Racial Inequality and Affirmative Action in Malaysia and South Africa

Hwok-Aun Lee

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/open_access_dissertations

Part of the Economics Commons

Recommended Citation


https://doi.org/10.7275/1670203 https://scholarworks.umass.edu/open_access_dissertations/291

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
RACIAL INEQUALITY AND AFFIRMATIVE ACTION IN MALAYSIA AND SOUTH AFRICA

A Dissertation Presented

By

HWOK-AUN LEE

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

September 2010

Department of Economics
RACIAL INEQUALITY AND AFFIRMATIVE ACTION IN
MALAYSIA AND SOUTH AFRICA

A Dissertation Presented

By

HWOK-AUN LEE

Approved as to style and content by:

______________________________
Robert Pollin, Chair

______________________________
Gerald Epstein, Member

______________________________
James Heintz, Member

______________________________
Gerald Epstein, Department Head
Department of Economics
DEDICATION

To Jacqui, whose love, grace and patience sustained this to fruition

To Kieran and Naomi, who inspired and distracted in perfect proportion

To my mother and the memory of my father, who first got me thinking
ACKNOWLEDGEMENTS

This dissertation was made possible by the guidance, support, and friendship of many people and organizations. My dissertation committee directed the construction and completion of this study out of a sprawling subject. I thank the chair, Bob Pollin, for his critical comments, challenging questions, and encouragement, Jerry Epstein for sharpening the focus and clarity of this study, and James Heintz for helpful and generous feedback.

I am grateful to the Faculty of Economics and Administration, University of Malaya, for granting me study leave to pursue this PhD, and to the Economic Planning Unit for allowing access to Malaysian Household Income Survey data. Among the scholars of Malaysia with whom I have interacted, I must single out Tey Nai Peng for his assistance in obtaining the 2000 Census data, Khoo Khay Jin for his advice in handling the household income surveys and Khoo Boo Teik for his insight and encouragement.

The PERI Dissertation Fellowship, PERI Travel Grant, and a short-term research grant from the University of Malaya provided the means for doing fieldwork in South Africa. I appreciate Seeraj Mohamed and the Corporate Strategy and Industrial Development unit at the University of the Witwatersrand for letting me set up base on their premises. I thank Seeraj, Ganief Bardien and Lumkile Mondi for their hospitality, generosity, and conversations during my stay in Johannesburg. I am indebted to my hosts in Cape Town, Michael and Nelleke Elston, for warmly and kindly opening their home.

I have been privileged to participate in graduate school with UMass economics students and their families, especially Adam Hersh and Dawn Le, Mohammed Moeini
and Maryam Amjadi, Florian Kaufmann and Katrin Maurer, Phil Mellizo, Noah Enelow, Ben Zipperer, Heidi Peltier, Hasan Comert, Martin Rapetti, and EGSO. The Graduate International Christian Fellowship, Michael and Carol Greene, our First Baptist Church growth group, and North Village neighbors, have been sources of friendship and community.

Above all, my deepest gratitude flows to Jacqui, Kieran and Naomi, for being a home I always look forward to return to, and for reminding me to be present and relevant.

I praise and thank God for the gifts of living, striving, and learning.
ABSTRACT

RACIAL INEQUALITY AND AFFIRMATIVE ACTION
IN MALAYSIA AND SOUTH AFRICA
SEPTEMBER 2010

HWOK-AUN LEE, B.A., UNIVERSITY OF BRITISH COLUMBIA
M.SC., SCHOOL OF ORIENTAL AND AFRICAN STUDIES
PH.D., UNIVERSITY OF MASSACHUSETTS AMHERST
Directed by: Professor Robert Pollin

This dissertation examines racial inequality and affirmative action in Malaysia and South Africa, two countries with a politically dominant but economically disadvantaged majority group – the Bumiputera in Malaysia, and blacks in post-Apartheid South Africa. We aim to contribute comparative perspectives and current empirical research on affirmative action regimes and dimensions of inequality directly pertinent to affirmative action, chiefly, racial representation and earnings inequality among tertiary educated workers and in upper-level occupations. We discuss theoretical approaches to inequality and affirmative action, with attention to particular circumstances of majority-favoring regimes, then survey, compare and contrast affirmative action programs and their political economic context in Malaysia and South Africa. In the empirical portions, we outline patterns and evaluate determinants of racial inequality, focusing on the mid-1990s to the mid-2000s.
On Malaysia, we find that Bumiputera access to tertiary education has rapidly increased, but also observe disproportionate difficulties among Bumiputera degree-holders in participating in labor markets and in attaining upper-level occupations. Bumiputera representation at managerial and professional levels has remained static and dependent on the public sector. Econometric results indicate that quality of tertiary education impacts on the prospect of attaining upper-level jobs, and that Bumiputera are more adversely affected. Lack of data restricts our assessment of racial earnings inequality to a deduction that Bumiputera young graduates have experienced relatively greater decline in their earnings capacity.

On South Africa, we find that blacks have steadily increased access to tertiary education, although disparities in quality of institutions and in student performance persist, which disproportionately and negatively affect black graduates. We observe that black representation has increased in upper-level, especially professional, occupations, largely in the public sector. We find that white-black earnings disparity declined substantially among degree-qualified workers, while not diminishing or not showing clear patterns among other educational and occupational groups.

We conclude by considering, within the constraints of each country’s political economic context, implications that arise from our findings. Most saliently, while affirmative action raises quantitative attainment of tertiary education and representation in upper-level occupations for the beneficiary group, inadequate attention to qualitative development of institutions and progressive distribution of benefits may attenuate progress toward the ultimate objective of cultivating broad-based, self-reliant professionals and managers.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS .................................................................................................................. v

ABSTRACT ........................................................................................................................................ vii

LIST OF TABLES ................................................................................................................................ xiv

LIST OF FIGURES ................................................................................................................................ xvi

LIST OF ABBREVIATIONS AND TERMS .................................................................................... xx

CHAPTER

1. INTRODUCTION .......................................................................................................................... 1

   1. 1. Motivation and main tasks ................................................................................................. 1
   1. 2. Structure of chapters ......................................................................................................... 4

2. INEQUALITY AND AFFIRMATIVE ACTION: CONCEPT, POLICY AND COUNTRY CONTEXT .......................................................................................................................... 10

   2. 1. Inequality, disadvantage and affirmative action: Conceptual and policy issues ........ 10

      2. 1. 1. Inequality and systemic disadvantage ...................................................................... 10
      2. 1. 2. Conceptions of affirmative action ............................................................................ 16
      2. 1. 3. Contentious issues and alternatives to race-based affirmative action ............... 21

      2. 1. 3. 1. Market mechanisms versus state intervention .................................................. 22
      2. 1. 3. 2. Race-based affirmative action ............................................................................. 24
      2. 1. 3. 3. Merit and effort, efficiency and dependency ....................................................... 32
      2. 1. 3. 4. Overall assessment ............................................................................................... 37

   2. 1. 4. Empirical approaches to affirmative action ................................................................. 41

   2. 2. Imperative, content and context of affirmative action: Malaysia .................................. 43

      2. 2. 1. Systemic disadvantage and affirmative action imperatives .................................. 43
      2. 2. 2. Affirmative action policies and programs ................................................................. 50

      2. 2. 2. 1. Representation in education .................................................................................. 51
      2. 2. 2. 2. Representation in upper-level occupations .......................................................... 56
      2. 2. 2. 3. Equity and property ownership ............................................................................ 59
      2. 2. 2. 4. Managerial and enterprise development ............................................................... 60
3. 2. Review of official accounts and literature ........................................................... 125
  
3. 2. 1. Tertiary education expansion ................................................................. 125
3. 2. 2. Graduate and youth unemployment ....................................................... 128
3. 2. 3. Representation in targeted occupations .............................................. 132
3. 2. 4. Convergence of tertiary education and upper-level occupations ....... 135
3. 2. 5. Public sector employment .................................................................... 138
3. 2. 6. Household income inequality ............................................................... 140

  
3. 3. 1. Data quality .......................................................................................... 145
3. 3. 2. National earnings inequality ................................................................. 147
3. 3. 3. Earnings inequality by educational attainment ..................................... 150
3. 3. 4. Inter-occupational earnings differentials ............................................. 154

3. 4. Main findings .............................................................................................. 156

4. MALAYSIA: DETERMINANTS OF RACIAL INEQUALITY AND IMPLICATIONS ON AFFIRMATIVE ACTION .............................................................. 159
  
4. 1. Overview .................................................................................................... 159
4. 2. Employment in targeted occupations ....................................................... 163
4. 3. Occupational attainment among tertiary educated workers ................. 168
  
