hotspot into a community park; in Bokfontein, a disused quarry, in which two children had drowned, was filled in and converted into a public recreational space. Murals and mosaics are used to transform public spaces.

Apart from the more predictable emphasis on the material infrastructure of the community — a road, piped water — the Bokfontein community values a pleasant public space. Their new road is lined with young trees that will provide shade and soften the harsh impression made by the broken stone and glaring heat of the road surface. The new park provides a wide green space for a marginal and impoverished community 'to enjoy nature', in Mohlala's words, like any other more prosperous community. (Langa & Von Holdt, 2010)

Community safety is also an area of focus, with the CWP reviving community policing forums in places such as Tjakastad, clearing the bushes and long grass to make it safer for women and children, and operating street patrols.

[We] now notice the level of crime decreasing. So as far as I am concerned, the CWP and the patrollers are doing a fine job and must never stop. (Randfontein, non-CWP member of the community; Vawda et al., 2013)

Many sites include an environmental component. To enhance this, the DCoG has recently entered into a formal Memorandum of Understanding with the Natural Resource Management (NRM) programme of the Department of Environmental Affairs (including, for example, Working for Water). The NRM programme will assist the CWP to draft environmental needs analyses at each site, and will provide technical support and quality assurance of the CWP's involvement in this area. It is envisaged, for example, that where Working for Water has cleared invasive alien vegetation, the CWP will perform the maintenance function, enhancing the effectiveness of Working for Water's efforts.

The CWP's involvement in the Hartebeespoort Dam remediation programme provides an example of what can be done.

People who live in Diepsloot, Bez Valley, Alexandra, Munsieville and Ivory Park all live near the Jukskei River. Instead of the scenic beauty associated with rivers, this one is filthy. In some places it looks as if a garbage truck dumped its contents into the river: plastic bags float around. Then there are

the cold drink bottles, milk cartons, soiled nappies, dead animals, animal and human excrement and even worse. Sometimes, sadly, dead babies are thrown into the river ...

(TIPS Case Study Series, 2011b)

The CWP involved 2904 people in river-cleaning activities. More than 60 kilometres of river banks were cleaned, 2035 tonnes of debris and 731 tonnes of hyacinth and Caribbean weed were removed (TIPS Case Study Series, 2011b).

### Implementation challenges and risks

While the trajectories of the CWP impact have been mapped here, the scope and depth of such impacts depend on effective implementation — and as always, there are implementation challenges.

A key design feature of the programme is its emphasis on providing 'regular and predictable' work. To achieve the anticipated impacts of this, both work and the payment for work need to be regular and predictable. In the context of institutionalising the CWP in government, however, efficient payment systems proved to be a challenge, particularly in the early years. In 2011, a series of delays in payments due to workers by the Department of Co-operative Governance seriously destabilised the programme on the ground, with toyitoying the inevitable result. In 2012, there were instances of lengthy arrears in payments to implementing agents. This included payment for tools, materials, safety gear and other non-wage costs, with significant payment arrears in some instances. In practice, this meant sites operated with inadequate tools and materials, shortages of safety gear, an inability to contract in technical support or provide training. While at one level this is a bureaucratic constraint, and may be transient, its potential to erode the quality of work—as well as the morale at site level—is significant.

Another important shift has been the pressure on the labour intensity ratio in CWP. Budget cuts in 2014 and 2015 confronted the programme with a choice between cutting the numbers of participants or raising the labour intensity level. While the latter was chosen, its effect was to reduce the funds available for such costs as tools and materials, safety gear, training and technical assistance, with negative impacts on the quality of work outcomes.

Another implementation risk is that the more successful the CWP is at local level, the greater the risk of attempts at capture and patronage, both inside and outside the state. Unless measures to address such risks are institutionalised and enforced, this has the potential to undermine the programme's development impacts. Linked to this are the risks of corruption, which require ongoing vigilance.

Finally, in a context of significant pressure to scale up, there is a risk that effective community-development processes take a back seat to achieving 'the numbers'; also that the necessary capacities to run the programme effectively at grassroots level are not available on a wide enough scale, and the quality of outputs declines over time.

### **Conclusion**

The community work model's importance lies not only in its scalability, but also in the way social mobilization is made integral to the rollout process, using non-profit agencies to implement the programme and creating new forms of partnership between government, civil society and communities.

The type of public employment that the commission advocates is not just income transfer in disguise. It is about inculcating a new mindset that empowers people to contribute to their communities.

(National Planning Commission, 2011)

Inclusive growth has two main dimensions, focused firstly on the outcomes of growth, measured in relation to the distribution of growth; and secondly on the process of growth, in relation to participation and economic inclusion. This chapter argues that public employment contributes to both of these dimensions, and has illustrated some of the trajectories through which it is able to do so.

The emphasis on inclusive growth arises in contexts of high inequality. Growth under these circumstances tends to reinforce existing patterns of distribution, hence the need for a special focus on finding ways to make growth more inclusive. Part of the challenge is, therefore, to find a form of public investment—or stimulus—that is able to break this cycle, in a context in which measures that rely on a market response will tend to reproduce existing patterns of distribution. Public employment provides such an instrument, offering a form of public investment in employment, able to target the most marginalised directly, putting the funds where they are most needed, and allowing other economic impacts and multipliers to trickle up from there—often into poor local economies, thickening local markets and creating new scope for market development in these areas.

This form of investment also unlocks what is otherwise a wasted national resource. South Africa's levels of unemployment mean that, at present, growth takes place on the backs of only 65% of the potential national workforce. Not only is labour an underutilised resource, it is also a wasting asset, because the longer it is not used the less its potential value becomes. Yet, while markets may not be able to absorb this labour, there is no shortage of work to be done in poor communities. Public employment unlocks the transformative power of labour in these contexts. In the process, as the CWP illustrates, there is scope to engage

communities in the development process in new ways, to mobilise new forms of partnership in this process — and to unlock new forms of economic agency at the local level, in a context in which deep structural factors have made this difficult for markets to do. Public employment addresses the social need for employment; through 'useful work', it can also address social needs.

At present, the limited scope of social protection for unemployed people compounds the impacts of structural exclusion. Certainly, a cash transfer would help. But for those who are willing and able to work, access to employment adds social and economic value which includes the dignity of being productive rather than being dependent; with socially useful work having inclusion effects not only on participants, but potentially also on the communities at large.

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Part V
Employment
and the
manufacturing
sector





### Chapter 13

# Capital-intensive industrialisation, comparative advantage and industrial policy

Anthony Black and Reviva Hasson<sup>1</sup>

### Introduction

While manufacturing is not a major source of employment expansion in most middle-income countries, the poor performance of the sector is a significant contributor to South Africa's employment problem. Apart from the fact that growth of exports and output in general has been lower than that of a number of comparator countries, the sector is unusually capital intensive and capital intensity has increased rapidly, especially since the early 1990s. The aim of this chapter is to explore the role of industrial policy in addressing South Africa's chronic unemployment problem. It should be stated at the outset that industrial policy is by no means the only component of a policy package to encourage a more labour-absorbing growth path. For instance, one issue, which is not directly considered here, is whether manufacturing should receive the high level of support that it does in relation to other (more labour-intensive) sectors such as agriculture. Nevertheless, industrial policy clearly has an important role to play in a strategy aimed at promoting labour-absorbing growth.

The following section asks what should be different about industrial policy in the South African context of massive structural unemployment. The starting point is that while more rapid economic growth is an important objective, at any given rate of growth, the economy needs to become more labour demanding and this should be a greater focus of industrial policy.

The chapter goes on to examine the link between industrial policy and capital-intensive development. Pre-1994, the weight of support was biased towards investment in capital-intensive (and energy-intensive) enterprises. With the advent of democracy, government set a multiplicity of policy objectives which included greater diversification of manufactured exports. But *de facto* there was

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a surprising level of continuity in the ongoing assistance for heavy industry. This is part of the reason that 'traditional' export sectors have continued to expand and that there has been relatively little diversification into non-traditional manufactured exports.

The conclusion argues that the ongoing bias in favour of heavy industry has been damaging, not only for employment but also for growth. It has also led to South Africa's economy being extremely emission intensive. South Africa's industrial policy has acted to strengthen competitive advantage in resource-based, capital-intensive sectors of manufacturing and undermined the prospects of more labour-demanding sectors. Industrial policy needs to shift away from direct or indirect assistance to more capital-intensive sectors and should be actively used to promote more labour-demanding sectors and subsectors.

## The growth path, comparative advantage and the role of industrial policy

Moving to a more 'labour-demanding growth path' means generating higher levels of employment per unit of output, or increasing the 'labour intensity' of output. Raising the overall economy-wide employment intensity of output could be achieved in two main ways. Firstly, through a change in technology: existing economic activities could become relatively more labour intensive. It should be stressed that we are not proposing that labour-intensive methods be adopted that would reduce output and increase costs. Rather we are suggesting the *removal* of existing price distortions that discourage employment and favour capital investment. The second means of increasing labour intensity across the economy would be to shift the overall composition of the economy towards more labour-intensive sectors. Similarly, support could go to those areas of the economy that are more labour intensive, such as 'small' firms and the informal sector. Essentially what this means is that state resources and public funds be used, not in the support of capital-intensive industries but rather in the promotion of more labour-demanding activities.

### Comparative advantage and industrial policy

Over time it would be expected that as the economy develops, manufacturing labour productivity will increase as technology improves, skill levels increase and more capital is invested per worker. The rate of growth and investment will be important factors driving this process and the result will be that the number of workers required to produce say R1 million of value added, will fall over time. A central argument in this book is that the economy needs to become more employment intensive. At a given rate of growth in output and manufacturing

investment, this could happen in a number of ways. It could imply more rapid expansion of light manufacturing relative to heavy industry, for instance garments or metal products relative to steel. It could also happen via a slower pace of capital intensification within existing sectors (Black, 2011).

In an open, market-based economy, the trajectory of industrial development will be driven by a country's comparative advantage. The profile of the manufacturing sector will reflect, therefore, endowments of labour and capital and also resources. However, comparative advantage is not simply a matter of initial endowments. It develops over time and will be shaped by the rate of accumulation of skills, capital and technology, in which government policy plays an important role. Economic policy, and in the case of manufacturing especially industrial policy, may directly and or indirectly shape these outcomes.

Industrial policies can be more or less interventionist. For instance, proponents of interventionist industrial policy have argued for 'getting prices wrong' to accelerate industrial development and growth in general (Amsden, 1989). The 'prices' Amsden was referring to here include the exchange rate and cost of capital, and in her conception include selective interventions, including protection and subsidies, to support some sectors above others. From a more neo-classical perspective, Lin (2009) is supportive of a role for industrial policy, but cautions against strategies that defy comparative advantage by supporting activities which are too capital- or skill-intensive relative to the economy's underlying comparative advantage.

There is also the question of what industrial policy is endeavouring to achieve. It is generally argued that industrial policy is concerned with promoting structural change and improving economy-wide efficiency (Chang, 1994). Frequently, this is conceived of as moving up the technological ladder, for example from agriculture to industry, or the promotion of diversification into non-traditional sectors and the promotion of high-technology sectors. In East Asia, for example, industrial policy is generally regarded as having been successful in leading firms to move rapidly into more capital-intensive and technologically advanced sectors, the so-called 'flying geese' effect. Japan led the way and was followed by countries such as Taiwan and Korea, which were able to upgrade their manufacturing sectors from labour-intensive products to ships and consumer electronics, and finally into high-technology products such as semi-conductors. 'Moving up the value chain' can also take place within sectors such as clothing manufacturing by, for example, shifting from basic garments to high-quality clothing with value created through branding and design.

However, it is important to note that industrial policy played a key role in initially creating competitive advantage in labour-intensive export industries in East Asia, which was how they achieved a high-output elasticity of employment in these

high-growth sectors. This underpinned the dramatic success in poverty reduction in countries such as Taiwan, Korea and, more recently, Vietnam (Khan, 2007).

Raising economy-wide productivity is generally construed to refer to labour productivity, that is, the output per worker employed in manufacturing. And this happens via various forms of upgrading. It is argued in this chapter that the objectives of industrial policy must depend on context, and the key defining contextual factor in South Africa is massive structural unemployment. Unemployed human resources on this scale represent the most glaring 'inefficiency' afflicting the South African economy, and result from both 'market' failure and 'government' failure. In the South African context, setting the labour productivity of employed workers in manufacturing as the key performance indicator is inappropriate as it measures the productivity of our most overabundant factor — unskilled and semi-skilled labour. In this high unemployment context, it should be a secondary concern behind raising the level of participation in the labour force. Our central proposition is that, intuitively, it should be much easier (require less capital and other resources) to raise the productivity of an unemployed worker from zero to a low number than to achieve an equivalent productivity gain in, say, a car-assembly plant, where labour productivity is already relatively high (Black, 2011).

In practical terms, this would involve the allocation of scarce capital to mobilise underutilised labour rather than its concentration in sectors, firms and factories where the productivity (of employed labour) is already relatively high and where there are likely to be limited opportunities for further productivity gains.

These kinds of choices are not simply the domain of labour-market policy but lie at the heart of industrial policy. In the South African context it may not be appropriate, therefore, to aim industrial policy solely at its traditional targets—addressing market failures such as underinvestment in research and development (R&D) and innovation; or the promotion of the 'knowledge economy'; or the promotion of higher labour productivity of employed workers, for instance through beneficiation.

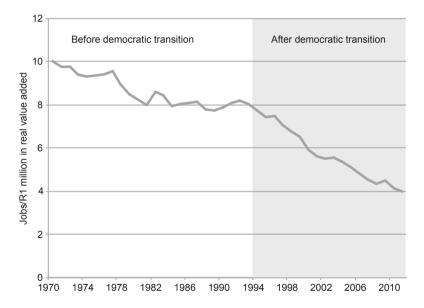
## South Africa: Capital-intensive development and comparative advantage

There is considerable evidence that the South African economy has been and remains characterised as being capital intensive. Levy (1992) compared capital intensity in manufacturing in South Africa with countries with comparable (or higher) per capita incomes.<sup>2</sup> For the period 1961–1965, capital per worker in

<sup>2</sup> The comparator countries were Brazil, Mexico, Korea and Malaysia.

manufacturing in South Africa was 112% higher than the next highest country (Mexico) and for the period 1981–1985, it was 48% higher.

For the economy as a whole, Pollin et al. (2006: 11) present evidence on the employment intensity of output from 1967 to 2001. Labour intensity declined in all sectors except agriculture from the 1970s, but the sharpest decline has been since the 1990s. From 1994 to 2001, employment in relation to output fell by 28% and the sharpest declines in employment intensity over the whole period have been in manufacturing and mining during the 1990s. Surveys undertaken by the World Bank, and reported in Clarke et al. (2007), also found that South African firms (in manufacturing and services) were more capital intensive than enterprises in most comparator countries. Since the early 1990s, the employment intensity of manufacturing has fallen sharply (Figure 13.1), reflecting ongoing capital intensification spurred by trade liberalisation, the weak performance of labour-intensive sectors and also higher productivity spurred by higher growth in output.



**Figure 13.1:** Ratio of formal employment to gross value added for South African manufacturing, 1970–2011

Source: Derived from Quantec data

### The evolution of industrial policy

At the time of the transition to democracy, there was intense debate about the nature of the problem of slow industrial expansion as well as of the policies needed to promote growth (Hirsch, 2005). World Bank analysts characterised the South African economy as a protected and distorted economy of the Latin

American type, with import-substitution policies accompanied by attempts to secure greater self-sufficiency, for example by producing oil from coal (Fallon & Pereira da Silva, 1994; Levy, 1992). Edwards (2001) also argued that import substitution industrialisation (ISI) policies biased the production structure towards capital-intensive sectors. The World Bank's recommendations to redress this situation were trade liberalisation, a reduction of distortions in factor markets and a stable macroeconomic environment, and the 'right' prices to provide an enabling environment to stimulate exports (Fallon & Pereira da Silva, 1994).

The analysis put forward by the influential Industrial Strategy Project (ISP) was not that dissimilar, although their prescriptions focused more on 'supply-side' support and industrial-policy interventions (Joffe et al., 1995). The ISP was also very critical of the high degree of concentration and resultant lack of competition in many industrial sectors. Fine and Rustomjee (1996) offered a somewhat different perspective, arguing that the dominance of the large-scale mineral-based industry that comprised South Africa's 'minerals–energy complex'<sup>3</sup> should be the starting point for an understanding of industrial development and appropriate industrial policy.

The ISP and the World Bank interpretations prevailed in terms of stated policy, although, in practice, policy sought to promote multiple objectives, with international competitiveness as a central theme. While objectives included support for non-mineral-based subsectors and higher value-added activities, it was understood that mineral-based manufacturing would remain important and should be supported by further beneficiation (Hirsch, 2005: 124).

Trade liberalisation was also an important element. Some liberalisation had already taken place by the early 1990s. This included a reduction in quantitative controls on imports, the beginnings of tariff reduction and significant privatisation. After 1994, the liberalisation programme included removing the remaining quantitative restrictions, simplifying the tariff schedule and a significant reduction in average tariff rates (Edwards & Lawrence, 2008).

A range of measures were also introduced to encourage investment, technological upgrading and exports, and to support small firms. These have included sector-specific adjustment programmes, investment incentives, 'supply-side' incentive programmes, subsidised infrastructure, support measures for skills development and technology, special loan facilities and support programmes for small firms (Black & Roberts, 2009).

Fine and Rustomjee define the 'minerals–energy complex' as including 'the mining and energy sectors and a number of associated subsectors of manufacturing, which have constituted and continue to constitute the core set of accumulation in the South African economy' (1996: 71).

The government's concerns about international competitiveness were refocused on enhancing capabilities in 'knowledge-intensive' activities and advanced technology, with the release in 2002 and 2003 of the National Research and Development Strategy, the Integrated Manufacturing Strategy and the Advanced Manufacturing Technology Strategy (DST, 2002; DTI, 2002; NACI/DST, 2003). These were followed by the National Industrial Policy Framework (DTI, 2007) and then a series of Industrial Policy Action Plans (DTI, 2010; 2014), which introduced an ambitious agenda of policy interventions to stimulate a wide array of priority sectors and activities.