4. 3. 1. Analysis of 2000 Population Census data ............................................ 168
4. 3. 2. Employer and employee surveys ......................................................... 174

4. 4. Earnings determinants ............................................................................... 177
  
4. 4. 1. Supplementary surveys ...................................................................... 185

4. 5. Key findings and implications on affirmative action .............................. 187

  
5. 1. Overview ................................................................................................... 192
5. 2. Review of empirical literature ................................................................. 195
5. 3. Findings from October Household Surveys and Labor Force Surveys .... 200
  
5. 3. 1. Data considerations ............................................................................ 201
5. 3. 2. Earnings levels and overall inequality ............................................... 203
5. 3. 3. Educational attainment ...................................................................... 206
7. 3. 3. Potential, limits, and pitfalls of affirmative action

7. 3. 3. 1. Tertiary education

7. 3. 3. 2. Employment in upper-level occupations

7. 3. 3. 3. Managerial and enterprise development

7. 3. 3. 4. Overall regime of affirmative action

APPENDICES

1. CONSTITUTIONAL PROVISIONS FOR AFFIRMATIVE ACTION
2. TERMINOLOGY OF AFFIRMATIVE ACTION IN SOUTH AFRICA

BIBLIOGRAPHY
LIST OF TABLES

Table 2-1. Peninsular Malaysia: Racial distribution of labor force with industries, 1957. ................................................................. 46

Table 2-2. Peninsular Malaysia: Composition of population and poverty, by race and area, 1957 and 1970.......................................................... 48

Table 2-3. Malaysia: Racial composition of occupation groups, 1970....................... 48

Table 2-4. Malaysia: Affirmative action programs and notable features....................... 65

Table 2-5. South Africa: Affirmative action programs and notable features............... 98

Table 2-6. Malaysia and South Africa: Affirmative action programs and notable features....................................................................................... 119

Table 2-7. Malaysia and South Africa: Political economy context of affirmative action ........................................................................................................... 120

Table 3-1. Malaysia: Average annual growth in tertiary education enrolment, 1990-2005 .................................................................................................................. 126

Table 3-2. Malaysia: Percent of labor force with tertiary education, within race group, 1995-2004.......................................................................................... 128

Table 3-3. Malaysia: Percentage of labor force with diploma or degree, within race group (2004)........................................................................................................... 128

Table 3-4. Malaysia: Unemployment rate within race group, by highest education, 1995-2004.................................................................................. 130

Table 3-5. Malaysia: Unemployment rate, by age bracket, 1995 and 2004.............. 130

Table 3-6. Malaysia: Unemployment rates, by age bracket and race groups, 2004.... 131

Table 3-7. Malaysia: Distribution of occupation by race, percentage of Malaysian, 1990-2000.......................................................................................... 133

Table 3-8. Malaysia: Distribution of occupation by race, percentage of Malaysian, 2000-2005.......................................................................................... 134

Table 3-9. Malaysia: Registered professionals by race, 1990-2005............................ 135

Table 3-10. Malaysia: Proportion of degree and diploma holders working as managers, professionals, and technicians (2000)..................................................... 136
Table 3-11. Malaysia: Proportion of managers, professionals and technicians with degree or diploma, percentage of total within race group (2000) ................................. 138

Table 3-12. Malaysia: Proportion of managers, professionals and technicians working in the public sector, percentage of total within race group (2000) ......................... 138

Table 3-13. Malaysia’s education certificates and equivalent schooling ........................ 151

Table 3-14. Malaysia: Real earnings and employment growth, by highest education certificate attained (corresponding number of years) ................................................. 152

Table 3-15. Malaysia: Real earnings and employment growth, by occupation group ........................ 155

Table 4-1. Malaysia: Probit regression for attaining a managerial or highly-skilled job, 2000. ........................................................................................................................ 167

Table 4-2. Malaysia: Tertiary educated workforce: Probit regression for attaining a managerial or professional job, 2000. ................................................................ 170

Table 4-3. Malaysia: Tertiary educated workforce: Probit regression for attaining managerial or professional job, by sector (public/private), 2000. ........................ 171

Table 4-4. Malaysia: Tertiary educated workforce: Probability of attaining a managerial or professional job, by sector (public/private), per non-Bumiputera graduate of a local public institute, 2000 ........................................ 173

Table 4-5. Malaysia: Earnings regressions, 1995-2004 ............................................. 180

Table 5-1. South Africa: Gini coefficient for household income, from Census and Income and Expenditure Survey data ......................................................... 196

Table 5-2. South Africa: Public higher education headcount enrollment ....................... 209

Table 5-3. South Africa: Higher education graduation rate and total ............................. 212

Table 5-4. South Africa: Undergraduate success rate .................................................. 212

Table 5-5. South Africa Employment Equity Reports: Racial composition of managerial and professional positions ................................................................. 218

Table 5-6. South Africa: Employment Equity Report samples ..................................... 219

Table 5-7. South Africa: Racial composition of the public service ............................... 227

Table 7-1. Malaysia and South Africa: Key findings in comparative perspective  ......... 274
LIST OF FIGURES

Figure 3-1. Malaysia: Percentage of managers, professionals and technicians with
diploma or degree, 1995-2004 ................................................................. 137

Figure 3-2. Malaysia: Chinese: Bumiputera and Indian: Bumiputera inequality ratios,
1970-2004 (gross household income and household income per capita).............. 141

Figure 3-3. Malaysia: Gini coefficient of gross household income, by race (1970-
2004) ........................................................................................................... 143

Figure 3-4. Malaysia: Gini coefficient of individual earnings and household gross
income (1995-2004) ..................................................................................... 149

Figure 3-5. Malaysia: Gini coefficient of household earned income (including zeroes),
household gross income, and the proportion of households with zero earned
income (1995-2004) ..................................................................................... 149

Figure 3-6. Malaysia: Earnings by highest education attained, per complete secondary
schooling (11 years) ..................................................................................... 154

Figure 3-7. Malaysia: Earnings by occupation group, per service and sales worker ...... 155

Figure 4-1. Malaysia: Effect of tertiary education on probability of attaining a
managerial, professional, or technical job (per complete secondary school) .......... 165

Figure 4-2. Malaysia: Effect of education attainment on earnings, per complete
secondary schooling (11 years) (adjusted for other determinants) ....................... 180

Figure 4-3. Malaysia: Effect of occupational position on earnings, per service workers
(adjusted for other determinants) ..................................................................... 181

Figure 4-4. Malaysia: Managers and highly-skilled workers: Effect of educational
attainment on earnings, per secondary schooling (adjusted for other determinants)
.................................................................................................................... 182

Figure 4-5. Malaysia: Clerical and service workers: Effect of educational attainment
on earnings, per secondary schooling (adjusted for other determinants) ............... 183

Figure 4-6. Malaysia: 30 years-old or less: Effect of educational attainment on
earnings, per secondary school (adjusted for other determinants) ....................... 184

Figure 4-7. Malaysia: Above 30 years-old: Effect of educational attainment on
earnings, per secondary school (adjusted for other determinants) ....................... 184

Figure 5-1. South Africa: Monthly earnings, by race (2008 Rand) ......................... 204
Figure 5-2. White: Black earnings ratio at mean, median and 95<sup>th</sup> percentile ............. 205

Figure 5-3. South Africa: Gini coefficient, within race groups ............................................. 206

Figure 5-4. South Africa: Proportion of blacks among employed, by highest education attained ........................................................................................................................................ 208

Figure 5-5. South Africa: Earnings by highest education, per complete secondary schooling ...................................................................................................................................... 213

Figure 5-6. Blacks: Earnings by highest education, per complete secondary schooling ........................................................................................................................................ 214

Figure 5-7. Whites: Earnings by highest education, per complete secondary schooling ........................................................................................................................................ 214

Figure 5-8. White: Black earnings ratio, within educational attainment group ............. 215

Figure 5-9. South Africa: Proportion of blacks within occupation group ..................... 216

Figure 5-10. South Africa: Proportion of managers, professionals and technicians with tertiary education ...................................................................................................................................... 220

Figure 5-11. Blacks: Proportion of tertiary educated workforce employed as manager, professional or technician ...................................................................................................................................... 221

Figure 5-12. Whites: Proportion of tertiary educated workforce employed as manager, professional or technician ...................................................................................................................................... 221

Figure 5-13. South Africa: Earnings ratio by occupation, per service workers ............. 223

Figure 5-14. Blacks: Earnings ratio by occupation, per service workers ..................... 224

Figure 5-15. Whites: Earnings ratio by occupation, per service workers ..................... 224