There has, therefore, been no shortage of industrial-policy interventions and new programmes, but the net impact is far from clear. Together with trade liberalisation, it was expected that these measures would counteract the previous government's support for large-scale, capital-intensive industries and the legacy of poor productivity, and would facilitate the development of non-traditional manufactured exports (Hanival & Hirsch, 1998; Joffe et al., 1995). However, this has happened only to a very limited degree. While the stated objective of policy has been to encourage higher value-added manufacturing, labour-intensive activities and smaller firms, in practice considerable support has continued to be focused on larger-scale, capital-intensive firms and subsectors.

### Capital intensity and comparative advantage

Assuming no large-scale state intervention, the (tradable) sectors which are likely to expand most rapidly will be those with a growing comparative advantage. So the question then arises as to the nature of South Africa's comparative advantage and what role, if any, industrial policy should have in trying to influence this. One measure is to consider revealed comparative advantage, which is based on actual trade flows. Policy since 1994 has placed considerable emphasis on export competitiveness, and was a central objective of the programme to liberalise trade.

Attempts to develop competitive 'non-traditional<sup>4</sup> exports in relatively labour-intensive sectors have achieved limited success. The share of exports in the ultra labour-intensive category declined from 14.5% of total manufactured exports in 1995 to 9.7% in 2012 (Craig, 2013). In fact, certain labour-intensive sectors have instead proven very vulnerable to import competition. The largest contributor to this decline has been the disastrous performance of the textiles and clothing sectors (Morris & Barnes, 2014). Their share of manufacturing output declined from 7.6% in 1990 to just 1.8% in 2010.

Our definition of non-traditional exports follows Black and Kahn (2002: 224) and excludes primary exports, as well as iron and steel, non-ferrous metals and industrial chemicals.

While manufactured exports have grown, they have not led to the expected jobs bonanza. Instead, productivity rose rapidly as firms slimmed down and became more competitive. So tariff reductions and a weaker currency supported export growth, but it turned out that there was a high degree of path dependence with continued expansion taking place in capital-intensive 'traditional' sectors (such as basic chemicals, steel and other basic metals). There was also a massive expansion in automotive exports, an intermediate capital-intensive category.

So South Africa's 'revealed' comparative advantage was, somewhat paradoxically, in relatively capital-intensive products and not in labour-intensive products. While the economy has significant pockets of sophisticated technological capability and skills, there is also a very large unskilled group and massive open unemployment, but at the same time no apparent comparative advantage in labour-intensive products.

What explains this apparent paradox? We argue later that South Africa's revealed comparative advantage in favour of relatively capital-intensive subsectors has been fundamentally distorted in three main ways. Firstly, market power and the pricing of raw and semi-processed materials have raised costs in more labour-demanding, downstream subsectors. Secondly, the shortage of skills and the associated cost premium has limited competitiveness, especially in more labour-demanding sectors. Related to this is inappropriate labour regulation, which has adversely affected some of the most labour-intensive subsectors, such as clothing. Thirdly, capital and energy subsidies have increased the profitability of capital- and energy-intensive beneficiation projects in particular. While these three factors are all important, we deal with the first and second briefly, and then go on to focus on historical state support for heavy industry.

### Market power and input pricing

In concentrated upstream sectors, it is common for firms in South Africa to charge import-parity prices to local buyers for products in which there is, in fact, a large trade surplus. In such cases, competition would be expected to yield a price close to the export price received, as an exporting firm would be willing to sell the product at any price above the price currently being received for the exported product. Instead, pricing at import parity reflects the firms' market power to act as price setters rather than price takers. The lack of competition has enabled them to use import-parity pricing, meaning that local fabricators have derived little advantage from low production costs of materials such as steel, aluminium and basic chemicals (Black & Roberts, 2009). This is in spite of the fact that beneficiaries of the 37E tax incentive undertook to set prices at a level which did not lead to higher returns from domestic sales than exports.

ArcelorMittal South Africa has engaged in unilateral price setting of its flat steel products to South African customers, at imputed import-parity price levels. This is despite a large net trade surplus and low production costs. In 2007, in its first ruling on excessive pricing, the Competition Tribunal found Mittal's pricing to be in contravention of the South African Competition Act and imposed a fine of R691.8 million or 5.5% of turnover (Black & Roberts, 2009). Such pricing is effectively a transfer from local buyers (generally downstream, more labour-intensive industries) to the upstream industries, especially where material inputs are a significant part of costs. Basic iron and steel comprises 42% of direct and indirect inputs to fabricated-metal products (Roberts & Zalk, 2004). In general machinery, the contribution is 25%. In effect, import-parity pricing means there is no advantage to downstream industries from this internationally competitive, low production-cost, resource-based industry. This entrenches the capital intensity of manufactured exports, and basic iron and steel has been one of the largest single sectors in manufactured exports (Black & Roberts, 2009).

A similar position applies in the basic chemical and downstream chemical and plastics industry. In products such as polypropylene, which accounts for some 51% of direct inputs to plastic products, import-parity pricing has been practised despite a large trade surplus. Given substantial transport costs and a 10% import duty, local plastic-product manufacturers pay substantially above the opportunity cost for their key material input.

#### The skills constraint

The second 'distortion' is that the historical, systematic undermining of black education has limited the supply of skills and therefore significantly raised costs for manufacturing. Related to this is inappropriate labour regulation, which has undermined the prospects for labour-intensive manufacturing. This is dealt with in Chapter 14 by Nattrass and Seekings.

Since 1994, what can generously be described as the 'false start' in the rehabilitation of black education and artisanal training has continued to militate against competitiveness in more labour-demanding sectors. A striking feature about the labour market in South Africa is not so much that wages of production workers are higher than competitors (although in many cases they are), but the exorbitant costs of managers and skilled staff. Based on detailed international survey data in manufacturing and some service sectors, Clarke et al. (2007) found that unskilled workers in South Africa earned slightly less than in Poland, but somewhat more than in Brazil. However managers' wages were two-and-a-half and three times higher than in Poland and Brazil respectively, and wages of professional and skilled employees in South Africa were also much higher than in the other two countries.

A benchmarking study of the Thai and South African automotive industries came to similar conclusions. It found that the ratio of production (semi-skilled) workers' wages in South Africa, compared to Thailand, was nearly 3:1, for professionals 6:1 and for artisans, an incredible 12:1 (Barnes et al., 2013). Even allowing for the possibility of higher qualification levels for skilled staff in South Africa, these differentials create a huge competitive disadvantage for South African manufacturing.

Major initiatives, such as the 1998 Skills Development Act, designed to address this problem have had limited success. This Act established Sector Education and Training Authorities (SETAs), funded by levies on wages. Many smaller companies, which experience difficulty claiming back the levy, perceive it to be an additional tax on employment.

A serious problem is that the number of apprentices qualifying as artisans declined steadily from the 1980s until 2003 (Mukora, 2009: 244). While urgent steps are being taken to address this constraint, it will be many years before this shortage is fully addressed.

### Support for capital intensification and heavy industry

Support for heavy industry has had a long history in South Africa (Fine & Rustomjee, 1996). It can be dated back to the formation of Iscor and was integral to industrial development during the apartheid period, which also included the establishment of giant, self-sufficiency projects such as Sasol (Levy, 1992). The Human Development Report on South Africa (Adelzadeh, 2003: 151) lists a range of incentives used by the apartheid government which were biased towards capital-intensive production methods. These included corporate-tax incentives, depreciation allowances, tariff rebates, debt financing, subsidised interest rates as well as the provision of utilities and infrastructure. These incentives firstly supported a shift towards employing more capital-intensive-production techniques and, secondly, attracted investments by large-scale firms which are typically more capital-intensive than small and medium-sized enterprises. In part, this form of industrial development reflected South Africa's mineral endowment but, as we demonstrate later, there has been substantial direct and indirect state support for various forms of heavy, industrial development. It is also important to recognise that there has been a substantial shift in government policy on these questions since 1994, but it is also clear that there has been substantial ongoing support for heavy industry.

### The pricing of energy

The growth of resource-based sectors of manufacturing has been on the back of cheap (coal-based) energy and government support to exploit linkages within

the 'minerals-energy complex' (Fine & Rustomjee, 1996). For example, the development of aluminium production, which dominates the non-ferrous metals subsector, was based entirely on low-priced electricity to process imported bauxite. Cheap electricity has historically been a function not just of abundant coal resources, but also the extraordinary electricity-pricing policy. From its inception, one of Eskom's prime roles has been to provide cheap inputs to the mining sector, and cheap energy underpinned the development of the minerals-energy complex. Until prices started to rise sharply in 2008, electricity prices in South Africa had averaged around 40% of the price in the United States over the previous four decades (Winkler & Marquard, 2009: 52). Eskom undertook massive over investment in the 1970s and early 1980s, increasing its capacity threefold between 1970 and 1982 (Burton, 2011: 41). In 1977, Eskom's investment accounted for no less than 12% of total gross domestic fixed investment (GDFI) in South Africa.

The reason for South Africa's cheap electricity is partly due to natural endowments such as the relatively inexpensive cost of local coal inputs. Low-grade coal, which is used for power generation, is not of export quality and is thus not significantly influenced by international prices (Winkler & Marquard, 2009: 60). Table 13.1 indicates that the price of coal in South Africa has been significantly lower than the price paid for coal in other countries. Importantly, the comparison also reveals the substantial discount which Eskom received for coal in the generation of electricity, compared with other domestic coal users. For example, in 2004 the price for steam coal used for electricity generation in South Africa was almost half of that paid by industry: US\$17.7/toe compared with an industry price of US\$33.1/toe (OECD, 2010: 57).

Overcapacity in the early 1990s meant that the reserve margin reached 40% (Steyn, 2006: 38, cited in Burton; 2011: 41) and after funding the earlier expansion, government embarked on a policy of setting extremely low tariffs and special incentives to attract huge investments in a series of metal-processing plants. In 1991, Eskom announced its 'price compact', a strategy to reduce the real price of electricity by 20% over a period of five years to accelerate economic growth (Van Horen, 1997: 31). This came on top of a 14% decline in the real price of electricity between 1987 and 1991 (Van Horen, 1997: 33). In reality, Eskom surpassed its target, with electricity prices on average dropping by 43% (and the manufacturing sector's electricity prices dropping by 53%) (Van Heerden et al., 2008: 2).

Eskom's commitment to cheap electricity was reaffirmed under the new government in 1994 with the stated intention under the Reconstruction and Development Programme to lower electricity prices by 15% between 1996 and 2000 (Eskom Annual Report, 1995, cited in Van Horen, 1997: 34). Overall, between 1970 and 2005, the real price of electricity in South Africa declined by approximately 11% for all sectors (Van Heerden et al., 2008: 2).

Table 13.1: Steam coal prices USD/toe (net calorific value)

	2004	2005
For electricity generation		
South Africa	17.7	21.5
OECD	60.3	68.5
For Industry		
South Africa	33.1	36.3
Russia	52.3	58.1
China	59.9	n.a
OECD	81	95.3

Source: IEA database (OECD, 2010)

There are several factors underlying these price reductions. Firstly, Eskom made a commitment to being the 'world's lowest-cost producer of electricity' through productivity improvements and cost containment (Eskom, 1995: 3, cited in Van Horen, 1997: 34). Secondly, the number of staff employed was reduced substantially between 1985 and 1994, and during the same period the financial health of Eskom improved with reduced finance charges because previous debts had been paid off. Finally, the situation of overcapacity meant that there was no significant capital expenditure on the horizon. Consequently, electricity was priced below the long-run marginal cost allowing for 'normal rates of return, but only in the absence of building costs to install new capacity' (OECD, 2010: 57). This led to the expansion of mineral beneficiation sectors and the aluminium industry in South Africa; for example, Alusaf's aluminium smelter near Richards Bay was built in 1996 (Burton, 2011: 42).

The initial justification of low prices to encourage take up of excess generation capacity may have had some validity. However, as late as 2005 the Developmental Electricity Pricing Programme (DEPP) was introduced, marketing low electricity tariffs for a 'minimum of seven years' in order to attract foreign investment. It was supposed to have a provision that cost savings be passed on to local fabricators, but this has proved impossible to enforce. The huge new industrial development zone at Coega, near Port Elizabeth, advertised electricity at 'very favourable rates' to attract industrial investment (CDC, 2004, cited in Winkler & Marquand, 2009: 58). And with capacity running out, agreements were being reached in 2007 with Alcan for an aluminium smelter at Coega, reportedly at an electricity price of around US\$0.02/kWh or R0.14, compared with average prices

<sup>5</sup> It was taken over later by BHP Billiton.

of R0.18 for other industrial users and R0.45 for households (Black & Roberts, 2009). The severe constraints on South Africa's generation capacity led to plans for the smelter investment being cancelled in late 2009. The R21 billion greenfield investment would have employed just 800 people, with the product expected to be almost entirely exported in primary form.

Pricing policy has also favoured industrial users ahead of households, who effectively cross-subsidised the manufacturing and mining sectors. While it is the international norm that industry users pay less because bulk supply is cheaper to provide, the differentials in South Africa have been particularly large. There has been much speculation over the so-called 'sweet deals' between Eskom and particular energy-intensive firms, who had obtained extremely favourable tariffs under long-term contracts; for example, BHP Billiton was found to be paying only 12c/kWh for electricity.<sup>6</sup>

The state has also played a direct role in subsidising the electricity sector. Steyn (2006: 29) reports that during the 1970s expansionary phase, Eskom received a R19.1 billion subsidy as forward cover for loans to offset their infrastructure investments. The present government has similarly provided financial support for Eskom's current expansionary development, with R60 billion provided directly by the government and an additional R350 billion in loan guarantees (Burton, 2011: 43).

The trend of decreasing electricity prices came to an end in 2008 when country-wide power outages revealed that the growth in electricity generation infrastructure had not kept pace with the demand for electricity. This resulted in a massive campaign by Eskom to invest in new infrastructure to meet current and future electricity demand. One of the ramifications has been steep increases in the electricity price over several years, starting with a 34% increase in 2009.

Since 2008, prices have more than doubled in real terms. But in 2011, South Africa still had very low prices compared to comparator countries (Figure 13.3) and some energy-intensive users continued to benefit from prices around one-sixth of the average Eskom price (OECD, 2013: 87). Although there have been further increases since then, prices remain low for industrial users, with supply availability now being the binding constraint.

The secure supply and low price of energy facilitated the development of energy-intensive, heavy industries. However, the long history of artificially low prices has led the economy to its current predicament—the electricity supply is inadequate and prices are rising sharply.

<sup>6</sup> This was exposed in a leaked Eskom document in 2010 (Burton, 2011: 42).

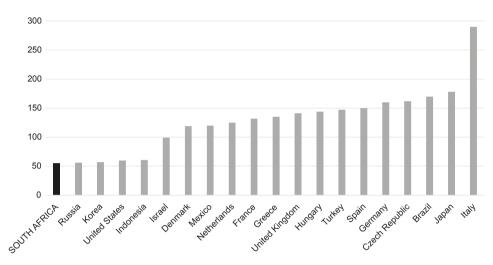


Figure 13.2: Interational comparison of electricity prices for industry, 2011 (\$ per MWh) Source: OECD (2013: 102)

The fact that cheap and reliable electricity is no longer guaranteed has limited recent investment in energy-intensive industry and there has been public outrage over Eskom's preferential pricing arrangements with large energy-intensive industries (such as BHP Billiton). In effect, the electricity pricing structure has exacerbated the impact that South Africa's natural-resource endowment has had on the pattern of subsectoral manufacturing growth, discussed earlier.

### Department of Trade and Industry (DTI) incentive schemes

In the late 1980s, there was a change in developmental focus towards encouraging exports. The General Export Incentive Scheme (GEIS) was introduced in the late 1980s and was largely successful in increasing the share of manufacturing in exports. However, the products which received support were biased towards capital and intermediate capital-intensive sectors (Edwards, 2001: 58). For instance, Iscor, although having being privatised in 1989, benefited from export incentives under GEIS of around R175 million per year (Roberts & Rustomjee, 2009: 60). Thus, against a backdrop of support for capital-intensive sectors, the change in the orientation of industrial policy towards expanding into foreign markets did not result in increasing employment.

Since 1994, the new democratic government has stated its objective to restructure the economy to promote growth and jobs. The major developmental shift has been the change in focus to support exports and to increase trade liberalisation. However, some of the substantial support programmes provided by government have reinforced rather than altered the industrial development path. An accelerated depreciation allowance under section 37E of the tax code

was given to major resource-based projects in the 1990s, such as Columbus Stainless Steel and Saldanha Steel.<sup>7</sup> One of the conditions of this tax break was to encourage more competitive pricing, where firms 'undertook to price at a level which did not yield a higher income than that obtained from exported products' (Roberts & Rustomjee, 2009: 55). However, many firms avoided this requirement by simply not selling to domestic consumers, thus hampering downstream, more labour-intensive linkage effects.

The Strategic Industrial Projects (SIP) programme, implemented between 2001 and 2005, aimed to promote local and foreign investments in large-scale projects by allowing tax breaks for the purchase of certain assets, such as machinery and buildings. It provided tax relief equivalent to R7.7 billion from 2002 to 2005 for large capital-intensive projects, many of which are in basic metals and basic chemicals (including four projects undertaken by Sasol) (Black & Roberts, 2009). Most supported investments were in commodity-based, capital-intensive sectors. According to Roberts (2007), 21 of the 33 SIP-recipient projects were in the chemicals or metals sectors. The average capital intensity of SIP-supported projects was R3.7 million per employee, among the most capital intensive in the manufacturing sector (Roberts, 2007: 24).8

Large capital-intensive firms that received significant investment allowances from the state included 'Iscor's (now ArcelorMittal) Suprachem Ferro-alloy coke plant (R600 million), BHP Billiton's Hillside Aluminium (R300 million), Anglo-American's former subsidiary Hulett Aluminium (now Hulamin), Nampak Metal packaging (R80 million), Trident Steel (aluminium) (R56 million), Tata Iron and Steel's ferrochrome plant at Richard's Bay (R482 million and a R144 million tax forfeit), Sublime Technologies ferrochrome smelting plant (R139 million) and a SAPPI subsidiary' (DTI, 2004: 9, cited in Burton, 2011: 25).

The SIP was then replaced by the section 12(*i*) incentive, which provides grants and tax allowances for large investment projects from R200 million to R1.6 billion. The maximum amount that could be claimed was R900 million (DTI website, 2011).9

Another related project of the DTI has been the funding of mega projects (over R1 billion) and industrial development zones. State support for such projects is multifaceted, including infrastructure support, industrial subsidies, cheap land and water as well as preferential electricity tariffs. These developments

<sup>7</sup> The section 37E tax incentive expired in 1999.

The tax allowances granted to each firm are significant, for example, a 2004 DTI report listed two of these allowances at a value of R900 million (Burton, 2011: 25).

The section 12(*i*) tax incentive is offered on the basis of a point system which promotes employment, training as well as energy efficiency among other objectives.

are generally aimed at large-scale, capital-intensive and energy-intensive projects such as Saldanha Steel in Saldanha Bay and Alusaf in Richards Bay. The Coega development in the Eastern Cape is perhaps the most controversial because of its huge scale. Prior to the electricity crisis, the Pechiney/Alcan (Rio Tinto) smelter was supposed to be the main tenant at Coega and was to benefit from 'investment allowances of almost R3.3 billion and a tax forfeit of R600 million' (Burton, 2011: 25). While there is clearly a need to support development in underdeveloped regions such the Eastern Cape, it is puzzling that the state opted for such a massive project aimed at attracting heavy industry, which employs relatively few people.

The DTI's Critical Infrastructure Programme (CIP) provides grants to cover between 10% and 30% of the infrastructure-development costs deemed critical to a new development. The fundamental aim of the CIP is to lower the costs of doing business and to stimulate both upstream and downstream linkages (DTI, 2006: 8). In principle, this is an example of a factor-neutral incentive as it could benefit a variety of projects and also has a public-good component. In practice, many of the beneficiaries have been in the traditional capital-intensive sectors. Rustomjee and Hanival (2008: 47) report that 'between 2002 and 2006, around 60% of the approved grants were allocated to the Coega and East London Industrial Development Zones valued at R472 m' (cited in Burton, 2011: 27). The main beneficiaries in these areas were the motor-vehicle sector and the then anticipated Alcan aluminium smelter. Large amounts have been spent by the state to provide infrastructure for the mining, basic iron and steel, and basic nonferrous-metals sectors (Rustomjee & Hanival, 2008: 49).

### **Industrial Development Corporation (IDC) funding**

As a state-owned finance institution, the IDC plays an important role in influencing economic growth in accordance with government's strategic objectives. The IDC supports firms by providing equity finance and loans, frequently at concessional rates. Historically, it has funded large-scale, mineral-beneficiation projects and has been closely associated with the parastatals as well as with the large, private-sector conglomerates.

For instance, the basic chemicals sector is dominated by Sasol, which was initially a state corporation. Its capabilities are derived from huge state financing of its synthetic fuel-from-coal operations, which were established for strategic reasons as a result of the sanctions threat (Levy, 1992; Rustomjee et al., 2007). Direct state support for basic-metals production was provided in the form of IDC finance for aluminium and stainless-steel plants into the 1990s, through state ownership of the main steel producer until 1989, and in the provision of infrastructure over recent decades (Fine & Rustomjee, 1996). Much of the

IDC finance in the second half of the 1990s continued to be oriented to large, capital-intensive, resource-based activities. Up until the late 1990s, the IDC had significant ownership in major corporations, including Gencor, Iscor, Billiton and Sasol, and although it has since sold some of its equity holdings, it continues to be a significant stakeholder in heavy industry.

Several authors (for example, Burton, 2011; Edwards, 2001; Hirsch, 2005) have identified the IDC as perpetuating the bias towards capital-intensive manufacturing via its investment priorities. This was in accordance with the apartheid government's strategic objectives regarding its industrial policy. However, it continued well into the 1990s under the new political regime, with the majority of IDC funds being used by the basic-metals sector to support initiatives such as Saldanha Steel, Columbus Stainless Steel and the Alusaf expansion (Edwards, 2001). From 1993–1998, the basic non-ferrous and iron and steel sectors received 18% and 33% of IDC financing respectively (Mondi & Roberts, 2005: 17).

Since 2000, there has been a shift within the IDC towards greater support for more employment-intensive sectors such as downstream manufacturing, tourism and agricultural projects. There has also been a change in focus regarding scale, with greater support for small, medium and micro enterprises (SMMEs), as well as black economic empowerment (BEE) initiatives. The IDC is also currently reviewing its sectoral priorities with a focus on downstream sectors. But large-scale, capital-intensive projects still receive a significant share of financing. For instance, the IDC is conducting a feasibility study on a massive US\$4.5 billion steel project in partnership with China's Hebei Iron and Steel.

### **Conclusion: Reshaping comparative advantage**

We have argued above that South Africa's 'revealed comparative advantage' is, in part, the outcome of its distorted pattern of development. Powerful interests have coalesced around this capital- and energy-intensive growth path in support of what Fine and Rustomjee (1996) have dubbed the 'minerals-energy complex'. Naturally these interest groups are opposed to any reduction in this support. While industrial policy has sought to shift industrial development onto a different trajectory, this has proved extraordinarily difficult and has met with limited success (Black & Roberts, 2009).

But what does this mean in the South African context of high unemployment, an apparent lack of competitiveness in labour-intensive sectors and a capital-intensive export profile? This structural paradox has created a conundrum for industrial policy. Should policy encourage sectors which display revealed comparative advantage or attempt to create new areas of comparative advantage by encouraging higher value-added activities? Or is it possible to compete

more effectively in more labour-demanding activities? This conundrum partly explains the DTI's adoption of a multiplicity of potentially contradictory policy objectives in support of beneficiation, the 'knowledge economy' and labour-absorbing growth.

While industrial policy is sometimes narrowly defined as a set of selective interventions to promote industrial upgrading, we would prefer a broader conception—'improving economy-wide efficiency'. In the South African context of large-scale structural unemployment, this leads in turn to a focus on employment. Moreover, the bulk of our unemployed labour is unskilled or semi-skilled and can most easily be absorbed into labour-intensive activities. As *Business Day* has commented, '... we need to create jobs for the workforce we have, not the workforce we wish we had'. The playing field has been tilted towards energy- and capital-intensive firms and sectors—it needs to be tilted towards supporting employment and labour-demanding growth.

Placing employment at the centre of industrial policy means support for small firms and training, particularly at a basic level, and an examination of the regulatory environment. It also means providing appropriate infrastructure and investments to improve competitive capabilities in more labour-demanding activities. This does not necessarily mean that wages should be driven down, although policy-makers do need to address labour-market rigidities in certain areas. Incentives should subsidise labour and training rather than capital investment, electricity and infrastructure for capital-intensive firms. This kind of support will lower unit labour costs, increase the productivity of both capital and labour, and encourage more labour-demanding investment.

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### Chapter 14

# Institutions, wage differentiation and the structure of employment in South Africa

Nicoli Nattrass and Jeremy Seekings<sup>1</sup>

## Introduction: The destruction of low-wage formal employment in South Africa's clothing industry

The clothing industry is the last barely surviving remnant of labour-intensive manufacturing in post-apartheid South Africa. Whereas in manufacturing as a whole the capital to labour ratio was (in 2008) R150 000 per job, in the textile, clothing and footwear sector (SIC31) the ratio was less than R30 000 per job, and in apparel specifically (SIC314) it was less than R10000 per job (Stats SA, 2010). At the end of apartheid, South Africa had a strong clothing sector, producing for both the protected local market and for export. Wage employment hovered around 150 000-170 000 workers, that is, about 10% of total manufacturing employment (Altman, 1994: 41; Godfrey, 1997: 48). From 2003, however, employment in the clothing industry declined to about 100 000 waged employees in total in 2010, of whom only 56 000 were registered with the bargaining council (in March 2011). Membership of the Southern African Clothing and Textile Workers Union (SACTWU), which organises across textiles and footwear as well as clothing production, declined from a peak of 186 000 in 1991 to 85 000 in 2010 (according to the union itself), with less than 50 000 members in the clothing industry specifically.

The decline of employment in the clothing industry had a simple cause: producers were squeezed between stagnant or even falling prices for their products, on the one hand, and rising labour costs, on the other. A strong exchange rate and the growth of China's export industry, in the context of reduced import tariffs over the preceding decade, squeezed the prices paid to domestic

<sup>1</sup> The financial assistance of the Research Project on Employment, Income Distribution and Inclusive Growth is acknowledged. Findings, opinions and conclusions are those of the authors and are not to be attributed to said research project, its affiliated institutions or its sponsors.

producers (see, for example, Morris & Einhorn, 2008). Labour-market institutions played the primary role in raising costs. In the clothing sector, labour-market institutions did not raise real wages generally, but they did reduce interregional wage differentials through raising dramatically real wages in lower-wage areas, thereby undermining the economic viability of labour-intensive production. The crucial labour-market 'institutions' in this story were the National Bargaining Council (NBC) for the Clothing Industry, established in 2002, and the Minister of Labour. It is no coincidence that the decline in employment followed soon after the establishment of a national bargaining council. It was the replacement of regional councils with a single national council that empowered the trade union in its drive to end low-wage employment, even at the cost of massive job losses.

Prior to the establishment of the NBC, clothing workers in most metropolitan areas were covered by regional bargaining councils, while workers in nonmetro areas were covered by sectoral wage determinations by the Wage Board and its successor, the Employment Conditions Commission (ECC). Regional employers' organisations negotiated regionally with SACTWU over collective agreements on wages, benefits and conditions of employment. Employers - and probably SACTWU also - were heedful of the likely effects of wage demands on employment in each region. The Minister of Labour then generally extended each agreement to all non-parties (that is, to firms and workers who had not participated in the actual negotiations) within the region covered by each bargaining council. The Wage Board (and ECC) was also required, statutorily, to consider the employment effects of minimum wages in the areas outside of the regional bargaining councils' jurisdiction. The result was that wages generally increased modestly in the lower-wage areas. In 2002, however, responsibility for wage-setting in lower-wage areas was transferred to the NBC (and the Minister of Labour, through the extension mechanism). The NBC raised minimum wages in the lower-wage areas, and the Minister of Labour extended these to nonparties across the whole country, despite the appreciated exchange rate and strong competition from Chinese imports. Whereas the ratio of minimum wages in higher-wage areas had been three or more times higher than the minimum wages in lower-wage areas through the second half of the twentieth century, by 2010 they were less than 50% higher, and were slowly moving towards the union's target of a mere 20% interregional differential. Minimum wages in areas like Newcastle (in northern KwaZulu-Natal) doubled in real terms in the decade to 2010, and tripled in dollar terms between 2002 and 2010.

Employers' organisations in KwaZulu-Natal repeatedly objected to increased 'national' minima that affected primarily the low-productivity, lower-wage regions, especially when an appreciating currency weakened their competitive position (as in 2003–2005 and 2009–2010). Some firms, especially in KwaZulu-

Natal, did not register with the new NBC. Many others registered, but failed to comply with the collective agreements, some with respect to the various dues payable to the NBC, many with respect to the payment of the minimum wages to their employees. A majority of employers countrywide, and at least 70% in KwaZulu-Natal, were reportedly non-compliant with some or all of the statutory requirements by 2009 (Godfrey et al., 2010: 161). The NBC repeatedly took legal action against these non-compliant firms, most of which were low-wage, low-profit, low-capital, labour-intensive producers in non-metro areas (Anstey, 2004: 1859; Godfrey et al., 2010: 162; Nattrass & Seekings, 2014).

The case of the clothing industry shows that institutions matter in job destruction in contemporary South Africa. Bargaining councils, with the assistance of the Minister of Labour (who extends collective agreements, even when the representivity of the parties to the agreement is uncertain) and backed up by the legal apparatus of courts and sheriffs, not only can but do destroy low-wage employment. Low-wage jobs have been destroyed both directly and indirectly: directly in that the institutions of bargaining councils and the extensions of their collective agreements allow dramatic real increases in the minimum wage to be imposed uniformly on employers, despite important differences in production technologies and product markets within the industry, and with the consequence that more clothing is imported; and indirectly because industrial policy has been used to support productivity-enhancing investments that result in increasingly capital- and skill-intensive production, with low-wage jobs being replaced by a smaller number of higher-wage jobs.

Institutions matter in this case because the industry is not homogeneous. For almost a century, clothing production in South Africa has comprised a mix of more labour-intensive cut, make and trim (CMT) production of basic clothing items, and more skill-intensive production for niche markets (Barker, 1962; Burns, 1998; Nattrass & Seekings, 2012). Pushing up minimum wages in an open economy destroys jobs in the more labour-intensive subsector. The more skill-intensive producers, as well as firms in subsectors that are, in effect, non-tradable (producing for the government, for example), are less sensitive to wage effects. Diminished wage differentiation destroys jobs in some but not all subsectors. There is little evidence that it protects jobs in the higher-wage subsector, because the two subsectors generally produce for different markets. Instead, retailers import low-cost clothing from Lesotho, China or elsewhere (Nattrass & Seekings, 2012).

This raises a troubling question: is South Africa's system of wage-setting through the extension of national collective-bargaining agreements compatible with labour-intensive manufacturing? Our conclusion is that it is not, if the union and some employers join to push for wages that render labour-intensive

producers uncompetitive in the face of cheap imports. In the clothing industry, an uneasy and unstable coalition of the trade union (with its head-office in Cape Town) and predominantly Cape Town-based employers, with strong support from various parts of the state, used national collective agreements, the extension mechanism and their enforcement mechanisms to shut down lower-wage, labour-intensive production in other parts of the country. South Africa's labour-market institutions provide strong incentives to a range of actors—organised labour, major employers, bargaining council officers and the Minister of Labour—to pursue their own interests in ways that, not necessarily intentionally, lead to lower-skilled job destruction.

Job destruction might be justified by preventing 'exploitation' in 'sweatshops'. It is important to be clear that the clothing industry is, for the most part, a low-wage industry, and the lower-wage, labour-intensive subsector pays wages that are very low by comparison with the wages earned by skilled workers, managers and professionals in South Africa. A democratic society might prefer a smaller volume of 'decent' work to a larger volume of low-paid work, especially if social welfare policies provide for a minimum standard of living, even for the unemployed. In this chapter we do not examine how South Africans should engage with this choice. Whatever the merits of these arguments, the fact is that jobs have been destroyed through raising real wages and hence labour costs in areas such as Newcastle, as a result of the choice that has already been made, implicitly, in that South Africa has adopted labour-market institutions—and supportive industrial and other policies—which inhibit or perhaps even preclude labour-intensive manufacturing production.

Our argument is not against either collective bargaining or minimum wage regulation per se. Neither collective bargaining nor minimum wage regulation need result in the destruction of labour-intensive production. Our argument focuses on the national extent of wage setting (through the minister's nationwide extension of collective agreements) and the increased minimum wages that ensue in hitherto lower-wage areas. Job destruction in sectors such as clothing is the consequence not of bargaining councils per se, but more specifically of the enforcement of wages at a uniform and high level, through national extensions without wage-related exemptions, so as to curtail the demand from employers for less-skilled labour in labour-intensive production in lower-wage areas. Collective bargaining at the appropriate level-generally regional-allows for a more democratic regulation of wages by the employers and workers affected, reducing the 'need' for the Minister of Labour to impose regulations on non-parties. Our argument is that when wages are negotiated, and minima set, in ways that ensure that the likely effects on production and employment are taken into account, then labour-intensive production and employment are less vulnerable to destruction.

Even national bargaining councils operate in diverse ways with respect to wage setting. The NBC for the clothing industry is probably not typical of national bargaining councils. It has pursued and implemented the extension of collective agreements aggressively, and has shown little willingness to allow wage-related exemptions. Some other councils—for example, the Metal and Engineering Industries Bargaining Council — seem to have been more tolerant of exemptions from minimum wages in order to limit job losses (see Grawitzky, 2011). The national scope of a bargaining council is most consequential in labour-intensive sectors, such as clothing, and especially in cases where the most labour-intensive manufacturing was concentrated in specific low-wage regions. In other words, the national scope of a bargaining council probably matters less in sectors that are not labour intensive, where there is less wage differentiation, and where the bargaining council is therefore more likely to allow wage-related exemptions. The case of the clothing industry is important not because it is typical of manufacturing, but precisely because it is the atypical, final vestige of labour-intensive manufacturing amidst ever more capital- and skill-intensive industry.

### The origins and growth of the industrial council system

Industrial councils—that is, the forerunners of bargaining councils—were first established under the 1924 Industrial Conciliation Act. The Act provided for the registration and regulation of trade unions and employers' associations, for collective bargaining between them in industrial councils, and for giving these collective agreements statutory authority, not only over the parties to the agreement but also to non-parties (through extensions gazetted by the Minister of Labour). Non-compliance with an agreement or extension that had been gazetted by the minister constituted a criminal offence. The Act originally did not cover pass-carrying African workers, who were excluded from the status of 'employee', and whose employment was governed by other legislation. The Act was amended in 1930 to allow collective agreements and their extensions to cover African workers also, explicitly to prevent high-wage white (and coloured) workers from being replaced by low-wage African workers (although trade unions representing African workers were not allowed to participate in collective bargaining). New legislation in 1937 provided for African workers to be represented in industrialcouncil hearings by inspectors from the Department of Labour.

From the outset, the industrial councils served to institutionalise industrial conflict through, in part, regulating competition to higher-waged, unionised workers in higher-productivity firms from lower-wage employers and workers. Skilled workers in South Africa were better paid than their British, American or Australian counterparts, and were much better paid than in most of Europe, even taking the cost of living into account. Unskilled (African) workers, in contrast,

were paid much less than unskilled workers in Britain or Australia, although they were paid much the same as labourers in Italy, Belgium and even Germany (South Africa, 1926: 23–31). The new industrial councils were used to prevent 'cheap' African labour undercutting expensive white labour (Van der Horst, 1942: 245–251).