Figure 5-16. White: Black earnings ratio, by occupation (managers, professionals and technicians) ...................................................................................................................................... 225

Figure 5-17. White: Black earnings ratio, by occupation (clerks, service workers and craft workers) ...................................................................................................................................... 226

Figure 5-18. Blacks: Public sector share of degree holders, managers and professionals ...................................................................................................................................... 228

Figure 5-19. Whites: Public sector share of degree holders, managers and professionals ...................................................................................................................................... 228
Figure 5-20. South Africa: Proportion of blacks among degree holders, managers and professionals, by sector .............................................................. 229

Figure 5-21. White: Black earnings ratio of degree holders, by sector............. 230

Figure 5-22. White: Black earnings ratio of managers and professionals, by sector ..... 230

Figure 6-1. South Africa: Effect of race on the probability of attaining a management or professional position ........................................................... 243

Figure 6-2. South Africa: Effect of educational attainment on the probability of attaining a management or professional position, per complete secondary school .................................................................................................................. 244

Figure 6-3. Tertiary educated workers: Probability of blacks (per whites) attaining a managerial job or a professional job .......................................................... 244

Figure 6-4. South Africa: Joint effect of race and educational attainment on the probability of attaining a management or professional position, per white without tertiary education .............................................................. 245

Figure 6-5. South Africa: Probability of attaining public sector managerial or professional job, per white without tertiary education ........................................ 246

Figure 6-6. South Africa: Probability of attaining private sector managerial or professional job, per white without tertiary education ........................................ 246

Figure 6-7. South Africa: Unemployment rate (broad), by education attained and race, and overall ............................................................. 248

Figure 6-8. South Africa: Effect of educational attainment on earnings, per complete secondary school (adjusted for other determinants) ........................................ 255

Figure 6-9. South Africa: Black per white average earnings (adjusted for other determinants) ......................................................................................... 255

Figure 6-10. South Africa: Joint effect of race and education attainment on earnings, per white without tertiary education (adjusted for other determinants) 256

Figure 6-11. South Africa: Effect of occupational position on earnings, per service worker (adjusted for other determinants) ........................................ 257

Figure 6-12. South Africa: Joint effect of race and occupational position on earnings, per white service worker (adjusted for other determinants) .............. 257
Figure 6-13. Blacks: Effect of educational attainment on earnings, per complete secondary school (adjusted for other determinants) ................................................ 258

Figure 6-14. Whites: Effect of educational attainment on earnings, per complete secondary school (adjusted for other determinants) ................................................ 259

Figure 6-15. Blacks: Effect of occupational position on earnings, per service worker (adjusted for other determinants) ................................................................. 260

Figure 6-16. Whites: Effect of occupational position on earnings, per service worker (adjusted for other determinants) ................................................................. 260
# LIST OF ABBREVIATIONS AND TERMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Affirmative Action</td>
</tr>
<tr>
<td>ACCCIM</td>
<td>Associated Chinese Chambers of Commerce and Industry Malaysia</td>
</tr>
<tr>
<td>ANC</td>
<td>African National Congress</td>
</tr>
<tr>
<td>Asgisa</td>
<td>Accelerated Shared Growth Initiative – South Africa</td>
</tr>
<tr>
<td>BBBEE</td>
<td>Broad-Based Black Economic Empowerment</td>
</tr>
<tr>
<td>BCEA</td>
<td>Basic Conditions of Employment Act</td>
</tr>
<tr>
<td>BCIC</td>
<td>Bumiputera Commercial and Industrial Community</td>
</tr>
<tr>
<td>BEE</td>
<td>Black Economic Empowerment</td>
</tr>
<tr>
<td>Blacks</td>
<td>Broad race group, including Africans, Coloreds and Indians</td>
</tr>
<tr>
<td>BMF</td>
<td>Black Management Forum</td>
</tr>
<tr>
<td>BN</td>
<td>Barisan Nasional (National Alliance)</td>
</tr>
<tr>
<td>Bumiputera</td>
<td>“Sons of the soil”, including Malay and non-Malay Bumiputera</td>
</tr>
<tr>
<td>CHE</td>
<td>Commission on Higher Education</td>
</tr>
<tr>
<td>Cosatu</td>
<td>Congress of South African Trade Unions</td>
</tr>
<tr>
<td>EEA</td>
<td>Employment Equity Act</td>
</tr>
<tr>
<td>EPF</td>
<td>Employees Provident Fund</td>
</tr>
<tr>
<td>GEAR</td>
<td>Growth, Employment and Redistribution</td>
</tr>
<tr>
<td>GNU</td>
<td>Government of National Unity</td>
</tr>
<tr>
<td>GLC</td>
<td>Government-linked company</td>
</tr>
<tr>
<td>HBI</td>
<td>Historically black institution</td>
</tr>
<tr>
<td>HDI</td>
<td>Historically disadvantaged individual</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>HIS</td>
<td>Household Income Survey</td>
</tr>
<tr>
<td>HWI</td>
<td>Historically white institution</td>
</tr>
<tr>
<td>ICA</td>
<td>Industrial Coordination Act</td>
</tr>
<tr>
<td>IDC</td>
<td>Industrial Development Corporation</td>
</tr>
<tr>
<td>LFS</td>
<td>Labor Force Survey</td>
</tr>
<tr>
<td>LRA</td>
<td>Labor Relations Act</td>
</tr>
<tr>
<td>MARA</td>
<td>Majlis Amanah Rakyat (Council of Trust for Indigenous Peoples)</td>
</tr>
<tr>
<td>MCA</td>
<td>Malaysian Chinese Association</td>
</tr>
<tr>
<td>MERG</td>
<td>Macroeconomic Research Group</td>
</tr>
<tr>
<td>MIC</td>
<td>Malaysian Indian Congress</td>
</tr>
<tr>
<td>MTUC</td>
<td>Malaysian Trades Union Congress</td>
</tr>
<tr>
<td>NAFCOC</td>
<td>National African Federated Chamber of Commerce</td>
</tr>
<tr>
<td>NEF</td>
<td>National Empowerment Fund</td>
</tr>
<tr>
<td>NEP</td>
<td>New Economic Policy</td>
</tr>
<tr>
<td>NP</td>
<td>National Party</td>
</tr>
<tr>
<td>NSFAS</td>
<td>National Student Financial Aid Scheme</td>
</tr>
<tr>
<td>OHS</td>
<td>October Household Survey</td>
</tr>
<tr>
<td>PIC</td>
<td>Public Investment Corporation</td>
</tr>
<tr>
<td>RDP</td>
<td>Reconstruction and Development Program</td>
</tr>
<tr>
<td>SACOB</td>
<td>South African Chamber of Business</td>
</tr>
<tr>
<td>SEDC</td>
<td>State economic development corporation</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
</tr>
<tr>
<td>UMNO</td>
<td>United Malays National Organization</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

1. 1. Motivation and main tasks

Malaysia and post-Apartheid South Africa stand out for having a politically dominant but economically disadvantaged majority race group and for instituting extensive affirmative action (AA). Colonial and Apartheid legacies of exclusion, discrimination and repression entrenched systemic and self-perpetuating forms of disadvantage, resulting in severe group under-representation in socially esteemed and economically influential positions. Specifically, the under-representation of Bumiputera in Malaysia and blacks in South Africa in tertiary education and in upper rungs of the occupational ladder, as well as in asset ownership, have compelled extensive state action to redress racial disparities. In the wake of racial unrest in 1969 in Malaysia, and in the face of uncertainty in South Africa’s transition from Apartheid, both countries expanded or introduced a wide range of affirmative action programs. Racial redress is driven by political imperatives and prosecuted through race-delineated preferential policies that present potentially instructive commonalities and differences.

This study is motivated by the exceptional scope and scale of majority-favoring affirmative action, the socio-political gravity of the programs’ success, and the importance of current empirical investigation. There is a dearth of country-specific and comparative study of the forms and outcomes of AA in Malaysia and South Africa, especially in recent years. Malaysia’s four decades of extensive affirmative action (since 1971) provide a substantive track record of achievements and shortfalls, the first half of
which has been considerably scrutinized. Progress since the 1990s, however, has been studied less vigorously, even though some shortcomings in Bumiputera economic participation persist or increase, in particular, difficulties among graduates in labor market engagement, continual dependence on public sector employment of professionals and administrators, and persistent under-representation in management and enterprise. These developments raise weighty questions about the efficacy of Malaysia’s policies.

On the South African side, affirmative action programs, while still nascent, have proceeded for over a decade, long enough for progress to be evaluated, and perhaps early enough for serious problems to be addressed. Its AA programs, especially employment equity and Black economic empowerment, have already become embroiled in contentious debate.