The prevention of low-waged competition required both the 'extension' mechanism, whereby collective agreements were extended to non-parties, and the consolidation of wage determination at the national level, so as to limit interregional differentiation. Through the twentieth century the clothing industry achieved only the first of these, but some other industries achieved both, with predictable consequences. National-level industrial councils were first established in the printing and building industries, where wages for artisans in smaller towns were hitherto approximately one-half (or even less) of the wages paid and earned in the metropolitan areas. The imposition, through the bargaining councils, of new national minima inevitably resulted in job losses in the smaller towns (South Africa, 1926).

High wages and job destruction were justified on the ideological grounds that 'civilised' white workers in South Africa needed a standard of living commensurate with their (white) counterparts in Britain and, especially, Australia (and New Zealand). This would also ensure that a clear racial hierarchy was maintained: 'To maintain a white civilization in South Africa the white workers must receive a civilized wage' (South Africa, 1926: 352). Indeed, a 'fair' wage for 'civilised' workers must permit them to employ a domestic 'servant' (South Africa, 1926: 172-187). In this view, the jobs that were destroyed through the extension of higher minimum wages were dispensable in the noble cause of paying 'civilized' wages to 'civilized' workers. Unsurprisingly, most of the workers whose jobs were deemed dispensable were not white (South Africa, 1926: 290-291). Criticisms were levelled at the general policy, on the basis that the high wages paid to skilled white workers were 'at the expense' of low-paid African workers, and at the extension mechanism specifically, in that it was 'manifestly unwise' to apply the same minimum wages in small towns as in the big cities (South Africa, 1926: 57, 86-87).

Unsurprisingly, the imposition of high wages, whether through industrial councils or the Wage Board, was sometimes resisted by firms that were paying lower wages. In the clothing sector, the first industrial council was established in the Transvaal in 1925, where most workers were young white women. Because employers in the Western Cape (then part of the Cape Province) were not covered by an industrial council, they were subject to a wage determination by the Wage Board (established under the 1925 Wage Act). When the Wage Board proposed Transvaal-level minimum wages, to protect the position of white workers,

Western Cape employers pushed for a regional industrial council and helped a regional trade union to organise their (mostly coloured) employees. Industrial councils were eventually established in the Western Cape and KwaZulu-Natal (then Natal) in 1936, and in the Eastern Cape in 1938 (Barker, 1962: 373; Nicol, 1984).

The system for setting minimum wages in the clothing industry thus provided for considerable differentiation. Industrial councils were regional in scope precisely to allow interregional differentiation. Between the 1930s and 1950s, the average wages paid in each of the three 'coastal' areas (Cape Town, Port Elizabeth and Durban) varied between 10% and 30% below the average paid in Johannesburg. In addition, the regional industrial councils allowed small towns within their area of jurisdiction to pay lower minimum wages than the cities, to compensate for 'locational disadvantage' (Barker, 1962: 373-374). The biggest differences were due to firms relocating outside of the industrial councils' geographical jurisdictions. Most firms fleeing the high wages in Johannesburg in the 1940s and 1950s relocated not to the lower-wage coastal areas but to the socalled 'uncontrolled areas', such as Charlestown (north of Newcastle in northern KwaZulu-Natal), where African or Indian rather than white or coloured workers were employed. In 1954, the average wage paid in 'uncontrolled' areas was onethird of the average paid in Johannesburg (ibid: 408). The 'uncontrolled areas' were not entirely unregulated given that they were subject to intermittent wage determinations by the Wage Board and at times the Minister of Labour decided that some of these areas should be subject to the extension of an agreement negotiated in an industrial council (Barker, 1962: 377-378). As the Wage Board had concluded in 1955, the imposition of nationally uniform wages was neither practicable nor in the public interest (Barker, 1962: 375). Beginning in the 1960s, however, the apartheid state sought to promote industrialisation and employment in the Bantustans (Glaser, 1988), and used lower wages as an incentive for firms to relocate to industrial areas within the Bantustans (such as Isithebe on the KwaZulu-Natal North Coast). In addition to exempting employers in these areas from even the Wage Board's wage determinations, the state provided a range of subsidies.

The differentiated wage regime enabled total employment to rise. By 1991, there were about 119 000 jobs in industrial council areas, 35 000 jobs within the Bantustans and another 15 000 jobs in areas subject to the Wage Board, giving a total of almost 170 000 jobs (Altman, 1994: 41). The higher-wage end of the industry was based in Cape Town, while the lower-wage industry spread across KwaZulu-Natal and the Bantustans. The higher-wage firms typically specialised in higher quality, fast fashion, custom-made clothing items, using finer and more expensive fabrics, and relatively more productive workers. The lower-waged firms

typically produced cheaper, lower-quality garments and utility wear, for which labour costs were by far the most important cost item. There is little evidence that any clothing firms earned super-profits (Barker, 1962; Burns, 1998). Wage differentiation was necessary, even while the industry enjoyed protection behind tariff barriers.

## The transformation of industrial councils into bargaining councils

By the 1980s it was unclear whether the industrial councils had much of a future. Both capital and labour had mixed feelings. Some large employers participated in the councils because they could use the extension of negotiated minimum wages across entire sectors to limit competition. This was especially true in labour-intensive industries such as contract cleaning (Pillay, 1990: 8). In the clothing sector, the industrial councils were regional and therefore they limited intraregional but not interregional competition. The result was, as Godfrey (1997) discovered in interviews conducted in Cape Town in the early 1990s, that clothing producers were ambivalent about the industrial council system. The established unions, representing mostly white skilled workers, no longer worried much about minimum wages, because their wages were far above the minima, but they did use the councils to protect their pension funds. For their part, the new unions initially saw the councils as the tools used by the established trade unions to protect white privilege (Baskin, 1991: 256).

What ensured the survival, and indeed strengthening, of the industrial council system was its embrace by the independent trade unions. In the 1980s, the prospect of negotiating over minimum wages and improved benefits across entire sectors, rather than piecemeal at the plant level, became increasingly attractive, as long as the unions could combine this with industrial action. In 1981, for the first time, one of the smaller, new, independent unions joined the industrial council in the metals industry. In 1983, new unions joined industrial councils in the textiles and metals sectors, after employers made important procedural concessions to them and overrode opposition from the established unions (Friedman, 1987: 270, 326-331). As long as an independent union was just one of several unions on an industrial council, the value of participation remained muted. As the independent unions outgrew the established unions in terms of membership, however, they became the majority unions on the councils, and acquired the power that came with this. The Congress of South African Trade Unions (COSATU) pushed for industrial councils to cover the entire country, as part of its 'Living Wage' campaign (Godfrey & Macun, 1992: 400). The discourse of a 'civilised' wage was thus reincarnated via the very same institutions through which it had been effected in a racialised form half a century earlier. Despite hostility from some employers and reservations among some unionists, COSATU unions reached agreement with employers over centralised bargaining in engineering, car manufacturing and other sectors (Pillay, 1990; Baskin, 1991; Morris, 1990).

The new unions reinvigorated the industrial council system, using it just as white workers' unions had used it earlier in the century, to push up minimum wages and to secure improved benefits and working conditions, in the face of economic pressures to depress wages and labour costs. Unions affiliated to COSATU rightly saw that the 'wage gap' — that is, the gap between the salaries and wages paid to better-paid (mostly white) employees and the wages paid to unskilled workers — was very wide, and that most of their members (including semi-skilled as well as unskilled workers) were paid less than a 'living wage'. The industrial councils enabled unions to neutralise the downward pressures on wages exerted by non-members, and thus to push for higher wages despite high unemployment and competition from cheap imports. The councils also enabled unions to regulate even those firms in which they had failed to organise the workers, and thus took some of the pressure off union organisers. The extension of minimum wages across whole sectors had perverse effects, however. By preventing the survival or emergence of smaller, low-wage, labour-intensive enterprises, extensions contributed to the rising capital intensity of production and thus to the very unemployment that was threatening wages in the first place.

In the clothing sector, several independent trade unions merged to form SACTWU in 1989. The merging unions—which had few members in lowerwage areas - agreed on the need for countrywide wage parity, and sought to use a national industrial council 'as a vehicle to reduce the regional wage differentials in the sector' (Godfrey et al., 2010: 155). The regional employers' associations initially resisted the formation of a national industrial council, although some higher-wage employers recognised the benefits in terms of regulating wage-based competition. The political pressures for national-level bargaining were immense, however. Pressure from SACTWU, including threatened strikes, prompted the largest employer, Seardel, to agree to the idea of a national industrial council. The major regional employers' associations ostensibly fell into line, but dragged their heels through the late 1990s. The Cape Clothing Association, which by the 1990s was paying the highest wages in the country, concurred with the union on the need to set uniform countrywide wage rates, to enforce these in the lower-wage regions, and thus to 'level the playing field'. The Natal Clothing Manufacturers' Association and other associations wanted to retain a more flexible wage structure, including provision for piecework payments. The different employers' associations only agreed to abolish the regional councils and establish the NBC when SACTWU (and the Department of Labour) increased the pressure, and an agreement was brokered in terms of which the statutory wage differentials between regions would be narrowed or eliminated in return for the promise of a new, national wage structure or model providing for variations in wages and payment systems on some basis other than region alone (Anstey, 2004: 1846–1852). Because the lowest-wage areas were outside of the existing regional industrial councils, their agreement was not required for the establishment of the NBC.

As the facilitator concluded, 'the days of a "one size fits all" approach to wage bargaining are clearly past ... [I]n the context of a global economy in which employers find themselves in very diverse situations of competitiveness and in which it is critical to preserve and create jobs it is inevitable that one or even a few sizes will not fit all' (Anstey, 2004: 1862). Despite some discussions, however, no new national wage structure or model was ever agreed upon. The NBC become the vehicle for a coalition of well-organised, high-wage employers and the trade union to restructure the industry by pushing it towards uniform minimum wages without any substitute 'wage model'. The NBC increased steadily the minimum wages payable in lower-wage regions, especially in areas such as Newcastle and Ladysmith in northern KwaZulu-Natal. Interregional wage differences were greatly reduced.

The outcome was massive job losses. Job losses were especially severe because the erosion of wage differentiation and increases in minimum wages coincided with the appreciation of the rand relative to other currencies, in the aftermath of trade liberalisation. Between 2002 and 2010, the minimum wages in Newcastle tripled in terms of US dollars. Raising wages at a time of declining international competitiveness was folly. If trade liberalisation was the anvil on which jobs were being beaten, real increases in minimum wages in low-wage areas were the hammer being used ever more vigorously to beat them (Nattrass and Seekings, 2014).

### Bargaining councils, extensions and job destruction

The unions and employers that dominate bargaining councils may have ideological and economic interests in limiting low-wage employment, but they have no interest in destroying jobs in the factories they own (in the case of the employers) or where their members work (in the case of unions). Unions may push for wage increases among firms in which their members work to the extent that jobs are lost as employers switch from more labour-intensive to more skill-and capital-intensive production. This is, indeed, the strategy behind the union-backed industrial policy that is focused on increasing labour productivity through raising the capital to labour ratio. But unions' militancy is likely to be moderated by the prospect of their members losing their jobs if employers are squeezed to

the point of closure. The worst wage-related job losses are therefore likely to occur in factories which are not party to the collective agreements in the bargaining council, and where few workers are organised, that is, in factories that are subject to the extension of collective agreements by the Minister of Labour.

This is precisely what happened in the clothing sector after the formation of the NBC. In the face of competition from imports, successive collective agreements hardly changed the real minimum wage payable in Cape Town. SACTWU has been very aware of the constant threat of factory closures and job losses if it pushes too hard on the wage issue in Cape Town. In 2005, for example, SACTWU agreed to what it called 'very modest' wage increases in Cape Town 'in order to provide the industry with relief during very trying times'.<sup>2</sup> The very same collective agreement, however, raised minimum wages in Newcastle and Ladysmith in real terms. The representatives of non-metro employers were opposed, but were outvoted on the bargaining council, and ignored by the minister when he extended the agreement. Essentially, this was an agreement imposed by Cape Town-based workers and employers, with the assistance of the Minister of Labour, on the entire country. In 2010/11, this drama was, in effect, repeated, but with renewed determination on the part of the bargaining council and Department of Labour to compel firms to comply - or to shut down (Nattrass & Seekings, 2014).

Does this drama in the clothing industry reflect a broader truth about the South African labour market and economy? The evidence on the effects of bargaining councils on wages was, until recently, weak as well as dated (see Boccara & Moll, 1997; Moll, 1996; Nattrass, 2000). In the early 2000s, however, the Department of Labour and other institutions commissioned a flurry of research that suggested that bargaining councils had muted effects on wages and employment.

Defenders of the bargaining council system advanced three arguments. The first is that the system has too limited a reach to make much difference. Insofar as high wages or costs of employment might discourage employment creation, this is said to be irrelevant in South Africa because the South African labour market is sufficiently flexible already. Altman and Valodia cite studies that claim that only '15 per cent of formal workers were covered by councils directly, mainly in the public sector, mining and metals', while 'extensions could apply to a maximum of 300,000 workers' (Altman & Valodia, 2006: 4). Godfrey et al. (2006: 94) say that extensions cover so few workers that 'it is difficult to understand why this issue has attracted so much controversy'. They suggest that 25% of all employees were registered with bargaining councils in 2004. Given that some sectors did not have

<sup>2</sup> SACTWU press release, 'SACTWU and NCMA sew together wage agreement', not dated but June 2005.

bargaining councils, registration was higher in those sectors which did. Godfrey et al. suggest that, in manufacturing, 43% of employees were registered, of whom about one-third (or 15% of all employees) were in non-party firms covered by extensions (Godfrey et al., 2006: 22–23; 2010: 114–118).

As Godfrey et al. (2010: 118) acknowledge, however, their estimates of the scope of extensions are based on data on employers and employees who are registered with the bargaining councils, and omit employees who are not registered, usually because they are employed at unregistered firms. In the clothing industry, for example, the Labour Force Survey (LFS, conducted by Stats SA) suggested that there were at least 130 000 workers in wage employment in 2004 who (according to Godfrey et al., 2010) should have been registered with the bargaining council, but less than 100 000 were registered (and fewer than 50 000 were employed in party firms). In this sector, where the bargaining council itself acted aggressively against unregistered firms, unregistered employees are clearly subject to extensions. In this case, including unregistered employees would increase by 60% the proportion of workers subject to extensions.<sup>3</sup>

But what do these figures actually tell us? They tell us that there are many workers who are not subject to bargaining council agreements, including extensions thereof. This is hardly surprising, given that a larger number of workers are covered by sectoral wage determinations under the Basic Conditions of Employment Act 75 of 1997 because they are not covered by bargaining councils. The 3.5 million workers covered by sectoral determinations comprise almost 50% of the relevant workforce. Workers in mining are covered by collective bargaining but through an industry-specific institution. In sectors without bargaining councils, councils are obviously irrelevant to wage and benefit setting. Just because bargaining councils (and extensions) do not explain wage setting across the entire economy does not mean that they are unimportant in regulating employment and wage setting in selected sectors, including especially the historically and prospectively labour-intensive sectors (such as clothing).

Crucially, also, the data on coverage do not tell us anything about the counter-factual, that is, the jobs that would exist in the absence of the extension of bargaining councils' collective agreements. The case of clothing is revealing, because the delays in the establishment of a national bargaining council and continued non-compliance meant that low-wage employment survived in some regions into the 2000s. How many clothing jobs would have been saved had

Godfrey et al. (2010: 126–128) use precisely these LFS data to demonstrate that bargaining councils do not cover most workers, even in manufacturing. Bhorat et al. (2009; 2012) correctly consider *all* employees in affected sectors as covered by the bargaining council.

minimum wages not been raised through collective agreements and the extension mechanism? NBC data suggest that its 2010–2011 compliance drive against firms which were not compliant with increased minimum wages, threatened almost 20 000 of the remaining jobs in the clothing sector (Nattrass & Seekings, 2014).

This begs two further research questions that have not, to our knowledge, been addressed. First, is the structure of wages (and hence the skill structure of employment) related to the ways in which wages are determined? Second, do bargaining councils deter firms from adopting more labour-intensive production or even from entering production? Godfrey et al. (2006: 94) acknowledge that the fact of incomplete coverage 'does not mean that councils do not create problems for small and new businesses'. It is probably impossible to answer this counterfactual question of what firms would do in the absence of this particular form of regulation. In the clothing sector, party firms (party, that is, to collective agreements) and non-party firms (covered by extensions) do seem to have different production models. More capital- and skill-intensive firms are more likely to be party to the agreement; more labour-intensive firms are more likely to be non-parties (Nattrass & Seekings, 2012).

The second argument in defence of the bargaining council system is that any reforms, even if warranted in themselves, might undermine the collective bargaining system and result in excessive costs indirectly. Roskam (2007) warns about allowing selective exemptions without regard for the possible broader consequences. He gives as an example the possible effect of allowing 'exemptions for small businesses from bargaining council agreements', which 'might dramatically affect the representivity of bargaining councils, and therefore threaten sectoral collective bargaining'. Selective reforms might undermine 'the balance that has been painstakingly negotiated by the social partners' (Roskam, 2007: 1)—overlooking the obvious point that retrenched workers, the chronically unemployed and firms that have closed do not count as 'social partners'. In Roskam's view, proposals such as a blanket exemption from agreements for small firms 'would seriously undermine an already fragile bargaining council system' (2007: 8).

This is a different argument to assess, because its merit depends in part on the value of the collective bargaining system in general. But it is not clear that allowing selective exemptions, for example to labour-intensive small firms, would have dire consequences. Some of the bargaining councils already allow selective exemptions to small businesses for a finite time period (Godfrey et al., 2006: 41–42), or to very small businesses indefinitely. The NBC in the clothing industry gives blanket exemption, on application, to very small firms employing five or fewer workers. We are not aware of any evidence that the widespread practice of allowing exemptions to smaller firms has been corrosive of the bargaining council system.

The third argument is that the system is working fine as it is, primarily because of the exemptions system. 'There is no need to provide for further exemptions for small businesses from collective agreements that are extended by the Minister', asserts Roskam, 'because at present the bargaining council system covers small businesses fairly [and] the exemption system is working efficiently ...' (2007: 8). Defenders of the system routinely repeat this claim that most applications for exemption are approved (for example, Altman & Valodia, 2006: 4), and so 'the exemption system ... is no longer the issue it once was' (Godfrey et al. 2006: 95; see also Bhorat & Van der Westhuizen, 2009: 23). Research reportedly found that the consideration of applications for exemptions from sectoral agreements may have become less arbitrary than in the past (Godfrey et al., 2006: 15; see also 65–72).

There are several reasons for doubting the validity of this argument. Crucially, it seems that exemptions are generally given for non-wage issues, and bargaining councils rarely, if ever, gave exemptions on wages. This was the case in the mid-1990s in a variety of sectors (Nattrass, 2000). In the case of the clothing sector, a comparison of the applications for exemptions in 2008 with the NBC's stated reasons for approving some of these—and rejecting others—suggests that, in this sector, wage-related exemptions are almost never granted. In 2010, the NBC suspended entirely consideration of applications for exemption. The NBC in the clothing industry is one of the bargaining councils which has repeatedly made it clear that exemptions will not be given to firms ('sweatshops') that are trying to compete by paying wages below the minima set through collective agreements and their extensions (Nattrass & Seekings, 2014). Moreover, as Godfrey et al. (2006: 74) point out, exemptions cover very, very few employees.

This is linked to an additional argument, about the political power of small as opposed to large business. The South African economy is dominated by large, capital-intensive firms which have historically exercised considerable influence on the state (Fine & Rustomjee, 1996) and continue to collude (Lewis, 2012). According to Roskam (2007: 57, citing Godfrey et al., 2006), however, 'the notion that big business drives sectoral collective bargaining is not true'. The evidence for this argument is not strong. Even Godfrey et al. (2006: 32–33) find that non-party employers are typically much smaller than party employers, and this is especially true in bargaining councils with a bigger reach into their sectors. As Godfrey himself showed in his earlier work on the clothing industry in Cape Town, the nominal representation of small employers in employers' bodies does not mean that they wield as much power in practice as the large employers which have the resources to dedicate to influencing bargaining councils (Godfrey, 1997: 46, 57–59).

Defenders of the bargaining council and extension system of minimum wage setting face a basic problem: insofar as the system works, and raises wages (as well as securing better benefits) for employees, especially in low-paid occupations, it is highly likely that it will—directly or indirectly—result in job destruction, especially among lower-paid occupations. The system will only be of no consequence for the structure and level of employment if it fails to affect levels and differentiation of wages.

Several recent studies have sought to identify the effects of bargaining councils on employment. Butcher and Rouse (2001) and Bhorat et al. (2009; 2012), using data from 1995 and 2005 respectively, found that bargaining councils significantly increased the wages paid to African workers, especially when the workers were also in a trade union. The premium associated with being covered by a bargaining council was 9–10%, and this rose to 25–30% for workers who were also members of a trade union (and were therefore more likely to be paid wages that complied with collective agreements and extensions thereof).<sup>4</sup> These estimated premia take into account non-compliance, that is, the premia would be larger if all firms were compliant.

There are several problems with Bhorat et al.'s interpretation of their findings. First, their models focus on the wages paid to workers who are supposedly covered (comprising employees in party firms, registered employees in non-party firms, supposedly covered by extensions, and unregistered employees, also supposedly covered by extensions) with the wages paid to workers who are not covered. The wages paid to workers not covered by collective agreements or extensions are not, however, unregulated. The latter include workers in sectors with their own institutions for collective bargaining, such as mining, and workers covered by sectoral determinations, as well as those workers who are not covered by any form of wage regulation.

Thirdly, and perhaps most importantly, their regression models focus on aggregate effects rather than the structure of employment and the distribution of wages. The case of the clothing industry shows that unionised workers in Cape Town might not push for a wage premium if they recognise that they are in a competitive, tradable sector and their own jobs are on the line. But they might be willing to impose higher real minimum wages on other workers in places like Newcastle. The crucial question for job destruction is whether bargaining

Bhorat et al. estimated the premium for bargaining council coverage and union membership at 16% in the initial version of their paper (2009), but at 25% in the published version (2012). The estimated premia are higher when they do not control for conditions of employment (including pension contributions). Excluding such a control from the model is more appropriate given that these conditions are frequently covered in collective agreements and cannot be considered as exogenous to the dependent variable (wages).

councils raise wages at the bottom end to the extent that employers either opt for capital- and skill-intensive technologies or shut down. Bhorat et al. (2009) report that the premia for private-sector workers are, in general, higher at the bottom end of the wage distribution. This is clearly the case in the clothing sector, where the extension of collective agreements has transformed both wage differentiation and the structure of employment.

Bhorat et al.'s findings form the basis of calculations by Godfrey et al. (2010) of the effects of extensions specifically. Godfrey et al. take Bhorat et al.'s (preliminary) findings on the (overall) wage effects of bargaining councils, and combine these with their estimates of the scope of extensions and of the employment elasticity of wages to calculate the overall effect of extensions on employment. They conclude that 'the extension of bargaining council agreements only had a negligible effect on employment levels' (Godfrey et al., 2010: 184). All three stages in their calculations are flawed. They underestimate the wage premium with regard to the primarily lower-skilled workers covered by extensions, they underestimate the coverage of extensions, and they resort to estimates of the employment elasticity of wages which cannot take into account the employment that would have existed if lower wages had been possible. The crucial question is whether raising wages at the bottom end of the labour market reduces the demand for less-skilled labour in the formal sector, as formal firms adopt more capital- and skill-intensive production technologies (or shut down). There is clear evidence that bargaining councils have aggressively raised minimum wages at the bottom end-as well as preventing any downward flexibility in sectors facing exogenous pressures. In the clothing industry, for example, the real minimum wage paid in Newcastle doubled between 2000 and 2010, and the bargaining council repeatedly took legal action against low-paying firms, many of which closed. In Cape Town, the real wage rose modestly, but even this sufficed to squeeze employers whose only possible responses were to compete with importers through raising productivity or by relocating to low-waged Lesotho. In both higher and lower-wage areas, employment declined.

### Conclusion

Debates about the growth path, labour-market policy and distribution seem to revolve around very different views of what causes poverty. One widespread view is that income inequality is due to wage inequality, that poverty is due to low wages, and low wages are due to exploitation (that is, employers earn excessive profits). The state should regulate labour markets to prevent employers exploiting workers, and ensure that all work is 'decent'. Industrial policies ensure 'decent' work by helping firms to invest in more skill- and capital-intensive production. Insofar as any attention is paid to the challenge of job creation, the

emphasis is on the state adopting macroeconomic policies that boost economic growth. This view is widespread within the trade union movement and among the labour lawyers who helped to write South Africa's union-friendly labour legislation in the 1990s. They recognise that wages matter to workers but deny that labour costs matter to employers. Sectoral determinations, the extension of collective agreements, and other regulations and controls should therefore be used to force 'sweatshops' (and labour brokers) to employ workers at 'living' (or 'civilised') wages and terms of employment. In this view, issues of employment and poverty are viewed in terms of the employment relationship and not in terms of job creation.

This view ignores the microeconomics of decision-making by employers (and prospective employers) about how to mix different factors of production, that is, how the structure of wages (or labour costs) affects choices between more labour-intensive and more capital- and skill-intensive production. There is abundant evidence of the importance of this. Economic growth might not have been entirely jobless (Bhorat & Oosthuizen, 2006: 154–164), but job creation has not matched the expansion of output. Pollin et al. (2006) point to the declining labour intensity of production in the formal economy. Between 1994 and 2001, 'the number of workers utilized per unit of output — i.e. a basic measure of labor intensity — fell by an average of nearly four percent per year', that is, from seven to five workers per R1 million of output (Pollin et al., 2006: xiii–xiv, 11). They estimated that 'around 2 million jobs will be lost if this pattern of declining labor intensity continues through the next decade' (Pollin et al., 2006: 56).

Over the course of several decades, South African employers in mining and manufacturing have replaced production systems using abundant unskilled and semi-skilled labour with ones using more skilled labour. Survey data suggest that, in manufacturing, the proportion of workers who were unskilled fell from 11% to 9% between 1995 and 2002, while the semi-skilled proportion dropped massively from 81% to 48%. The skilled proportion rose from 7% to 43% (Bhorat & Oosthuizen, 2006: 185). COSATU's own surveys show that the unskilled and semi-skilled workers comprised 60% of COSATU unions' membership in 1994, but only 22% in 2009 (Bischoff & Tshoaedi, 2012: 52). One response to this is to continue with policies that promote a high-productivity, high-wage growth path: push up minimum wages, emphasise skills development, and hope that economic growth is strong enough that benefits will trickle down from the wellpaid skilled insiders in formal employment to the less skilled, eking out a living in the informal sector or unemployed. An alternative response is to ask 'why are employers uninterested in employing less skilled labour?' Then investigate what policy reforms might shift employers' decision-making, and assess the benefits and costs of such reforms.

The rising cost of employing less-skilled workers is an obvious explanation for why employers have shifted to relatively skill- and capital-intensive production. Pollin et al. might be right that 'the evidence linking mass unemployment to high labour costs is not persuasive' (2006: xx,), and that the reduction in labour costs required to create a significant number of jobs would be so drastic as to push many working people down to the poverty line; but they ignore the fact that labour-market institutions have been raising the real minimum wages of many unskilled and semi-skilled workers. Moreover, they assume that tolerance of wage differentiation would lower the wages of existing jobs, whereas the primary effect is likely to be the creation of new jobs. Bizarrely, Pollin et al. themselves seem to accept the logic of this argument when they suggest that massive wage subsidies be introduced to promote labour-intensive production.

The case of the clothing industry poses the dilemmas especially starkly. This is an industry long tainted with the odour of the sweatshop. Wages are undoubtedly low relative to high-earning professionals and managers. But a strategy of raising minimum wages through bargaining councils and extensions threatens labour-intensive production. The experience of the clothing industry in the 2000s suggests that the countrywide extension of the bargaining council's collective agreements and intolerance of wage-related exemptions have served to reduce 'indecent', low-waged employment through job destruction. In an economy where poverty is underpinned by massive unemployment among less-skilled workers, it is difficult to see the value of this strategy, except for the small number of labour-market insiders who retain their jobs.

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### Chapter 15

The limits of cooperation in a divided society: The political economy of South Africa's garment and textile industry<sup>1</sup>

Mike Morris and Brian Levy

### Introduction

South Africa's massive problem of structural unemployment is, in important part, a consequence of the capital-intensive structure of its economy. This structure contrasts starkly with almost all of the development success stories of the post-World War II era—which built on rapid and early expansion of the production of light, labour-intensive manufactures, supplying both export and domestic markets.

A strategy of light manufactures and export-led growth is foreclosed for South Africa — both because of the dominance of global garment exports by low-wage producers such as China, Bangladesh and Indonesia, and because (middle-income but highly unequal) South Africa has a strong political commitment to fostering the expansion of only those formal-sector jobs that offer 'decent work' and a 'living wage'. But there are many options between low-wage exports, and the abandonment of light manufactures as a potential site for job creation. These potentially include production for the domestic market and participation in those export niches in which thriving middle-income countries such as Turkey (which, as of 2012, had 750 000 people employed in the garment and textiles sectors)<sup>2</sup> continue to compete effectively. In practice, South African industrial policy has

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Textiles and clothing account for 6–7% of Turkey's GDP, and 18.5% of total exports; there are over 40 000 garments and textiles firms active in the country. See Republic of Turkey, Ministry of Economy, *Clothing Industry 2012*. Available from: http://www.tcp.gov.tr/english/sectors/sectoringpdf/hg-clothing\_2012.pdf

failed to position the country's light manufacturing sectors to compete effectively, even in those niches.

This chapter explores some reasons for this failure by focusing on policy and performance in the country's garments and textiles sector over the decade from 1998–2008. It provides the context of the evolution of South Africa's garments and textiles sector and explores analytically, some multi-stakeholder initiatives undertaken in the latter half of the decade in an effort to turn the sector around. It provides a 'glass half-full' perspective through an analysis of one of the more successful initiatives—the Cape Clothing and Textile Cluster (CCTC); then it goes on to provides a 'glass half-empty' perspective via an analytic review of a central-government-led initiative at sector coordination. Finally, it considers the broader implications of the analysis. Key conclusions that emerge from the analysis are as follows:

- Skillfully facilitated and rigorously designed collective action can foster cooperation among actors who have little prior history of working in pursuit of shared goals. Such an approach therefore has the potential to enhance the productivity of industrial clusters. However, unless all potential veto players buy in to the collective effort, there are significant limits to what can be achieved.
- But cooperation is especially difficult in settings with very large differences among the actors in their interests and in their perceptions of their relative bargaining power—and hence their views as to what would be a desirable and feasible distribution of benefits from cooperation. Given South Africa's commitment to (and interpretation of) 'decent work' and a 'living wage', these difficulties appear especially stark in labour-intensive sectors such as clothing—where the country confronts competition from many low- and middle-income countries with much less stringent definitions of what kind of work is worth having. The resulting conflicts between business, labour and political and bureaucratic actors make the transactions costs of reaching and sustaining agreement extremely high.
- In these difficult settings, there is a central role for facilitation by government, often at national as well as local levels. However, government actors can find themselves pulled between the 'impartial' logic of facilitation and incentives to be responsive to the specific interests of their political principals.

As these conclusions suggest, the results of South Africa's multi-stakeholder initiatives in the garments and textiles sector have been disappointing. But beyond the garments value chain itself, there is a further cautionary lesson which applies more broadly. Where distributional conflict is severe, win–win agreements (even if potentially available) are difficult to reach. In ending apartheid, South Africa's political genius was the ability to transcend division and find ways of achieving

a win-win situation. But that was in a national political context in which the consequences of failure were seen as 'too ghastly to contemplate'. The garment/textiles case suggests that these skills of conciliation may not be transferring well from systemic to more micro-level challenges. As the subsequent downward trajectory of this sector suggests, in a divided society the alternatives to effective consensus-building may not be the (post-apartheid) status quo forever; instead, there may be a growing loss of confidence in the future, and deepening division and polarisation.

### The context: Evolution of the garment and textile industry

Over the past two decades, South Africa's garment and textile industry received substantial attention as a potential mechanism through which to re-engage with the global economy and tackle high structural unemployment. Initially there was hope that the sector could be repositioned as an exporter into global markets, and hence as an engine of employment growth (Gibbon, 2002; Kaplan, 2004; Levy, 1992), but it was recognised that substantial restructuring was needed.

Shifts in policy and in the global environment have made the last two decades a roller coaster for the industry. Import liberalisation and exposure to global competition was followed by a brief, exuberant period of seeming success. But further policy shifts and short-sighted decision-making resulted in a startling reversal and a catastrophic downward spiral — which set in motion the efforts at cooperation which are the subject of this chapter.

### Trends in trade policy and performance

Until the mid-1990s, the garment and textile sector was locked into importsubstituting industrialisation (ISI), with firms protected by an almost impenetrable thicket of targeted import quotas and high, product-specific tariffs. Since the cost of textiles had a direct impact on profits, garment and textile companies continually wrestled over the textile import regime, with the end result being an ongoing escalation in nominal protection.

However, in 1994 the government embarked on a radical eight-year garment tariff phase-down agreement with the World Trade Organization (WTO) (Skinner & Valodia, 2002). This saw the elimination of import quotas, a movement to a more uniform tariff structure, and then a halving of nominal tariffs (Roberts & Thoburn, 2004). By 2001, tariffs on textiles were down to 28% and tariffs on garments down to 40%, both from over 100%.

Meanwhile, new export opportunities opened up. In January 2000, the South African–European Union (EU) trade agreement offered reduced duty access to the EU market. The United States (US) followed in May 2000 with the Africa Growth and Opportunity Act (AGOA), which allowed duty-free/quota-free

access to the US market for garments and textile products that met particular rules of origin.<sup>3</sup> US retailers began to look at sub-Saharan Africa, and particularly South Africa with its long established garment and textile industry, and their buyers flew in to seek potential new sources for orders. However, the big push for exports came from a simultaneous and rapid depreciation of the exchange rate in 2000/02 — from a yearly average of R6.94 per US\$1 in 2000 to R10.52 per US\$1 in 2002. All of these factors created considerable excitement among domestic garment manufacturers, who jumped on the 'export bandwagon'.

Local garment manufacturers, seeking larger profits than were available from supplying the domestic market, signed numerous export orders with US retailers. Garment exports rose in value and volume terms by roughly two-and-a-half times from 1999 to their highest point in 2002 (Table 15.1). Many manufacturers did not have sufficient capacity to supply both export and domestic markets. Instead of expanding capacity, a significant number reneged on their domestic orders. But then the rand strengthened, and, by November 2004, the R/US\$ exchange rate had appreciated to R6.40. Now manufacturers were confronted by a 'perfect storm':

- Export competitiveness was crippled.
- The local price of imported garments had fallen sharply.
- AGOA rules of origin severely constrained garment exports from South Africa.
- The South African government was unwilling to broaden the scope of the Duty Credit Certificate Scheme (DCCS)<sup>4</sup> which had subsidised garment exports.

Those garment manufacturers that had hastily jumped onto the 'export bandwagon' now reneged on their export orders. By 2006, garment exports to the US had collapsed to US\$46.7 million and 1.3 million units — only one-fifth of the level just three years earlier, and less than half the levels that had prevailed in 1999, prior to the rand's depreciation (Table 15.1).

AGOA (May 2000) facilitates sub-Saharan Africa export-led growth. AGOA rules of origin for the clothing and textile sector were later amended (until 2012) to allow qualifying countries, classified as 'least developed', to source their material and accessory inputs from non-AGOA and non-US-based suppliers, which allowed access to China and other Asian economies for fabric inputs. South Africa does not fall into this category and hence is subject to triple-stage conversion rules of origin — that is, they have to source fabric, yarn or cotton from either sub-Saharan African or US suppliers (Morris & Barnes, 2009).