The relevant literature on Malaysia is sparse and, largely due to inaccessibility of labor force and income data, has been restricted to racial disparities in household income averaged over the group’s entire population. This generality permits limited inferences about the implications of the observed inequality trends on affirmative action policies (Ragayah 2008, Ishak 2000, Zainal 2001). Another segment of relevant and recent research has surveyed progress in since Malaysia’s New Economic Policy, which has provided an overarching framework for poverty alleviation, social restructuring and affirmative action (Jomo 2004, Khoo 2005)\(^1\). While this set of studies instructively presents changes over time in racial proportions in education, employment and equity ownership, various qualitative outcomes (quality of education, sector of employment) and

\(^1\) Jomo (2004) and Khoo (2005) merit a special mention here for incorporating post-2000 data and more contemporary policy issues. A number of other studies in this vein have focused on the official NEP period of 1971-1990, including Faaland, Parkinson and Saniman (1990) and Faridah (2003).
interactions between affirmative action programs, especially the transition between tertiary education and upper-level occupations, remain largely unexplored.

Research on racial inequality in South Africa is fairly extensive, and data are readily accessible. A section of relevant literature has computed and compiled inequality indicators from various data sources (Leite, McKinley and Osorio 2006, Leibbrandt, Levinsohn and McCrary 2005, Hoogeveen and Özler 2005, Seekings and Nattrass 2005). Other noteworthy studies can be clustered according to those probing the issue of labor market discrimination, which overlaps with affirmative action (Allanson, Atkins and Hinks 2002, Burger and Jafta 2006, Rospabé 2002), and some conducting earnings regressions in an inter-temporal setting (Bhorat, Lundall and Rospabé 2002, Hlekiso and Mahlo 2006). The relative abundance of literature provides helpful reference points, but akin to Malaysia, the focus has been predominantly on inequalities aggregated across race groups, not specifically on categories targeted by affirmative action. Also, most works that delve specifically into affirmative action equate it with employment equity and focus on labor market returns, without considering the affirmative action in tertiary education and its correspondence with racial representation in targeted occupations.

Malaysia and South Africa were subjects of some comparative study in the mid- and late-1990s, mostly with a view to discern whether South Africa could draw lessons from Malaysia on affirmative action, as well as development and redistribution more broadly (Emsley 1996, Hart 1994, Southall 1997). As it turned out, South Africa did not adopt much of the Malaysian template. However, the passage of time since South Africa’s transition has allowed for its own policies to take shape – and, interestingly, for some resemblance to grow between both countries. The paucity of recent comparative research
adds to the impetus for this study, although this necessarily entails that we find little in the literature to serve as a model or baseline framework.

In recognition of the importance of constructing a general framework for this enquiry while appreciating the country-specificity of affirmative action programs and contexts, and in view of the lack of preceding research on which to design this study, this study sets out five main tasks:

1. To conceptualize affirmative action and synthesize the theoretical debate at a general level, while being cognizant of specific conditions in majority-favoring regimes;

2. To provide a systematic overview of the content and context of AA programs in Malaysia and South Africa, and in comparative perspective;

3. To broadly outline patterns of racial inequality pertinent to affirmative action;

4. To evaluate the determinants of racial inequality and provide more precise insight into outcomes associated with affirmative action;

5. To discuss the implications of our findings on affirmative action in Malaysia and South Africa, and in comparative perspective.

1.2. Structure of chapters

To fulfill the above tasks, this study proceeds as follows. Chapter 2 begins by setting out the conditions that induce pressures for affirmative action: persistent inter-group inequality and systemic disadvantage faced by particular groups. We discuss the inadequacies of generalized economic theories in explicating these problems, stemming from assumptions of competitive markets and their propensities to dismantle
discrimination and promote equal opportunity, and from omission of historical conditions in societies structurally divided by race, such as Malaysia and South Africa at the inception of affirmative action. While this study recognizes that political imperatives drive affirmative action, we also maintain that theoretical opposition to affirmative action stands up poorly to real historical experience. The chapter then defines affirmative action for the purpose of this study, taking into consideration the diversity of approaches, the circumstances of societies with a majority disadvantaged group, and the necessity of clarifying common parameters for our cross-country scope. We also engage critically with various contentious issues surrounding affirmative action, regarding its racial basis, repercussions and alternatives, which are pertinent to policy discourses in Malaysia and South Africa. On balance, affirmative action bears both immense potential and pitfalls, and constitutes a reasonable and consistent framework for achieving its objective of redressing systemic disadvantage.

Chapter 2 surveys the content and context of affirmative action in our two countries. We consider Malaysia and South Africa in turn, then draw out similarities and differences between the two. This section aims to inform our understanding of the specific conditions under which affirmative action emerged, and draw out key features of the institutional framework and political economy that have shaped AA programs. Saliently, the political transitions underpinning the institution of affirmative action, the balance of power between state and capital, and the magnitude of racial inequality and dynamics of race relations broadly influence the degree of centralization of the AA regime, the balance of discretionary authority and statutory code as modes of implementation, and the choice
between creating racially exclusive institutions versus fostering more equitable representation in existing institutions.

Instructive contrasts and similarities emerge out of this inductive enquiry. Affirmative action programs, notably in public sector employment and scholarships, have operated in Malaysia since Independence in 1957. Rapid expansion of affirmative action from 1971 corresponded with expansion of executive state power and reassertion of Malay dominance. Thus, Malaysia’s AA has largely grown through discretionary exercise of authority and centralized administration, and has in some cases taken the form of Malay/Bumiputera-exclusive programs, particularly in tertiary education. In South Africa, white dominance encompassed the economy, government and bureaucracy, and affirmative action emerged amid a transition to democracy and a principal commitment to non-racialism. Accordingly, the country followed a more statutory approach requiring compliance with laws overseeing affirmative action, and intervened in a more decentralized manner in increasing black representation in previously white-only institutions, notably universities and the upper ranks of the public sector. However, while the institutional framework broadly differs, Malaysia and South Africa exhibit similarity in terms of the important role of the public sector and public enterprises, and licensing and public procurement programs, for employment of professionals and managers and cultivation of enterprises.

Chapters 3 and 5 explore patterns of racial inequality pertinent to affirmative action, respectively, in Malaysia and in South Africa. We collate statistics informing change over time in racial representation in tertiary education and in upper-level occupations, and compute earnings disparities corresponding with the above categories. We provide a
systematic and current appraisal of the progress of affirmative action in its principal purpose of redressing under-representation of the disadvantaged group, and in the concomitant objective of reducing racial earnings disparities. While the bulk of existing literature refers to income or earnings inequalities aggregated across race groups, this study focuses on educational and occupational categories where AA beneficiaries are concentrated. To the extent permitted by data availability, we supplement these findings with data capturing important qualitative differentiation, especially variations in quality of tertiary education and in sector of employment.

Chapters 4 and 6, following up on Chapters 3 and 5, evaluate the determinants of racial inequality. In a first set of regressions, we estimate the independent effects of a set of determinants, mostpertinently race and education, on the probability of attaining managerial or professional positions. A second set, replacing the binary dependent variable with earnings, expands on conventional earnings functions by incorporating race and education interaction terms. The key results – from the interaction terms – provide comparison of the occupational prospects and earnings capacities of tertiary-qualified members of the beneficiary group versus tertiary-qualified non-beneficiaries. In the occupational attainment regressions, we add further layers to our analyses by disaggregating the dependent variable by sector to test if the prospects of upward mobility for Bumiputera and blacks differ between public and private sector.

Chapter 7 places our findings and policy implications in comparative perspective. First, affirmative action in education has corresponded with quantitative gains, but concerns persist in the quality of benefits received. Access to tertiary education expanded in both countries and for all race groups, including the Bumiputera in Malaysia and
blacks in South Africa, but within these designated groups, the attainment level of non-Malay Bumiputera and Africans continue to lag. Regression results emphatically report that degree-level qualifications exert the greatest impact on the likelihood of attaining upper-level occupations in both countries, and correspond most consistently with declining racial earnings disparity in South Africa, where the earnings gap declines more robustly between black degree-holders and white degree-holders than between black and whites within any other education or occupation category. However, we find evidence that quality of education substantially impacts on prospects for occupational advancement, and that beneficiary groups are more adversely affected in this regard. This underscores the importance to affirmative action of maintaining tertiary education quality alongside increasing access, raising questions to Malaysia about the suitability of centralized administration and racially-exclusive institutions and caution to South Africa on its persistent deficiencies in educational provision to the black population.