The DCCS was an export incentive programme for the clothing and textile manufacturers within the South African Customs Union, designed to encourage the outward orientation of clothing and textile manufacturers. The DCCS operated on the basis of clothing and textiles manufacturers earning duty credit certificates for proven exports, which were then used to claim a remission of duties on imports.

Table 15.1: Exports of clothing products, 1998–2006

		1999	2000	2001	2002	2003	2004	2005	2006
R/US\$ average exchange rate		6.0	6.94	8.58	10.52	7.57	6.45	6.37	6.78
Total exports <sup>1</sup>	Rand	995.1	1328.4	1901.1	2 590.3	2 260.9	1568.8	1005.4	836.5
Total exports	US\$	165.9	191.4	221.6	246.2	298.7	243.2	157.8	123.3
Exports to US <sup>2</sup>	US\$	96.9	140.9	173.4	180.6	231.8	141.3	67.0	46.7
Exports to US	Units (m) <sup>3</sup>	2.2	3.7	4.7	4.7	5.5	3.2	1.6	1.3

Sources: 1. CloTrade data, Morris & Reed (2008b)

- 2. USITC data. Available from: http://www.dataweb.usitc.gov/ (accessed October 2011)
- 3. Total units comprise 'dozens, number, dozen pairs, other'.

The impact on the textile industry was different. The industry was split between technical/industrial, household, and fabric for apparel textiles. Technical/industrial and household textiles remained successful exports, even after the rand's appreciation.

Local garment manufacturers then sought to return to the domestic retailers — but the retailers had made other plans. Scrambling to find stock (and now faced with reduced tariffs on imports), they had discovered China as an alternative supply source (Morris & Einhorn, 2008). Garment imports grew from US\$223 million in 2000 to US\$1123 million by 2006 (WTO, 2007), with China's share (including Hong Kong) jumping from 28.9% of total rand-value garment imports in 1998 to 58.6% in 2001 and rising to 81.2% by 2006 (Table 15.2). Textile imports (primarily fabric from China) increased nearly threefold between 1999 and 2006. Large-scale imports of garments and fabric from China became the order of the day.

Table 15.2: Garment/textile imports to South Africa: rand and China % share, 1998-2006

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Garments (R million)	778	889	1184	1 293	1673	2 292	3 609	4788	6898
Textiles (R million)	5 227	5 0 6 9	6 000	6 6 4 5	8 7 9 4	8 193	10 101	11 226	14370
China %	22.7	28.5	49.4	50.7	54.4	66.4	74.3	74.2	78.5
Hong Kong %	6.2	6.8	7.2	7.9	6.5	4.9	4.6	3.8	2.7

Source: Morris and Reed (2008b)

*Note*: Using rand denomination demonstrates the impact on local clothing/textile firms.

The result was a decline in production and employment in the garment and textile industry. Controlling for inflation, the real value of sales of domestically produced clothing declined from R11.8 billion in 1998 to R10.4 billion in 2003 (Barnes, 2005). Textiles output increased between 1996 and 2003, but had dropped below its 2000 level by 2008. Roughly 26% of the jobs in formal-sector garment manufacturing were lost between 2004 and 2007. In fabric textiles, between 2003 and 2005, employment declined 21% (Edwards & Morris, 2007). Instead of creating jobs, the garment and textile sector was shedding them.

### A new strategic direction?

There was hope, however. South Africa has a large and sophisticated domestic-consumer market. It caters for diverse income groups — a very demanding upper-income segment, middle-income workers seeking fashionable volume products, and the self-employed in the informal economy. The rise of a substantial black middle class had significantly expanded demand and domestic garment sales had boomed. All of this pointed towards a potential opportunity for local producers to thrive by supplying domestic markets.

One way to realise the opportunity would have been to reverse policy direction and increase protection for local producers against imports. Such a policy would have been costly: it would have increased the cost of garments to financially strapped consumers; it would have eased the competitive pressure on garments firms and their workers—potentially setting in motion a downward spiral of inefficiency and high-cost production (as has been the experience the world over, with import-substituting industrialisation), thereby foreclosing any future prospect of competing in high-value, garment-export niche markets. Even more broadly, it would have risked sending a signal that the country was reversing the effort to undo apartheid-era protectionism.

Instead of protectionism, the policy pursued between 2003 and 2008 was to preserve (and potentially win back) domestic market share via a set of competitiveness-enhancing measures, which aimed to leverage the locational advantages enjoyed by domestic producers. Proximity to the market provides some inherent competitive advantages. This is especially true given the structure of South African retailing. In 2006, the largest four South African garment retailers accounted for 70% of retail-sector sales (Morris & Reed, 2008a, 2008c). These large retailers wanted shorter lead times, increased flexibility and quicker responsiveness from their suppliers (Barnes, 2005). Cheap imports from China were subject to long lead times and lacked flexibility. By focusing not on price competition, but on quality, delivery and flexibility, an opportunity seemed to be available for significant inroads to be (re)made into the domestic market (Business Alliance Clothing and Textiles, 2005). Indeed, Roberts and Thoburn (2003), conducting

surveys and interviews among textiles manufacturing firms, found that firms experiencing severe price competition suffered deteriorating performance, while those experiencing competition in the realm of delivery managed to expand employment and were 50% more likely to record turnover growth.

For an initiative to win back the domestic market to gain traction, greater coordination was needed within the domestic value chain. However, historically there has also been little coordination between garment and textiles manufacturers. Textiles manufacturers increasingly lacked the capacity and product range to satisfy the local market. Consequently, garment manufacturers suffered from fabric shortages and were forced to import (Barnes, 2005). To harness the benefits of flexibility and speed, local garment and textile manufacturers needed to work together to sort out lead times, order reliability and greater production flexibility.

But greater coordination was difficult to achieve. During the ISI apartheid years, textile companies dominated the value chain, and garment and textile firms fought over the level of textile tariffs and import permits. Although by 2003, with globalisation and a new democratic regime, this era had long ended, the textile industry and its association, Texfed, was still dominated by large, older textile firms, still oriented towards the old industrial paradigm. One of the major challenges facing the garment and fabric textile industry was how to facilitate radically improved coordination across the entire value chain to enhance productivity, speed and flexibility among all producers. The dynamics of how this challenge has (and has not) been met is the subject of the following two sections.

### 'Take one': Orchestrating cooperation — a glass half-full

This section assesses the dynamics of a private-sector-led effort to strengthen industry cooperation—the Cape Clothing and Textiles Cluster (CCTC). The reader is warned in advance: the intent of this section is to offer a 'glass half-full' perspective on cluster collaboration—both in substantive terms (by highlighting what was done), and analytically (by applying a methodology for assessing the quality of the collaborative effort). The broader political-economy dynamics are only introduced (through the involvement of some key players) into the analytic narrative later.

## Cooperation in the garment and textiles value chain: Some recent experiences

### **Initiating cooperation**

Beginning in late 2003, a series of determined efforts were made at multiple levels (public and private, national and provincial) to address the difficult challenges confronting garment/textiles manufacturing described above:

- In late 2002, the garment-sector association presented a strategy for restructuring—including proposals for government support—to the Minister of Trade and Industry, who had himself been a senior organiser in the labour union in the 1970s and 1980s. He was unsympathetic and dismissed it as special pleading.
- In 2003, with the initial export success, the Department of Trade and Industry's (DTI's) chief economist commissioned a US consultant to survey garment buyers in the US to assess how to strengthen purchases from South Africa. The US buyers overwhelmingly identified the need to introduce flexible labour conditions to align with competitors from East Asian economies. The minister refused to discuss the report and reassured the South African Clothing and Textile Workers Union (SACTWU) that this would not be entertained.
- In late 2003, a group of textile firms in KwaZulu-Natal requested a private consultancy, Benchmarking and Manufacturing Analysts (BMA), to investigate the competitive dynamics in the textile industry, and explore whether a cluster process could be initiated.
- In mid-2004, the Western Cape government also approached BMA to facilitate setting up a provincial cluster in the garment and textile industry.
- In 2004 and 2005, the CCTC and KwaZulu-Natal Clothing and Textile Cluster (KZNCTC) were launched respectively. The Western Cape provincial government provided funding and institutional support for the CCTC. The KZNCTC received support from the Durban metropolitan and provincial governments. Both were facilitated by the BMA.
- At the national level, in late 2004, the DTI commissioned customised sector plans (CSP) for a variety of targeted sectors; they contracted BMA consultants to produce a CSP for the garment and textile industry.
- Over the following months these consultants engaged in an intensive process of meeting with representative stakeholders throughout the industry—to identify obstacles, constraints and challenges, as well as test agreement on various strategies and policies to overcome these. SACTWU, however, refused to participate in this policy-formulation process.
- By June 2005, the key elements had been thrashed out and a draft CSP was presented to government at a workshop of private-sector, government and parastatal stakeholders. A finalised, comprehensive document, incorporating inputs from the workshop, was forwarded to government a few weeks later. (Given the history of antagonism between the garment and textile sectors, the seeming finalisation of this plan looked to be a major achievement for industrial policy and government. The industry as a whole looked forward to a new era. However, as we shall detail, the national-level processes subsequently took some unexpected turns.)

- Throughout July/August 2005, the consultants met with all the major garment retailers to present the key policy elements and discuss their involvement in this process.
- In September 2005, for the first time in the history of the industry, a high-level workshop was held, bringing together representatives from the major retail chains and firms in the garment and textile sectors. The workshop was hosted by the CCTC and opened by the deputy minister of the DTI. However, the workshop discussions were exclusively among the private participants and focused only on value-chain issues. The workshop ended with a public commitment to work together towards a new era of value-chain cooperation.
- In October 2005, a Clothing and Textiles Business Alliance was established, encompassing the associations from all three parts of the value chain.
- By 2006, all the major retailers had joined the Cape and KZN clusters. The
  retailers paid special membership fees and created a new fund for achieving
  alignment in the supply chain and upgrading the clothing and textile
  manufacturers.
- Subsequent high-level workshops among participants in the value chain (held in 2006, 2007, 2008 and 2009) put flesh on the value-chain alignment skeleton, with major strategic and operational interventions to achieve systemic competitiveness.
- Between 2006 and 2009, garment firms had demonstrated efficiency gains from CCTC membership. The total inventory had decreased from 64 to 53 days in clothing firms, and from 19 to 15 days in CMTs. Internal rework rates had respectively decreased from 8.82% to 6.51% and from 11.23% to 9%. (BMA communication)

To illustrate in detail how these processes worked, the following discussion focuses on the CCTC. The experience of the KwaZulu-Natal cluster, though not analysed here, is similar in its major aspects. Later we focus on the national-level political-economy conflict dynamics.

### How the CCTC operates

The cluster is a private-sector, membership-driven organisation of firms (46 firms as of late 2011), which comprise a critical mass of the leading garment and textile firms in the province. Government provides the enabling environment, funding and support. The consultants, as the service providers, provide technical support. The CCTC is legally registered as a non-profit, membership-based organisation (Ardé, 2011). The constitution specifies clear governance functions—there are core (manufacturers only) and advisory members (retailers, consultant service providers, co-opted higher education institutions) of the executive and technical committees. Only manufacturers are accorded governance rights to be elected

office bearers of any committees, and it is run by an elected executive committee of manufacturers, and chaired by a garment (or textile) manufacturer, plus provincial-government representatives and the technical consultants who provide ongoing support (CCTC, 2009; 2011a; 2011b; 2011c). There are three technical steering committees comprising volunteers from the member firms, each of which focuses on one of the three areas of current cluster activity—world-class manufacturing, human-resource development and value-chain alignment—and operates according to clear business plans and budgets. Manufacturers pay membership fees of about 25% of operating costs, with government funding covering the remainder. Retailers pay membership fees plus additional funding for two special programmes—value chain alignment and world-class manufacturing.

Retailers participate in cluster-activity impacts through multiple channels (although they have seldom played a leading role in operational cluster activities). Their membership sent an important demonstration message, and has pressured their own suppliers to join the CCTC. In some cases this has been through fear of losing favour; in others it has been as a means of enhancing operational quality and remaining in the retailer's supply chain. All of this sent a signal to other manufacturing firms that the cluster was worth joining. Perhaps most fundamentally, in the early stages of the development of the CCTC, the retailers' demonstration of their commitment to upgrading the domestic industry helped to build trust, confidence and hope.

### Assessing the quality of cooperation

Participatory approaches to the design and implementation of economic policy have become the flavour of the decade, not only in industrial policy, but also in many other areas. However, the gap between high-level, 'multi-stakeholder' meetings that pay lip service to cooperation and robust collective action is very large. To assess the quality of cooperation, we use the methodology developed by Elinor Ostrom and associates.

Ostrom (1990) defines 'collective action' as the process whereby 'a group of principals who are in an interdependent situation can organize and govern themselves to adopt coordinated strategies to obtain (and maintain) higher joint benefits when all face temptations to free-ride, shirk, or otherwise act opportunistically ...' The process is one in which a new set of institutions (rules of the game) that facilitate cooperation are supplied, in which participants credibly commit to follow the rules, and in which principals engage in mutual monitoring of conformance to the rules. In principle, the relevant principals can comprise both governmental and non-governmental actors—although crucially, for an effort involving government actors to be genuinely collaborative, they would need to view their role as facilitative and supportive, not controlling.

Ostrom developed a framework of 'working rules', which, she argued, could be used to characterise any set of institutional arrangements.<sup>5</sup> The first column of Table 15.3 groups the working rules into four broad categories:

- 1. rules governing who the eligible participants in the collective endeavour are and their roles
- 2. rules governing how the participants interact with one another—the obligations of each participant, the benefits they should receive, how decisions are made, and how conflicts are addressed
- 3. rules governing how information flows between the participants, including the extent to which participants are following through on their obligations
- 4. rules governing the delegation of decision authority.

With these rules as backdrop, Ostrom (2005) identified a set of eight 'good practice' principles for the governance of collective action. The second column of Table 15.3 lays out the 'good practice' principles — adapted to the purpose of assessing the operation of the garment/textiles cluster.

Table 15.3: Institutional analysis: working rules, and 'good practice' design principles

The rules	Principles for 'good practice' design				
I: Rules governing eligibility					
Boundary rules — define who is eligible to enter a position	Clearly defined participant boundaries: clear and locally understood boundaries between legitimate				
Position rules — create positions for participants to enter	participants and non-participants are present.				
II: Rules governing benefits, costs and decision-making					
Payoff rules — assign rewards or sanctions	Proportional equivalence between benefits and costs: rules specifying the amounts that a participant benefits are proportional to the distribution of labor, materials and other costs.				
Aggregation rules — determine how collective decisions are to be arrived at	Collective-choice arrangements: most individuals affected by the collaborative initiative are authorised to participate in making and modifying its rules.				

Continued

Note that Ostrom includes *scope rules* which define and regulate the range of acceptable outcomes; these are not relevant to the present analysis, so are not included in Table 15.3.

The rules	Principles for 'good practice' design
Choice rules — specify what a participant occupying a position must/must not/may do at a particular point in a decision process	Conflict-resolution mechanisms: rapid, low-cost, local arenas exist for resolving conflicts among participants, or with officials. Graduated sanctions: sanctions for rule violations start very low but become stronger if a user repeatedly violates a rule.
III: Rules governing monitoring	
Information rules — assign the obligation/ permission or prohibition to communicate to participants in positions and the language/form in which the communication will take place	Monitoring: monitors who actively audit participant behaviour are at least partially accountable to the participants and/or are the participants themselves.
IV: Rules governing delegation of decision authority	
<ul> <li>Operational rules</li> <li>Collective choice rules</li> <li>Constitutional rules</li> </ul>	Minimal recognition of rights: the rights of participants to set rules (or participate in rulemaking) are recognised by the government.  Nested initiatives: governance activities are organised in multiple nested layers, with a clearly defined, autonomous domain of decision-making for local-level collective action.

Source: Ostrom (2005)

### **Benchmarking the CCTC**

How well does the quality of cooperation in the CCTC benchmark against these good practice principles? Each of the four broad categories highlighted in the table are considered in turn.<sup>6</sup>

Beginning with Category I — the rules governing eligibility:

The CCTC's boundary and position rules define clearly who is eligible to participate, and their roles.

Members of the CCTC comprise garment and textile manufacturers and retail chains, including the industry leaders. Members are formally registered with the CCTC and pay membership fees. The induction of new members is announced in quarterly newsletters. Criteria for membership include the following: (1) being involved in manufacturing or retail activities in the garment, textile or related sectors; and (2) operating within the Western Cape. CCTC services are highly excludable, with only members having access to workshop tours, technical materials and benchmarking services.

The various services listed and analysed below are distilled from respondents, as well as the CCTC website. Available from: http://www.capeclothingcluster.org.za/index/contents/view/1

Turning to Category II — the rules governing benefits, costs and decision-making: *There is reasonable equivalence between benefits and costs.* 

Each member commits financial resources in the form of membership fees. All members receive newsletters, are individually benchmarked in terms of world-class manufacturing operational-performance criteria, are invited to participate in cluster activities, and receive technical assistance provided by the cluster. Respondents indicated that some members engage and participate in cluster activities more than others. While these firms commit more resources (in terms of time and effort spent), they are also able to absorb more knowledge and skills. Retailers provide more funding, over and above their membership fees, than do the other members. In return, the retailers signal their willingness to be 'good corporate citizens', thereby deflecting political attention away from themselves, receive special services (research on global, fast product processes as well as workshops for their buyers on value-chain alignment and world-class manufacturing), and ensure that cluster members of their particular supply chains are working on upgrading their capabilities.

As for decision-making, consistent with the relevant good practice principles in Table 15.3:

- The collective choice arrangements authorise participation of those involved in the making and modifying of rules.
- Rapid, low-cost conflict-resolution mechanisms are in place to resolve disagreements among participants
- Sanctions are structured in a 'graduated' way, which helps to preserve solidarity among the CCTC's members.

Cluster oversight responsibilities reside with the executive committee. Activities and services provided in the three core areas are decided upon and administered by the technical steering committees. All these committees contain representatives from member firms. Any member firm may raise an issue within the cluster, which will be addressed either by the cluster service provider and facilitator, or by one of the formal structures.

The cluster facilitator initially addresses any difficulties or problems experienced by member firms. If unsuccessful, the problem can be raised in one of the formal structures. Occasionally, members stop paying their membership fees but wish to continue receiving newsletters, technical resources and the like. Often, and especially with smaller firms, the issue involves cash-flow problems and other business and financial woes. Since cluster members and facilitators all recognise the fragility of the industry, the offending member is not automatically excluded from the cluster, but rather given time to pay.

As for Category III — rules governing monitoring:

Monitoring is systematic, and the monitors are accountable to the participants.

The level of participation in cluster activities is important for cluster success, but technically is not a requirement. Records are kept of who attends cluster meetings and who participates in cluster activities. The facilitator both participates in collective action and is accountable to other participants through their role as service provider, where credibility is dependent on the quality of services provided.

Finally, Category IV, the rules governing the delegation of decision authority: Provincial authorities recognise the rights of the cluster participants to organise, as well as a clearly defined autonomous area for decision-making.

The Western Cape provincial government provides substantial funding to the cluster but does not control its operation: respondents confirm that the cluster is driven and guided by industry, and that its existence and decision-making structure is not challenged by any government agency.

In sum, benchmarked against both the earlier conflict-ridden history of the garments and textiles value chain, and the 'good practice' principles, the CCTC seemingly emerges as an exemplary case of effective collective action.

### The CCTC: Performance and prospects

At first sight, the CCTC emerges as a success. From a process perspective, the organisational arrangements that underpin the cluster benchmark well against Ostrom's good-practice principles. Substantively, as part of their membership, the cluster offers a wide range of services to its firms:

- The cluster organises training workshops and seminars, joint visits to member factories, industry-wide gatherings and study tours.
- Newsletters containing information on important events—the introduction of new members, meetings taking place—are distributed quarterly (both to members and on the cluster's website). These newsletters also contain information on industry developments and book reviews, and they discuss matters that are of general concern.
- Each member receives a confidential, annual benchmarking report and a firm workshop at which its operational performance is measured against aggregated performance indicators of domestic and international competitors, as well as its own historical progress.
- Retailers receive only aggregated benchmarks indicating the operationalperformance progress of cluster members, measured against international competitors. In addition, they receive research reports and to varying degrees participate (often via their buyers) in cluster workshops.

• The CCTC assists members to prepare applications for industry support programmes sponsored by central government. A portion of the funds awarded to firms is paid back upon the receipt of the government grants so that other members may benefit.

Other CCTC-sponsored initiatives include: software simulations to determine cost differentials between international and cluster suppliers; a benchmarking handbook to assist members in the benchmarking process; an Eskom collaboration that saw selected member firms receiving energy audits; and the Manufacturing Excellence Resource Package 'designed to help South African manufacturers deal with the challenges of restructuring in the face of global competition' (CCTC, 2009: 3).

The dilemma is that these services fall far short of what the garments/textile sector have needed to turn around the industry, restructure it and make it globally competitive. For one thing, the programme of services of a regionally based cluster is necessarily a limited one. The purview of the cluster and the provincial government that supports it does not extend to national, central-government-sponsored initiatives, which were among the key action programmes in the June 2005 Customised Sector Programme (CSP) document. These key action initiatives included: assistance with loans to upgrade manufacturers' technology and capital, roll out of a national subsidy for upgrading operational production activities in line with world-class manufacturing standards, action to stop illegal garment imports and scaled-up national training initiatives to create sustainable skills in the workforce.

Furthermore, the evidence suggests that although the existence of the cluster is not in jeopardy, its momentum has been uneven. After the retailers joined the cluster, membership expanded from an initial 13 in 2004 to 28 in 2007, and then further to 43 in 2008. However, in 2010 it dropped back to 33, before rebounding to 46 members in 2011. The loss of momentum was a function of three factors: (1) government cutting the membership subsidy for small black firms; (2) the effect of the financial crisis; and (3) the impact of the debacle surrounding the CSP (discussed below) on the retailers' commitment to the domestic garment and textile industry, which, in turn, affected the view of their suppliers that they had to be cluster members in order to remain in good standing with their retail customers. Retailers also appear to be shifting their focus from support for the cluster generally to support for their primary suppliers in their own supply chains.

## 'Take two': The limits of cooperation — a glass 'half-empty'

Thus far the narrative is only partial. Key players have remained absent—the Business Alliance, central government, the South African Clothing and Textile Workers Union (SACTWU), and the political alliance which links SACTWU (via

its parent, the Congress of South African Trade Unions, COSATU) to the ruling political party, the African National Congress (ANC). This section introduces these players into the collective-action narrative through a broader political-economy lens.

# Business, government and labour: From honeymoon to cooperation interrupted

### Phase 1: Honeymoon — the initiation of business-government cooperation

In 2004, the DTI set in motion a process of producing a CSP for the garment and textiles industry. An immediate challenge was to get the two sectors to work together: their interests were different and they had a long history of being unable to agree on a common set of industry-policy initiatives. The consultant commissioned to facilitate the CSP process endeavoured repeatedly to engage with SACTWU, but without success.

At first all appeared to go smoothly. By mid-2005, the key elements had been thrashed out and a draft sector plan was presented to government at a workshop of private-sector, government and parastatal stakeholders. A finalised, comprehensive document, incorporating inputs from the workshop, was forwarded to government a few weeks later, for submission to the DTI's most senior official for signature. At the heart of the proposed CSP was a public-private partnership institution—the Textile and Clothing Development Council (TCDC)—bringing together all industry and government stakeholders to advise, develop and ensure implementation of a series of proposed interventions. The TCDC was based on a successful initiative along similar lines in the automobile sector, known as the Motor Industry Development Council (MIDC).

The MIDC arose from a national, automotive, industrial-policy initiative, which had two key objectives — to improve the international competitiveness of firms in the industry and enhance the industry's growth through exporting (Barnes, 2005). The MIDC operated on the fundamental principle that it was the responsibility of government to drive industrial policy/strategy for the sector in conjunction with the assembly and component industry. The MIDC's role was to act as the policy reference group and an industry advisory body, as a means for industry to monitor and evaluate the implementation targets, and finally as a feedback mechanism to the DTI auto-sector directorate. The MIDC was not conceived to act as an alternative decision-making, nor implementation, body parallel to the DTI. Implementation was to occur through bodies (either government agencies or contracting, external service providers) that the DTI, in consultation with the MIDC, contracted and funded. Strict participation rules, based on constituency representation, governed attendance and participation; but, in contrast to the garment and textile sector, the motor industries' business associations were not

also involved in national, wage-bargaining institutions—this was undertaken by altogether different representative employer bodies. This meant that animosities and conflicts, built up within industrial-relations arenas, did not spill over into the MIDC.

The garment and textile CSP laid out detailed parameters for a collective effort, including:

- the rationale for intervention, based on the dynamics underlying the global and domestic industry
- detailed key-performance indicators
- strategic and institutional initiatives to align with the performance goals, and
- a governance mechanism to ensure implementation.

There was, however, a key gap in the draft document. Its implicit focus was on how South Africa's garment/textile sectors could align themselves with global value chains and participate more effectively in export markets. However, for reasons detailed earlier, the export opportunities had largely dissipated. At least for the medium-term, the platform for sustainability and growth would need to come from the domestic market. Yet the six, major, garment-retail chain stores—who controlled 70% of domestic sales—were only weakly represented in the CSP process.

Over the following months, an intensive dialogue unfolded between retailers, and garment and textile manufacturers. The key focus was on the possibility of slowing/reversing the rapid increase in Chinese garment and fabric imports by creating cooperation along the domestic value chain to take advantage of local production. This discussion crystallised around the issue of systemic competitiveness — that no single link in the value chain could be 'an island of competitiveness in a sea of inefficiency'. Two issues emerged as central:

- 1. The retailers were challenged to state clearly what they needed from the garment and textile firms. Their answer was crisp—speed and flexibility. If that could be achieved then they could cope with a reasonable price premium over Chinese imports.
- 2. The garment firms responded that providing speed and flexibility required investment in technology and training—but such an investment was problematic in the absence of any guarantees of order from the retailers. They also pointed to the inflexibility of the textile mills, whose long runs constrained garment firms from cutting lead times.

These discussions culminated in mutual commitments in October 2005, from the retailers and the garment and textile manufacturers, to a strategic vision for the industry and initial steps to implement it—anchored in the new Clothing and Textiles Business Alliance. Taken together, the CSP, the proposed Textile and Clothing Development Council, the new Business Alliance and the

cluster initiatives, seemingly comprised a powerful platform for a successful transformation of the garment/textiles value chain.

### Phase 2: Enter labour — cooperation interrupted

Although SACTWU had remained aloof from the process of preparing the CSP, it was not inactive. South Africa's ruling group is a *de facto* alliance, comprising the ANC, COSATU and the South African Communist Party. SACTWU proceeded to use its political connections with senior government officials to try and reshape the design of the CSP. The formal signing off of the CSP, which had been negotiated between government and business, thus never occurred. Instead, in October 2005, the DTI called a meeting at which a 'revised CSP', based on consultations with SACTWU, was presented.

There were numerous points of conflict over new detailed clauses that were included in the 'new CSP'. The Business Alliance identified three 'red flag issues' regarded as make or break issues. These were as follows:

- 1. Changes to the governance structure of the TCDC. Originally intended as a platform for subsector participants from across the value chain, plus some government and labour representation, the 'new CSP' proposed structuring it as a body comprising equal representation from business, labour and government. This proposal implied a transformation of the TCDC from a problem-solving industry forum into a *de facto* tripartite implementation body, with business in the minority. Furthermore, instead of each stakeholder paying their own costs, with government providing funding for strategic initiatives, retailers were expected to contribute the majority of the millions of rand required to operate the council.
- 2. A shift in focus from creating systemic competitiveness throughout the domestic value chain to mandatory requirements that retailers source locally, enforced through quantitative restrictions.
- 3. Prohibitions on retailers from sourcing garments from manufacturers whose compliance with National Bargaining Council regulations was in dispute, thereby using industrial policy to resolve industrial-conciliation problems.

Over subsequent months, there were multiple meetings/communications between the DTI and the Business Alliance. At each point, agreements between business and government seemed to have been reached—only for a next iteration of a draft CSP to come onto the table, incorporating labour's concerns. Eventually, in early 2006, a process to renegotiate the CSP was set up, comprising a tripartite negotiation with the Business Alliance, SACTWU and the DTI. After repeated cycles of negotiations, many protracted meetings and clause-by-clause negotiations, the negotiations resulted in the conclusion of a revised document in August 2006; but by then much damage had been done.

The Business Alliance had managed to throw out two of the 'red flag issues' — quantitative coercion on local sourcing, and the expansive interpretation of the CSP's role vis-à-vis industrial conciliations issues. However the business parties had simply given up trying to renegotiate the crucial issue of the governance architecture and authority power of the proposed stakeholder council. They ceased to see it as a lynchpin of a new industrial policy, and their efforts shifted to neutralising its role. The garment manufacturers did not disengage entirely — in the face of rising import competition, they remained keenly interested in direct government-support mechanisms. The retailers had *de facto* decided to withdraw from the process. The August 2006 'CSP' was thus viewed by business as a government document and not as an agreed, public/private, joint industrial policy. The proposed tripartite body never met.

The final nail in the coffin came in September 2006 when the DTI, with the support of SACTWU, announced a two-year China Restraint Agreement, imposing quotas on the importation of selected Chinese garments and fabric, which ultimately came into effect in January 2007. The interests of the retailers, vis-à-vis such restraint, were different from those of the garment and textile manufacturers; thus the announcement threatened to drive a wedge between the retailers and the rest of the industry. To minimise this risk, the garment association joined the retailers in publicly condemning the measure. But trust between business and the government was further damaged.

When, in July 2007, the DTI tried to resurrect the CSP and called a meeting of the industry, the new retailers association (the National Clothing Retail Federation of South Africa) announced that it was withdrawing from the CSP process. The other business partners, garment manufacturers and textile firms were willing to participate — but had come to view the CSP as laying out government actions with which they would engage as and when it suited them.

In sum, rather than accelerating momentum for sectoral transformation, a principal result of the national process was to erode the hard-earned trust that had been built up by the various players in the garment/textile value chain. The CCTC and KwaZulu-Natal clusters still operate quite successfully, but retailers have focused increasingly more narrowly on strengthening capacities and supply-chain management for some of their own garment suppliers. The effort to put in place a more ambitious industrial policy for the sector, jointly agreed between the public and private sectors, was stillborn.

# The political economy of industrial policy in the garments and textiles value chain

As a first step in trying to understand why the CSP initiative worked out as badly as it did, it is helpful to benchmark the CSP process against the good-practice principles laid out in Table 15.3. The results are sobering:

- The principle of 'clearly defined participant boundaries' was not met. An initial round of negotiations took place without organised labour at the table with an explicit signal from the DTI at the time, that agreement between business and government would be a sufficient basis for a sectoral industrial policy. Right until the end of the effort, labour remained outside of the participatory effort, preferring to make its influence felt through back channels, which the DTI entertained, despite its initial public statements to the contrary.
- The principle of 'proportional equivalence between benefits and costs' was not met. In the negotiations to revise the CSP, the other parties sought to shift the major part of the financial cost of the proposed stakeholder council onto business—without any corresponding commitments. Further, industrial relations in the sector had long been framed in conflictual terms, with no history of shared effort to address the sector's competitiveness challenges. Although workers were at least as vulnerable as the business owners to the vagaries of the sector, the CSP effort exacerbated, rather than reversed, business—labour conflict.
- The principle of 'collective choice arrangements capable of clarifying' the rules of the game, in a way that was perceived to be fair by all parties, was not met. There was, in particular, no consensus as to the role of labour. *De facto* business regarded labour as an 'interested party' to be consulted and incorporated in the process. The DTI regarded labour as an equal stakeholder. Labour, with its strong political connections, regarded itself as a pre-eminent stakeholder in driving sectoral policy.<sup>7</sup>
- The principle of 'rapid, low-cost arenas for conflict resolution' was not met. There was no mutually respected, neutral referee who could monitor how the various participants engaged in negotiation and call 'foul' when one or other of the players failed to play by the (anyway obscure) rules. Instead of playing the role of the independent facilitator, the DTI was perceived by business to

Many protagonists of industrial policy would argue that the effort to incorporate labour as an equal partner in the CSP was misplaced. In industrial policy terms, organised labour is an 'interested party' with the right to be consulted, but not a 'stakeholder' charged with the responsibility and ability to turn the industry around.

- be partisan. This escalated the negotiating process into a high-cost arena for business.
- The principle of 'nested initiatives, with clearly defined, autonomous domains
  of decision-making' was not met. Throughout the process, it was repeatedly the
  case that seeming agreements, painstakingly reached among the private-sector
  actors and then seemingly validated with government, were subsequently
  overturned.

In sum, a proximate explanation for the weakness of the CSP effort was a failure to put in place 'good practice' rules of the game to support an initiative that was dependent on cooperation for its success. But this explanation begs an obvious follow-on question: what accounts for this failure? Three factors seem especially relevant:

- 1. There was a lack of capacity in the putative champion of the CSP, the DTI. After the democratic transition post 1996, the directorate in the DTI responsible for engaging the garments and textile industry had been well staffed (at its peak about 11 people), with leadership that understood well the changing dynamics of international competitiveness. However trade policy had dominated the subsequent efforts of the DTI. Industrial policy to assist the domestic value chain to become more competitive had been placed on the back burner and skilled, sector-based personnel exited. By the time the CSP was initiated, the directorate had only one, young, inexperienced professional staff member.
- 2. There was the challenge of fostering collaboration among players who had had little, if any, prior experience of working with one another. Here, two sets of contrasts with the automotive sector are instructive:
  - i. In the automotive sector, it was unanimously accepted that the global, branded assemblers were the leaders of the value chain. Negotiations between the business leaders, labour and government could be difficult—but at the end of the day, all the participants understood that these global leaders had 'red lines' that could not be crossed. By contrast, the leaders of the garments' value chain were the domestic retailers. But retailers had played no prior role in industrial policy. and neither the DTI nor SACTWU had had any prior experience of working with them. Indeed, the union regarded them as the party responsible for the replacement of domestic production with cheap imports. Mutual suspicion was rife.
  - ii. Related, autos were an export-oriented sector in which it was clear that the companies and their workers ultimately succeeded together or failed together. In the end, for all of the challenges of industrial relations, a deal had to be struck and, after long experience, the rules of the business—labour game were clear to all. By contrast, the alignment of incentives was

- less clear-cut in the domestic market-focused garments and textiles effort. In particular, retailers (and consumers) stood to lose, but manufacturing workers and firms potentially to gain, from any reimposition of protection.
- 3. Perhaps most fundamental, was an unresolved ambiguity within the ruling political party (the ANC) and government as to what should be the prevailing policy orientation. On the one hand, construction of a 'developmental state' has been a strong aspiration of the ANC. On the other hand, the ANC governed as an alliance, allegiance to which increasingly was based on the receipt of targeted benefits by its partners. The CSP was predicated on the logic of a developmental state. As Ostrom's good-practice principles suggests, in order for the garments/textiles CSP to be effective, central government needed to play a stronger but independent role, providing leadership to forge a clear vision, policy and strategy for the economic development of the industry, and then facilitating compromised agreement among the stakeholders around such a vision. Facilitation was especially crucial in the face of the complex, competing interests of the multiple business and government stakeholders. In practice, the political imperative to respond to influential alliance members trumped any aspiration to a developmental orientation.

### Some final reflections

South Africa confronts the enormous, post-apartheid challenge of overcoming a legacy of inequality, division and polarisation. But its transition to democracy also endowed it with some unusual assets: a demonstrated capacity to overcome distrust and achieve win–win outcomes, even in the face of division; and an electorally victorious political party with a long and proud history of commitment to social justice. These assets are evident in the determined engagement of all stakeholders in the effort to forge a collective response to the challenges of the garment and textiles sectors.