Second, entry of the disadvantaged group into upper-level occupations has progressed to some extent in both countries, especially at professional level, but questions remain over long term sustainability. The momentum of Bumiputera entry stalled from the 1990s in Malaysia. In both countries, this branch of affirmative action depends heavily on the public sector. In Malaysian tertiary educated workforce, we find that Bumiputera are more likely to attain managerial or professional positions in the public sector, but are substantially less likely to do so in the private sector, after controlling for other determinants. In South Africa, the probability that degree-qualified blacks, compared to degree-qualified whites, are employed as managers or professionals is higher in the public sector, but lower in the private sector. These results suggest that the emphasis of
affirmative action in the labor market should shift from enforcing generally over-accelerated targets for group representation, to broadening quality education and moderating these targets in accordance with the increase in supply of capable, skilled workers.

Third, Bumiputera and black under-representation is persistently severest in management, particularly in operating private enterprise. Malaysia and South Africa have broadly deployed similar instruments – public enterprises, licensing and procurement – although located within different institutional frameworks. The lack of progress in cultivating self-reliant enterprises raises questions on the feasibility and efficacy of these programs, while the broad scope for abuse and corruption underscores the pitfalls of AA instruments that involve transfer of wealth or claims over rents.
CHAPTER 2
INEQUALITY AND AFFIRMATIVE ACTION: CONCEPT, POLICY AND COUNTRY CONTEXT

This chapter will survey and discuss conceptual and theoretical underpinnings of inequality, specifically persistent inequality between population groups, and approaches to affirmative action, with consideration of the conditions in majority-favoring regimes. We critically engage with a number of contentious issues surrounding affirmative action. We then survey Malaysia’s and South Africa’s affirmative action programs and their political economic context, and present our countries in comparative perspective.

2. 1. Inequality, disadvantage and affirmative action: Conceptual and policy issues
2. 1. 1. Inequality and systemic disadvantage

The political imperatives of redressing colonial and Apartheid legacies of inter-racial disparities superseded theoretical arguments in the formulation of affirmative action policies in Malaysia and South Africa. Besides omitting historical and country specific dimensions of inequality, generalized theories in the neoclassical tradition also offer scant insight to questions of inequality between population groups, especially those delineated by race. Nonetheless, it will serve us well to take a step back and survey some theoretical approaches to labor market discrimination, income determination, and inequality. In particular, this study seeks theoretical frameworks to help explain the persistence of inequalities between population groups. Two areas of neoclassical economic theory are particularly relevant: discrimination and human capital.
Becker’s theory of discrimination must be a starting point for its considerable influence on economic thought. He defines discrimination as a departure from objective behavior, related to “non-pecuniary, psychic costs of interaction”. People prefer to work with others of the same race or culture, and may lack adequate information about such persons to make proper assessments of their capabilities (Becker 1971). This argument for the existence of discrimination rests on the starting point that black and white workers are equally productive. Attaching competitive market assumptions, the returns to human capital would in the absence of discrimination equalize between blacks and whites. In sum, the explanation for disparity reduces to a ‘taste for discrimination’. Moreover, the theory predicts that in the long run, discrimination will be eliminated by competitive forces in the labor market, since companies that restrict hiring to one group will eventually pay wage premiums or employ less productive workers at the expense of more productive workers from the discriminated group, and thus become less profitable.

This conceptualization of discrimination assumes, as mentioned above, that workers of different groups have attained equivalent levels of human capital. It also assumes away persistent between-group disparities in access to education that characterize many societies, especially those with racial divisions. The assumption is patently flawed in omitting structural inequalities that prevail disproportionately on certain groups before they participate in labor markets, thereby precluding the systemic disadvantages that affirmative action seeks to address. The Becker model assumptions, being rather difficult to sustain, have been amended, chiefly with the introduction of imperfect competition.

---

2 Becker maintains, objectively, that a differential between marginal revenue product and marginal cost indicates discrimination, and that non-pecuniary costs can be quantified in a “discrimination coefficient” representing the value of these costs. If an employer derives disutility from an interaction, this translates into a negative discrimination coefficient – hence, lower wages.
These amendments posit that some firms have a monopoly in product markets and those firms prefer to hire white workers, or white laborers occupy a monopsonist position in some labor markets, or racial disparities prevail in access to financial capital (Darity 1982: 72-73). The diagnoses and solutions, however, remain ensconced in a neoclassical, ahistorical, market-centric framework. Addressing the deficiencies more forthrightly, Loury (2002) draws an instructive distinction between “reward bias” (post-labor market entry) and “development bias” (pre-labor market entry), and asserts that neoclassical economics pays inadequate attention to latter.

The confinement of discrimination to solely post-labor market entry phenomenon is emphatically deficient in the Malaysia and South Africa context, where the historical problem is that a majority group has received systemically lesser education and economic opportunity, and suffered poorer living environments. However, we refrain from the term discrimination, since varying – indeed opposing – forms of discrimination have prevailed since the administration of majority-favoring affirmative action. Framing persistent inequalities preceding labor market entry as systemic disadvantages allows for the diminishment of historical and current disadvantage alongside the establishment of positive discrimination.

Human capital theory is embedded in neoclassical underpinnings of rational choice and optimization in competitive markets. At a basic level, and in seminal early works such as Mincer (1958), the premise for claiming a causal relationship between “productive” individual traits and earnings is obvious enough. It is easy to find empirical corroboration for positive effects of age/experience and education/skill on earnings. The

---

3 Mincer’s (1958: 283) influential work on income distribution pronounces that “[t]he starting point of an economic analysis of personal income distribution must be an exploration of the implications of the theory of rational choice.”
specification of earnings determinants would, in later developments in the literature, allow for “environmental inequalities” to control for factors beyond individual traits (Mincer 1970: 6-7). Nevertheless, the neoclassical optimization paradigm formulates human capital investment as an individual decision to forego current earnings to engage in training, derived through a time preference-constrained maximization of permanent income⁴. Higher expected future earnings motivate more investment in training.

This formulation of earnings determination as an optimization process of acquiring human capital is inadequate on various grounds, of which three are especially important. First, the assumptions of competitive labor markets, implicitly precluding barriers to entry, casts the human capital investment process as voluntary⁵. In the absence of structural barriers to human capital acquisition, lower skill levels and subsequently lower earnings become a matter of taste and choice, and to some degree of innate ability. However, it is untenable to maintain optimal choice and talent as explanations of earnings distribution in the face of persistent poverty and inequality. Extensions of the human capital framework bring theory closer to real world conditions by accounting for the persistence, or increase, of inequality in societies over time. The incorporation of inter-generational transmission of inequality, feedback effects of unequal neighborhoods, or differentiation in school quality across localities, provide theoretical frameworks and empirical bases for perpetuating inequalities (Bénabou 1996, Durlauf 1996). We note the contribution of these perspectives, but do not formally incorporate them into this study,

⁴ Mincer (1970: 6) asserts that human capital models “single out individual investment behavior as a basic factor in the heterogeneity of labor incomes.”

⁵ Another deficit in the theory, which is important but less directly relevant to this study, is its reliance on the assumption that individuals have sufficient knowledge of their lifetime stream of earnings to calculate rates of return on their investments in education and training (Darity 1982: 83).
since our principal interest is to plot patterns of inequality *ex post* and to examine
country-specific policies. Empirical examination of inter-generational inequality will also
not be possible due to the unavailability of nationally representative panel income data in
both countries.

Second, deriving income from possession of human capital is not as straightforward a
process as neoclassical theory posits. The notion that human capital, embodied in skills
and capabilities, is a determinant of employment and income is problematic in that it
omits the role of market filters and bargaining power, and muddles the meaning of capital.
The contribution of higher education to upward mobility derives not just from knowledge
and skills, but also from the access granted by the credential of possessing certain
academic qualifications. In wage bargaining, persons with more human capital are not
merely more skillful, but are able to exercise greater leverage, whether due to their
position within the organization or the specificity of their skill. Bowles’ and Gintis’ (1975)
Marxist critique of human capital theory highlights the departures of human capital from
the two defining elements of capital: ownership of the means of production and a claim
on future income. On the first element, they point out that innate or acquired capabilities
constitute capital only insofar as they increase the capacity to engage on production on
one’s own. Where capable and educated persons are mere sellers of labor power, their
capabilities cannot be said to constitute capital. On the second element, the connection
between capabilities and claims on future income is tenuous, and contingent on various
factors beyond the individual.

Third, if labor markets are segmented – i.e. if there are structural barriers to entry –
then the notion of labor mobility and competitive markets must be reconsidered. More
advanced quantitative work seeks to statistically demarcate labor markets (Dickens and Lang 1992), but it suffices for this study to critically observe features that may designate structural breaks, most pertinently, by occupational level (managerial/professional and production/service workers), location (urban and rural), and degree of formalization (formal and informal). This approach constitutes a departure from competitive market assumptions, with implications on earnings determination and inequality. Segmentation of labor markets will require their effects to be controlled for, or analyses to also be segmented, i.e. computing descriptive statistics and estimating separate earnings functions by segment. Given the histories of racial divisions of labor in Malaysia and South Africa, the concept of segmented labor markets must be given due consideration.

Neoclassical theories of discrimination and human capital are limited in their capacity to inform the existence and persistence of inequality and to frame the questions posed in this study. The conception of labor markets as competitive interactions of supply and demand, motivated by atomistic workers and employers, presents a narrow conceptualization of earnings determination and distribution processes. Structural impediments to the advancement of certain population groups are invariably historically contingent and often lie beyond the realm of individual or household choice. Explaining differences in access to education and training requires much more than estimating the costs of such acquisition or the lack of financial resources. We must also account for spatial and institutional dimensions of inequality, for imperfect social mobility, and for political crises or negotiations that have generated intractable pressures for large-scale government distributive intervention in Malaysia and South Africa.
In sum, this study must account for group disadvantage both pre- and post-labor market participation. We employ a broader concept of systemic disadvantage to encompass inequalities that are continually manifest and that have propensities to reproduce. The notion of disadvantage is sufficient and more appropriate than discrimination, as it obviates the problem of disentangling negative/unfair versus positive/fair discrimination.

2.1.2. Conceptions of affirmative action

A common thread in definitions of AA, explicitly or implicitly, is the application of preference to members of a designated population group. Different approaches, however, tend to emphasize one or more aspects of AA, related to the basis, scope and duration of group preference. Much of the conceptual debate, drawing on the U.S. experience, engages with legal and philosophical aspects of AA (e.g. Beckwith and Jones 1997, Cahn 2002, Curry 1996). We therefore survey some definitions of AA, focusing on literature that draws on economics traditions, then contextualize AA in South Africa and Malaysia and propose a suitable and functional definition for this study. We consider to the following sources, where affirmative action is:

“group preferences and quotas” (Sowell 2004)

“[regulation of] the allocation of scarce positions in education, employment or business contracting so as to increase the representation in those positions of persons belonging to certain population subgroups” (Fryer and Loury 2005)
“[the] practice of preferential selection of members of under-represented groups to widely esteemed positions” (Weisskopf 2004)

“[a] coherent packet of measures, of a temporary character, aimed specifically at correcting the position of members of a target group in one or more aspects of their social life, in order to obtain effective equality” (ILO 2003)

“special temporary measures… to accelerate the pace of improvement of the situation of groups that are at a serious disadvantage because of past or present discrimination” (ILO 2007)

“measures to raise the participation of members of an economically disadvantaged group in the areas of education, employment and business, where they had been historically excluded or under-represented” (Lee 2005)

“[a] form of state-sponsored social mobility” and a “remedial strategy which seeks to address the legal, historical exclusion of a majority” (Adam 2000)

Three perspectives stand out in justifications for affirmative action: discrimination, disadvantage and under-representation. Discrimination and disadvantage tend to be inter-linked, resulting in under-representation, especially in upper education institutions and occupations, and ownership of wealth and capital. However, every approach to AA emphasizes one or two aspects over the other, with the exception of Sowell (2004) who, in claiming to conduct a purely empirical analysis of affirmative action, precludes
consideration of historical discrimination or disadvantage. In contrast, the ILO definitions make the case for AA on the grounds of disadvantage due to past discrimination (ILO 2007), which call for measures to accelerate positive change or take corrective action in pursuit of “effective equality” (ILO 2003). For Fryer and Loury (2005) and Weisskopf (2004), the chief purpose of AA is to increase the representation of under-represented groups. Notably, Lee (2005) and Adam (2000), writing respectively about South Africa and Malaysia, premise AA on historical exclusion.

The scope of AA is specified in some approaches, encompassing education, employment and business (Fryer and Loury 2005, Lee 2005). Weisskopf (2004) emphasizes the importance of redressing under-representation in “widely esteemed positions” – i.e. upper tier universities, and professional and managerial ranks. Barriers to entry are especially acute in these areas, but more importantly, these positions confer a significant level of social standing and economic influence. Perennial under-representation of disadvantaged groups can reinforce perceptions within the group that the upper rungs of educational and occupational ladders are inaccessible, or perpetuate social stigmas towards the capabilities of the group as a whole.

Duration of AA is usually not enumerated, although most conceptions of AA implicitly set self-disqualifying marks, since the grounds for AA diminish as under-represented or disadvantaged groups progressively become more represented and less disadvantaged. Arguably, expiration timelines (dismantling AA after a period of time or after targets are reached) or sunset clauses (e.g. disqualifying members of the designated group who have received benefits from further preferential treatment) are vital towards attaining equity and efficiency. We return to this debate in the following section. It
suffices to note at this stage that the ILO definitions, which we may take to be the most
generalized across county experiences, stress the impermanence of AA. This emphasis, as
part of the definition of AA, is evidently a response to potential adverse effects of
prolonged preferential policies that solidify into new forms of protectionism and
exclusion$^6$.

The range of approaches surveyed above, and their underlying values and normative
biases, underscore the importance of clarity – and, to an extent, country specificity – in
outlining the justification and scope of affirmative action. Four issues warrant our
consideration in composing a definition of affirmative action. First, this study predicates
affirmative action in Malaysia and South Africa on the prevalence of systemic
disadvantage faced by racial groups, as a result of historical discrimination or exclusion.
Preferential policies towards a majority group entail interventions of higher magnitude.
The scale and scope of programs in Malaysia and South Africa substantially exceed those
conventionally associated with affirmative action in social science literature (Jain, Sloane

Second, historical exclusion of the Bumiputera in Malaysia and blacks in South
Africa from full education opportunity and economic participation is undeniable, but the
impediments to have shifted over time, due to affirmative action, as well as economic
development more broadly. Hence, the premise for affirmative action should
accommodate such changes, specifically, by viewing disadvantage from a systemic rather

---

$^6$ The ILO has maintained a fairly consistent position on temporariness of redistributive programs
in the labor market. Its Convention 111, passed in 1958, stipulated that government measures to
ameliorate the position of particular groups in society – as a precursor to implementing nondiscrimination legislation – should be reviewed every ten years.
than an historical perspective. This is judicious also for the purpose of assessing mechanisms or timelines for scaling down affirmative action.

Third, affirmative action invariably negotiates a tension between designating preference to some and preserving equitable opportunities to others. Malaysia and South Africa face such dilemmas, with two distinctive features: the designated group comprises a majority race group that is economically disadvantaged but politically dominant, and each country’s Constitution lays the foundations for affirmative action along with guarantees of equal rights to citizens. These inscriptions of grounds for preferential policies embody the sense of economic insecurity of the majority group and apprehension over the capacity of self-regulating markets to redress their severe under-representation in key areas, while demonstrating their political dominance and circumscribing the terms of discourse. The question whether or not to institute AA is effectively precluded in Malaysia and South Africa; the politically possible debate, for the moment and foreseeable future, concerns the design and conduct of policies. The question of AA’s duration may arise, but only occasionally, and rarely substantially. Historical circumstances undoubtedly demanded extensive and intensive affirmative action. However, systematic preferential treatment can induce exceeding pressures for such programs to be perpetuated, which can in turn entrench a system of entitlement, patronage and dependency. These detrimental and undermining outcomes reinforce the case for grounding AA in group disadvantage, and for balancing the cause of group preference against the principle of equality.

Fourth, the areas where affirmative action is implemented need to be specified. Obviously, the disadvantaged group will be under-represented in the upper rungs of
educational and occupational ladders, and in ownership and control of business. The spaces for preferential polices may be delineated according to these sectors. However, we also want to encapsulate an overarching purpose of affirmative action, which is to increase the presence of individuals from a disadvantaged group in positions that elevate the group’s position and influence as a whole, while also developing self-reliance. Strict proportionality, especially in areas of ownership and employment, are not necessarily desirable, especially if a designated group is positioned to make further progress without preferential policies. Following from the above discussion, and drawing on portions of the definitions cited above, this study conceptualizes affirmative action in Malaysia and South Africa as:

preferential measures to redress systemic disadvantages faced by a population group that is under-represented in socially esteemed and economically influential positions.