But the efforts have yielded, at best, modest returns. As the analysis has shown, one of the key reasons for this outcome was that local-level initiatives alone were insufficient to effect turnaround—and the stakeholders proved unable to go beyond local-level efforts and orchestrate, on a national scale, a collective process capable of realising the win—win way forward that, seemingly, was so tantalisingly within reach. Certainly, the very large differences in the interests and perceptions of their relative bargaining power among the non-governmental stakeholders involved—multiple business groups and organised labour—meant that achieving a win—win outcome would be difficult. But there was also a failure on

the part of government to effectively balance and mediate among the competing stakeholders in a way that moved the process forward.8

What makes this especially worrying is that an effective state, capable of forging consensus and pointing the way forward, is crucial if South Africa is to address its challenges effectively. Credibility is a key aspect of state effectiveness—and in the early years of post-apartheid democracy, the South African state appeared to be meeting the challenge, in economic as well as political management. But these early successes seem increasingly fragile. The experience of the garment and textiles sector suggests that the early strengths were not transferring well to more recent challenges. As the downward trajectory of the sector suggests, in a divided society the alternatives to effective consensus-building may not be the (post-apartheid) status quo forever, but, instead, a growing loss of confidence in the future, and deepening division and polarisation.

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# Chapter 16 Conclusion<sup>1</sup>

Anthony Black

South Africa's economic and social prospects appear increasingly bleak. Low growth of under 2% in 2015 is causing the unemployment rate to continue to edge upwards. Inequality remains extremely high. The growing fiscal deficit has placed a ceiling on further expansion of state employment and social grants. Key parastatals and other arms of government are in disarray and in some cases, for example electricity provision, this poor performance constitutes a severe constraint on growth. The decline in global commodity prices has delivered yet another blow to the economy, and social protest is growing in the rural towns, the cities and in the factories and mines. In this milieu, the unemployment problem appears ever more intractable.

## **Unemployment and growth**

It is obvious that much higher growth is needed to generate an expansion in employment, but higher levels of employment would also be good for growth. In fact it could be argued that a greater emphasis on rapid employment creation could help achieve a virtuous circle of more rapid growth in both output and employment. To understand this argument, consider first the costs of large-scale unemployment. Low levels of employment impose a significant drag on the economy for a number of reasons.

The first is the human cost. Apart from the misery of being unemployed, high rates of unemployment contribute to family breakdown, crime and social dislocation, which in turn impose high economic costs on society. It is a sad irony that one of the fastest growing employment sectors over the last 20 years has been private security.

Second, there is the issue of unemployed human resources on a massive scale. This constitutes a huge loss of potential output. According to the Organisation for Economic Co-operation and Development (OECD), the employment rate in South Africa since 2000 has been in the range of 40–45% of the working-age

<sup>1</sup> I would like to thank Brian Levy for useful comments on this chapter.

population. This compares to close to 65% in Brazil, India, Indonesia and China, and a similar level in OECD countries. In simple terms, South Africa is trying to make its way in the world economy with one arm tied behind its back. Apart from the loss in potential output, unemployed workers lose what little human capital they may possess because time away from employment leads to an attrition of skills and adverse health outcomes.

Third, there are also more direct economic effects. Higher rates of employment would mean higher spending by poorer households on basic consumption goods and services. These goods and services tend to have high domestic content and are labour-intensively produced. Food, for example, draws on the relatively labour-intensive agricultural sector. Rising employment and incomes in poorer households are the best way to promote the informal sector. More earners in poorer households will raise household income and may assist in dampening wage demands and, of course, would also contribute to the fiscus.

Fourth, unemployment is the leading cause of persistent inequality in South Africa. Unemployment contributes to inequality, mainly because it disproportionately affects people with lower levels of skill and lower-income households. Higher employment would raise household income, especially at the low end of the distribution. Reduced unemployment is also the only sustainable way to establish a rising wage floor for unskilled and semi-skilled workers. There is a growing acceptance of the view that high levels of inequality are bad for growth and reduced inequality would itself confer a growth dividend. In economist's terminology, high rates of unemployment therefore carry significant negative externalities for society as a whole.

## **Employment-intensive growth**

Since 1994, there have been a number of national economic strategies, each with ambitious growth targets. The Reconstruction and Development Programme (RDP) was part of the ANC's election manifesto in the first democratic elections. This was followed by the Growth, Employment and Redistribution programme (GEAR), a more orthodox set of policies which included fiscal restraint. In 2004, the Accelerated and Shared Growth Initiative for South Africa (AsgiSA) aimed at halving poverty and unemployment by 2014 and placed a heavy emphasis on infrastructure provision. More recently, we have had two strategies, the New Growth Path (2011) and the 2012 National Development Plan (NDP), operating concurrently. But actual growth has always fallen short of the projections contained in these plans. And even if the growth projections had been achieved, they would have been insufficient to deal decisively with unemployment.

With the economy performing very poorly, much higher growth is clearly essential. But perhaps even more importantly, the economy needs to generate

more jobs per unit of GDP growth than has hitherto been the case. If we assume (optimistically) that the economy could grow at an average rate of say 4% over the next 10 years, it will make a huge difference to the unemployment rate at the end of that period if employment grows at 1%, 2% or 3% per annum. The output elasticity of employment is currently quite low (about 0.5) so 4% growth per annum in output will lead to a 2% expansion in employment. We have argued in this book that the relationship between output and employment growth is not a fixed coefficient but is very much affected by policy. The point is that it is not sufficient to argue that growth rates must be increased. If South Africa is to deal decisively with the scourge of unemployment, growth has to become more employment intensive. This means that employment expansion should not just be seen as the incidental by-product of economic growth, but as an important objective in its own right.

South Africa has to address the historical disconnect between growth and employment. As Table 16.1 demonstrates, very few countries come close to South Africa's extraordinary rate of unemployment. Greece is one exception, with an unemployment rate of 24.6%, but its circumstances are completely different to those facing South Africa. Greece has been through an economic depression in which output fell by more than 25% over the period 2008 to 2014. The solution to its employment problem is quite simple — a resumption of growth. While not stellar, the performance of the South African economy over the past 20 years has been positive. However, the unemployment rate is even higher than in Greece.

Table 16.1: Unemployment rates in South Africa and selected countries

	Unemployment rate (%) 2015
South Africa	25.5
Argentina	5.9
Brazil	7.6
Greece	24.6
India	4.9
Indonesia	6.2
Malaysia	3.2
Mexico	4.2
Russia	5.5
Thailand	0.8
Turkey	10.1

Source: The Economist: Economic and Financial Indicators, 2015

## An employment compact

For well-known historical reasons, the South African economy operates at a low-level employment equilibrium. Growth is exceptionally non-inclusive (Fourie, 2014) and it makes little sense to think adding a couple of percentage points to the growth rate along this trajectory will solve the unemployment problem. A key conclusion of this book is that a complete shift in mindset is required to one that actively incorporates employment into the centre of economic policy-making. It means thinking about how growth at a given rate could generate more employment than has hitherto been the case. Millions of people in South Africa are desperate for work. This is seen as a 'problem'. Perceived differently, it represents a major development opportunity. How can this potential workforce be combined with appropriate management, finance and technology to become a major, new 'leading sector' in the economy; to be sure, one is talking here about relatively labour-intensive work and relatively low wages. Given South Africa's problems in competing in labour-intensive tradables, such a strategy would require active state support.

The critics may raise two concerns here—one being the implied growth of low-productivity sectors and the other, the cost of state support. Dealing first with the issue of productivity, a strategy that targets the lower half of the income distribution could be seen as contradictory to the objective of achieving higher productivity in sectors like manufacturing.

Labour productivity refers to output per (employed) worker and in South Africa it is quite high compared to other upper-middle-income countries. But the productivity of millions of unemployed South Africans is effectively zero and the metric that should concern us is economy-wide productivity. Another way of looking at it is to ask the following question: which alternative has the lower marginal cost — raising the already high productivity of, say, a car-industry worker by x, or raising the productivity of an unemployed person from zero to x? Intuitively, the latter should be easier and less demanding in terms of capital and management requirements. Does this mean neglecting 'advanced' sectors of the economy? Not at all; the economy has to 'walk on two legs', with massive growth in employment at the low end, accompanied by increased dynamism in the 'advanced' sector. More rapid growth in the labour-intensive sectors will create new sources of demand, upgrade skills and produce new, small firms. All of this will galvanise the 'advanced' sector.

What about the cost of supporting employment? We have indicated earlier that high unemployment imposes a very large cost on the society and the economy. Higher employment carries significant positive externalities. Subsidies may, therefore, be justified on purely economic grounds. The key is to uncover what low-cost interventions are available to deliver rapid employment growth.

Clearly, employment-intensive growth would require reforms, some of which are difficult in the current milieu. There has recently been much talk of Convention for a Democratic South Africa (CODESA)-style growth compacts. A term we prefer is that of an employment compact. For the vast majority of South Africans, higher employment is a more direct and attractive objective than growth (to achieve employment). A prerequisite of such a strategy is that it would need to have buy-in by domestic and foreign investors because they would be primarily responsible for new employment creation. This relates to a second prerequisite—the maintenance of macro stability. This in turn places a limit on expanding public-sector employment in the short term, although there is still scope to enlarge the Expanded Public Works Programme. Such a compact could be built on three pillars—strong pro-employment policies, including subsidies and direct state support; macro stability and limited labour reform.

Pro-employment polices mean thinking through how a given amount of growth could generate more employment than has hitherto been the case and developing a strategy to achieve this. It is beyond the scope of this book to develop such a strategy in detail. Here we offer just four examples framed in the form of questions.

# 1. What is the cheapest and most efficient way to create a bias towards employment by private firms?

One example would be to establish employment incentives on a large scale. Currently the tax system offers tax breaks for research and development (R&D) on the (correct) grounds that R&D has external benefits for the economy as a whole. A carbon tax is under consideration for the (equally correct) reason that carbon emissions constitute a negative externality for the planet. Using the same logic, it is surely appropriate that employment of unskilled workers, who are in excess supply, should be subsidised. The idea would be to change the behaviour of firms at the margin. It would make labour-intensive sectors more profitable and would delay the transition to more mechanisation and automation within firms.

One option is a small, but universal, wage subsidy for all workers below a certain wage level. This would avoid the problems of the youth wage subsidy because it would be aimed at all workers below a certain wage level. It could operate through the tax system, allowing deductions for labour costs somewhat in excess of the current 100%. It could be on a sliding scale, with larger percentage deductions for the lowest-paid workers. But is this simply a subsidy to employers? Yes, it is and it would have to be funded by taxes elsewhere. In the same way that the energy subsidy attracted energy-intensive firms (see Chapter 13), a well-designed labour subsidy could encourage labour-intensive enterprises.

#### 2. What would it take to build a large, light manufacturing sector?

Many developing countries have encouraged foreign direct investment (FDI) in light manufacturing as a way of generating exports and employment. This group includes not only low-income countries but upper-middle-income countries such as Turkey, Mexico, Malaysia and Thailand, which have per capita incomes equivalent or higher than that of South Africa. In some countries, special institutional arrangements have played a significant role in the exports of light manufactures. These include export-processing zones in Mauritius, the Mexican *maquiladora* and special economic zones in China. To date, South Africa has eschewed this growth path, and established industrial-development zones focused more on attracting heavy industry.

We have argued above that South Africa has the potential for rapid expansion of labour-intensive manufacturing. Industrial policy and other policy levers should be part of an aggressive strategy aimed at building competitive advantage in these sectors. This will require specific interventions and subsidies, and is not simply a matter of deregulating markets.

The first requirement is that this objective needs to be accepted as an explicit policy and pillar of industrial strategy. The political problem is that light manufacturing to some extent requires competition on the basis of wages. Such a strategy is sometimes criticised as a 'race to the bottom', which will drive down average wages. But strategies need to be judged on the basis of actual employment and distributional outcomes. Light manufacturing could create hundreds of thousands of jobs. Poorer regions would benefit disproportionately. For instance, in 2012 there were an estimated 90 000 employees in the manufacturing sector of the Eastern Cape. The creation of, say, 100 000 formal manufacturing jobs in the province would be a game changer for the region. This is by no means beyond the bounds of possibility but it will need political commitment and high-quality intervention.

What is required is the mobilisation of resources to support such an initiative. Could one conceive, for example, of a large electronics assembly cluster in the Eastern Cape (perhaps at Coega)? In spite of the poor performance of labour-intensive manufacturing, South Africa has many advantages. These include a large labour force with industrial experience, willing to work at relatively low wages; advanced infrastructure; a very sophisticated financial system and a well-developed network of suppliers and ancillary industries. In addition, it has good market access via trade agreements with the Southern African Development Community (SADC), the European Union, and the United States via the Africa Growth and Opportunity Act (AGOA), and a rapidly growing market on our doorstep.

South Africa has to declare itself open for (labour-intensive) business. With appropriate adjustments to policy and the investment environment, there would

need to be a concerted campaign to attract domestic and foreign investment in sectors such as clothing and textiles, metal products and consumer electronics. Agro industry also qualifies because of its strong backward linkages into the agricultural sector.

# 3. Can South Africa compete in labour-intensive tradables with existing wages, labour-market regulation and labour productivity?

Competitive wages are obviously essential to the viability of labour-intensive tradable sectors. International wage comparisons are fraught with problems and we provide only some indicative evidence here. Two World Bank studies (Clarke et al., 2007; Dinh et al., 2012) draw on survey data and show South African wages in the garment sector to be high, but the differentials are not large in relation to middle-income countries (Clarke et al., 2007). Indeed, wages in Turkey's huge garment sector are higher than in South Africa, albeit with greater regional variation (Morris & Barnes, 2014).

It has been argued in some quarters that the problem of massive unemployment could be simply addressed by deregulating labour markets; but some international comparisons find that the South African labour market is not especially regulated. For example, OECD employment-protection indicators data, compiled from 21 items covering different aspects of employment-protection regulations, indicate that the South African labour-market regulation is quite flexible compared to some comparator countries, especially with regard to temporary employment contracts.

However, the Global Competitiveness Report presents a very different view (World Economic Forum, 2014). While its survey methodology has been criticised, the perceptions of decision-makers are extremely negative regarding the efficiency of the South Africa labour market in a broad sense. The report ranks 'restrictive labour regulation' as the most serious constraint on business, followed by an 'inadequately educated workforce' and 'inefficient government bureaucracy'. South Africa's rankings in the various components of the labour-market efficiency 'pillar' are exceptionally poor. Out of 144 countries, South Africa is ranked 144th in 'cooperation in labour employer relations', 143rd in 'hiring and firing practices', 139th in 'flexibility of wage determination' and 136th in the 'pay and productivity' subcategory. These dismal outcomes no doubt partly reflect the current fraught industrial-relations environment, not least in labour-intensive sectors such as agriculture and mining. They also sound a warning about the viability of low-wage strategies and point to the need for government to contribute a larger component of the social wage as one way to ease this problem.

However, aspects of labour regulation do need attention. Centralised bargaining via national bargaining and the extension to non-parties has been damaging to non-metropolitan employment in the garment sector because it

makes insufficient allowance for regional disparities, firm size and the products being produced (Morris & Barnes, 2014; Nattrass & Seekings, Chapter 14 in this volume). The result is that garment firms in outlying areas, competing head on with Asian producers, are forced to pay nationally set wages which have increasingly reduced the gap between metropolitan and non-metropolitan wages. Similar problems apply in other sectors such as metal fabrication. There are many ways in which this could be addressed. For instance, there needs to be more scope for differentiation which takes account of regional disparities, firm size and the type of production process. Relatively small adjustments, perhaps at the regional level or in specific zones, could be the way to address the most problematic aspects. But linked to such measures should be a concerted affort to deal with the non-labour costs of private-sector employment (Kanbur, 2015). These include transport, training, worker housing and infrastructure.

#### 4. Could agriculture be developed to create more employment?

This volume contains three chapters devoted to the rural and agricultural sector. Chapter 9 indicates the decline in various support measures to agriculture, a sector that has seen significant losses in employment. But international experience shows that there is considerable potential in this sector and South Africa has performed poorly compared to competitor countries such as Brazil, Chile and Thailand. This is particularly the case if consideration is given to the encouragement of labour-intensive crops, as well as the processing of these for domestic and international markets. Agriculture is generally highly labour intensive but much depends on the activity in question. For example, deciduous fruit requires 300 times more permanent labour per hectare than maize (Cramer & Sender, 2015). These farming activities can then create correspondingly more employment in processing, packaging, logistics and so on. This requires stepped up support to reverse the decline in agricultural R&D, to fast track dedicated infrastructure such as irrigation in both commercial farming areas and small-scale agriculture. With the real level of fixed capital formation well below the rates of the early 1980s, policy-makers need to seriously examine why investment in this sector is so low.

These four examples could be multiplied to form a purposive set of strategies that could form the basis of an employment compact, which could shift the trajectory of the economy in a more labour-absorbing direction.

Government has stated, very clearly, the case for a more labour-absorbing growth path — but an economy cannot efficiently shift its growth path without shifting its competitive advantage. To move to a more labour-absorbing growth path, South Africa will need to compete more effectively in labour-demanding economic activities. It is not being suggested that we can suddenly out-compete

China in ultra labour-intensive manufactures and neither should South Africa support unsustainable, low-margin activities. However, competition in labour-intensive tradables cannot be avoided and for the unemployment rate to be reduced, South Africa needs to do much better than it has been doing. This does not mean that wages should be driven down, although policy does need to investigate specific labour-market rigidities. It is also important to take account of regional variations by allowing greater flexibility in poorer areas. Incentives should be used to subsidise labour, training and infrastructure for rural development and light manufacturing, rather than to subsidise investment, electricity and infrastructure for capital-intensive firms.

The impact on poverty reduction of rapid expansion in labour-intensive employment could be dramatic. A large percentage of households in the lower half of the income distribution are supporting unemployed family members on meagre earnings. Higher employment would relieve this burden. Health and education outcomes would improve. The large share of wages in value added means that money would circulate within lower-income areas, both rural and urban, creating better opportunities for the informal sector. The huge burden of crime and social dislocation in low-income communities would be reduced. And, importantly, higher employment is the only sustainable way in which low wages for unskilled occupations can be driven up. A central challenge for South African economic policy, therefore, is to tilt the playing field towards labour-absorbing growth in order to mobilise the potential of an underemployed and poorly skilled workforce.

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