2. 1. 3. Contentious issues and alternatives to race-based affirmative action

Affirmative action is contentious and polarizing, from a range of perspectives. At the extremes, it is unqualifiedly opposed as a violation of neoclassical market axioms or uncritically endorsed as a socio-political necessity. In between, more considered and nuanced positions may support AA by recognizing its socio-political imperative while acknowledging its limitations and contradictions, or maintain preference for alternatives to race-based AA that arguably can attain the same objectives. This section weighs various debates, outlining and responding to salient criticisms against affirmative action.
2. 1. 3. 1. Market mechanisms versus state intervention

One area of contention pits the position that markets render discrimination untenable over time against the position that state intervention is necessary to counter past discrimination with proactive, positive discrimination. Neoclassical economic assumptions – chiefly, no structural barriers to human capital acquisition and long run unprofitability of discrimination in competitive labor markets – drive the conclusion that competitive labor markets over time will facilitate the attrition of negative discrimination and the diminishment of unequal pay for equal human capital.

The neglect of pre-labor market inequality in neoclassical theory, whether due to discrimination or persistent structures of exclusion, has been discussed above. However, within the neoclassical framework, one could argue that alleviating inequalities in access to and quality of education suffices to equip previously disadvantaged groups to participate in higher educational and occupational strata, thereby equalizing opportunity for self-advancement in competitive markets. This indirect and incremental route to redressing under-representation in employment, nonetheless, is clouded by two major issues that cast doubts on its adequacy.

First, the assumption of competitive markets is exceedingly questionable in the context of labor markets, where barriers are endemic, such as the role of networks and referrals, the practice of employers targeting graduates of elite institutions, or tendencies to sustain norms and avert risks, real or presumed (Bergmann 1996). Formally removing labor market entry barriers and increasing educational access may create more conducive conditions for firms to hire and promote on the basis of capability and merit, increasingly overlooking race and gender, but there is no cogent motive facilitating this outcome.
Overt or subliminal discrimination may be influenced by racism, ignorance, inertia, or stigma towards a particular group, which in turn can be fuelled by lack of visibility of persons from that group in prominent and influential positions. This condition poses a coordination problem, particularly if there is continually no shortage of qualified labor market entrants from advantaged groups. Individual, profit-driven firms will likely be disinclined to venture on their own to hire or promote persons from under-represented groups, due to perceived risks, real needs for further training or mentorship, or other factors.

Do free markets necessarily and always employ the ‘best person for the job’? Bergmann (1996) points out, with reference to labour market research, that employers may discriminate against persons from under-represented groups or be inclined towards persons from groups that have established a presence. The effects are acute where on-the-job experience matters heavily, in which case under-represented persons may be continually overlooked by employers who are risk-averse or unwilling to invest in further training and mentorship. Breaking out of vicious cycles of discrimination or exclusion then requires a coordinated, external push.

Second, even if formal entry barriers dissipate, the pace of change may not be as fast as is socially desirable or politically imperative. Affirmative action responds to political pressures, usually converging at momentous transition periods, which generate expectations and perhaps set specific targets of substantial, robust and visible change. The time required to bridge widespread and complex disparities in educational access and quality may eventually, but too gradually, translate into more equitable economic participation. Anti-discrimination legislation may compel employers to be more
circumspect about overt or subliminal prejudice in hiring and remuneration practices, but still does little to require or induce employers to seek out a representative workforce. Moreover, even if legislation prohibits discrimination, the monitoring mechanism relies heavily on individuals initiating legal proceedings against alleged unfair discrimination, which are costly and intimidating to the persons confronting institutions or employers, and reactive and dispersed in their occurrence. In contrast, affirmative action by definition operates more proactively and in a coordinated manner, being executed by the state, which is in a position to balance the objectives of equitable representation and opportunity.

The case for relying on anti-discriminatory legislation, buttressed by the principle of equal opportunity, unsurprisingly, does not fare well against the evidence of country experiences. AA in the United States initially revolved around prohibiting discriminatory practices, but those efforts turned out to be inadequate to increase representation of the black minority in tertiary education. Over time, AA came to be associated with the notion and practice of positive discrimination (Weisskopf 2004). With reference to historical experience, ILO (2007: 10) takes “recognition of the fact that the mere act of ending discrimination will never level the playing field once deep-seated and long-standing deprivation has occurred”.

2. 1. 3. 2. Race-based affirmative action

Beneath AA debates often lies a disquiet over designating a population group as beneficiary, whether by race or gender, instead of a socio-economic category. Designating beneficiaries by race, the argument maintains, commits injustice and
inefficiency by not explicitly targeting the neediest in society, i.e. the poor and economically disadvantaged. Moreover, granting preference to a formerly disadvantaged group denies opportunities to other groups, negating the purpose of fostering integration and, some would assert, amounts to ‘reverse discrimination’. In addition, race-based AA accentuates group differences, contrary to its objective of attenuating the role of racial identity in economic interactions. Class-based or means-tested AA are commonly posed alternative to race-based AA (Jain 2006, CPPS 2006b).

A policy framework that designates beneficiaries in terms of class or means is structured such that the neediest in society, regardless of identity, will be accorded preference. Among those qualifying for state assistance, members of disadvantaged racial or gender or other groups will disproportionately gain by virtue of their predominance in low income brackets. Additionally, this attenuates the scope for abuse and allocative inefficiency within the designated group, by curbing rentier behavior of elites and staunching the flow of benefits to the middle class who can afford tertiary education and qualify on merit. These criticisms raise some valid and important concerns, outlining fundamental philosophical and practical dilemmas. Framing this debate as a binary choice between two schemes of affirmative action, however, falters on two main fronts: imprecision and inconsistency on the purpose of AA, and neglect of historical context and practical constraints.

The argument against race-based AA generally claims that the same objective of uplifting a race group will be attained by designating beneficiaries according to other criteria, particularly socio-economic status. It is true that disadvantaged persons will benefit disproportionately more from assistance targeted at low-income households.
Nonetheless, the broadening of AA to encompass areas where disadvantaged groups are over-represented – i.e. among the poor and socio-economically excluded – is not so much proposing alternative solutions as framing an altogether different set of problems. If the question of under-representation is accepted as the problem at hand, the focus accordingly falls on the precise target group and effective measures to increase their proportions in areas where they are under-represented. Class and income inequality overlap to a meaningful extent with racial inequality, but are much broader problems demanding broader, though no doubt complementary, solutions.

Two other inconsistencies are worth noting. First, the critique of affirmative action on the grounds of neglect of the needy generally implies that AA fails, in absolute terms, as long as some benefits accrue to the middle or upper classes, when the outcome is one of relative magnitude. Surely, whether AA excludes all or some of the poor bears importance in assessing the efficacy of specific policies. Second, the case against race-based AA on the grounds that it accentuates group differences finds corollaries in other dimensions of inequality that are generally not considered problematic. Conferring preferential status on poor, rural, or inner-city persons would accentuate differences between rich and poor, urban and rural, or suburban and inner-city, but such measures are upheld due to the benefits to bridging these gaps. In the same way that the university campuses should not be the preserve of the rich in a stratified society, student bodies should not be racially homogenous in a heterogeneous society. The justification for providing special means for the poor to gain access, in principle, does not differ from the rationale for race-based AA.
The premise of equitable group representation is repudiated by some, who maintain that it is neither desirable nor achievable. One attempt at pointing out the innocuous existence of non-representative workforces is to refer to the concentration of ethnic groups in particular sectors or occupations in societies that are fairly cohesive: e.g. in the U.S., Korean corner stores and West African taxi drivers (Hermann 2007, Sowell 2004). While such niches and business networks thrive and are not necessarily deleterious to social relations, they are characterized by horizontal differentiation – concentration of some groups in the operation of certain activities – which are much less fractious and potentially destabilizing than vertical disparities – predominance of one group at the top of the economic hierarchy. This critique of AA conflates two different problems, and on the whole provides a weak case against redressing under-representation of disadvantaged groups in positions conferring social status and economic influence.

Preferential treatment to one group unavoidably comes at some expense of other groups. However, characterizing positive discrimination as reverse discrimination commits a false equivalency, most gravely in cases where past discrimination took the form of slavery, denial of basic rights and systemic exclusion, such as in South Africa. The argument also generally precludes the potential gains from positive discrimination, even while it espouses non-interventionism on the basis of the potential for dismantling negative discrimination, which in turn hinges on assumed propensities of market behavior outlined and critiqued above.

Emphatically, transformative national agendas such as affirmative action emerge at historical watersheds and in country-specific conditions that give momentum to designation of beneficiaries by race. The trajectories and entrenchment of AA programs
receives the bulk of deprecatory attention, but a judicious assessment must be mindful of the initial conditions to appreciate historical context and practical constraints. The notion that race can be overlooked or proxied by socio-economic variables in racially fractured divided societies, while attractive, superimposes a future ideal on a present reality in which racial identity, disparity, and perhaps stereotypes, are deeply embedded and closely experienced. In most cases, the vast majority of the disadvantaged group is ill-equipped for tertiary education and economically influential positions. The choice in preferential regimes lies between socio-economic targeting which would benefit many from the disadvantaged group, or race designation which would benefit substantial numbers of persons from poor households.

The question thus becomes, which regime is more effective in delivering both equitable representation and productive outcomes? While targeting by socio-economic evaluation clearly presents a better framework from an allocative standpoint, practical constraints require policies to also factor in the availability of persons capable of entering the upper echelons of the labor market, regardless of socio-economic status.

A counterpoint to this argument might assert that the capable minority – the elite – within the disadvantaged group should take the lead in eschewing preferential policies and instituting a merit-based system from the start. However, considering again the conditions in which AA is instituted, pervaded as it is by uncertainty – even circumspection – towards the commitment of education institutions and employers to purge discriminatory practices, mandates to increase representation serve at least as a safeguard, if not an enforcement mechanism. A moral argument sometimes arises at this point: self-interest motivates the advocacy by elites for AA policies from which they are
poised to benefit. Such predilections cannot be denied, but this perspective is lopsided. Opposition to AA can also stem from self-interest in preserving historical or systemic advantage of employers and profitably positioned incumbents.

One of the applied cases of non-race-based schemes is the adoption in various states in the U.S. of a policy accepting a certain proportion of top students of all high schools, to counteract ballot propositions banning preferential admissions policies. This regionally egalitarian mechanism engenders diversity of student representation, to the extent that ethnic groups are concentrated in particularly districts. However, disparities across schools in quality of teaching and facilities may propel some under-prepared minority-group students into distinguished tertiary institutions. Students of low-income families may also have less funds to defray education costs, entailing larger commitments of public finance (Weisskopf 2004, Fryer and Loury 2005). Of course, the issues do not translate directly to more centralized education systems where national, university entrance examinations are administered, such as Malaysia and South Africa, but the general implication holds, i.e. proportionate regional representation or need-based admission can adversely affect the average level of student preparedness for tertiary education.

In the realm of employment, need-based or class-based AA becomes considerably less operable. While education institutes are in a position to factor in family income in admissions and financial aid decisions, it is much less clear how employers can be induced or obligated to hire or promote persons based on family socio-economic background. Adam (2000), while advocating this alternative in place of race-based employment equity programs in South Africa, scarcely furnishes details on how class-
based AA will be implemented. In terms of ownership and control over capital, class-based AA is the most problematic and prone to abuse, even while dominance of one race group at the commanding heights of the economy is a dimension of disparity of immense political consequence.

The debate over race-based versus alternative modes of affirmative action will continually elude common ground, and in the absence of counterfactuals, can never be fully resolved. Nonetheless, we attempt to find a synthesis from which to proceed with this study. Advocates tend to restrict AA’s scope to preferential selection to particular positions, while critics subsume a range of inequalities within the ambit of AA, or hold current policies accountable for broad socio-economic inequalities. Within the bounds of this study’s definition of AA, however, we find race-based programs to be consistent with the policy’s objective.

Historical conditions and practical constraints under which AA is instituted provide important context for understanding the designation of beneficiaries by race or other population group category. While the policy discourses and political dynamics surely vary by country, the prospect of redressing disadvantage and under-representation without preferential schemes falls short of societal or political expectations, and relies on agents, especially employers, taking risks that they are predisposed against individually. AA fills a coordination gap, which is all the more required for an intervention that disrupts norms or biases. Policies also follow trajectories and acquire inertia, producing outcomes that can be scrutinized retrospectively. No amount of hindsight, however, changes the fact that race-based AA has become institutionalized. Criticism of race-based AA highlights negative outcomes and unintended consequences, while proposing
alternatives on the basis of beliefs in competitive markets and underlying assumptions. Advocates draw out positives and raise possibilities that outcomes could be worse without AA.

Given the absence of such counterfactuals, focusing on the practical matters and empirical evidence clearly presents a productive direction for AA research to take. Arguments over the existence of race-based AA are less germane and helpful than arguments over its design and duration. Designating a population group as beneficiaries, in spite of obvious limits and drawbacks, provides a more workable framework for attaining its intended purpose at a robust pace and within a time horizon. Class- or need-based AA is permanent and more costly in terms of public funding, vulnerable to the same problems of disparity in aptitude of beneficiaries, and unviable in high-level occupations, management and ownership.

It must be recognized that race-based and class-based policies are more complements than substitutes. Class considerations can be integrated into selection procedures within the designated race group to reinforce the process of redress. On the paramount issue of access, completion and quality of basic schooling, reducing disparities is a precondition for both race-based affirmative action and alternate schemes to be effective. Expansion and improvement of basic schooling alleviates tensions that arise from preferential selection into tertiary education.

High expectations of change, we have noted, inevitably infuse the inception of any AA program, compounded by informational deficits and fundamental uncertainty. The lack of cogency in the argument that private markets will self-dismantle negative discrimination likely corroborates political pressures for positive discrimination. Amid
uncertainty, the most direct route of correcting for racial disparities is by designating beneficiaries by race. These constraints must be acknowledged. However, they do not necessarily nullify the state’s capacity to manage expectations and set prudent, incremental goals, e.g. targeting the increase in representation in select occupations in correspondence with the designated group’s proportion of the tertiary educated labor force, instead of the national labor force or economically active population. There are advantages to race-based affirmative action programs, particularly in education and employment, as well as pitfalls. The alternatives are often present solutions inconsistent with the problem (specifically, class-based selection to redress race-based inequality) or impracticable (class-based criteria for selection into employment or equity ownership). Ultimately, however, the goal of ‘deracialization’ demands critical attention toward cultivating self-dependency of the designated group and scaling back preferential selection in due course. The next section fleshes out these issues.

2. 1. 3. 3. Merit and effort, efficiency and dependency

Arguments against affirmative action – in general, and not specifically race-based programs – commonly assert that interference with competitive markets vitiates the fairness and efficiency of ‘meritocracy’ and ‘equal opportunity’. AA also devalues accomplishments of members of the designated group who could have advanced without preferential treatment, stigmatizes beneficiaries as a group, creates dependence on the state, and alienates members of non-designated groups. These issues pose the heaviest challenges to AA formulation and implementation.
One response is to probe the supposed objectivity and adequacy of the notions of merit and opportunity. The meaning and parameters of merit arise out of a particular social context, and thus are not neutral, and indeed tend to perpetuate a status quo. Tierney (2007: 389-390) points out that merit fits with a capitalist conception of justice, with its valorization of survival of the ostensibly ablest and repudiation of government intervention in general as a threat to capitalism\(^7\). Assessment of merit is presumed to be a measure of intelligence and individual effort, confirmed by one’s peers through unbiased and objective criteria, e.g. standardized tests or national examinations. In reality, however, privileges disproportionately enjoyed by particular population groups, such as private schooling or extra tuition, can set children on trajectories towards reputed tertiary institutions and, in turn, opportunities for accelerated career advancement\(^8\). Merit-based appraisal, furthermore, is typically individual-centered, omitting the person’s social context, and present-looking, being based on past to present attainments, not future capacities. The dynamic social objective of equitable representation, however, necessitates some consideration of potential for learning.

Another response maintains that \textit{a priori} postulates about how AA affects incentives are unfounded, thus the subject is ultimately a “subtle and context-dependent empirical question” (Fryer and Loury 2005: 154). Holzer and Neumark’s (2000: 514) expansive literature survey concludes that evidence of discrimination in racial, gender or other


\footnote{In the U.S. context, Tierney (1997) points out that ‘legacy’ enrollment, which improves the prospects for children of alumni, but defies meritocracy and disproportionately benefits whites who had enjoyed privileged access, through exclusion of other groups, into these institutions. He also notes the discrepancy of the general approving tenor towards legacy enrolment against the widespread criticism of AA.}
spheres is sufficient to “rule out a facile conclusion that affirmative action must reduce
efficiency or performance”. The assessment of how affirmative action impacts on
beneficiaries’ performance is also in an important sense a subjective matter of attitudes
and perceptions. Some empirical approaches directly ask persons benefiting from AA to
self-evaluate their experience. Adam (2000) finds, among a sample of preferentially
selected black business trainees in South Africa, no sentiment that their advancements
were devalued and as much motivation to put in effort as qualified participants.9

The aggregate efficiency effects of affirmative action are, likewise, theoretically
indeterminate. On the one hand, as it is more often argued, discrimination reduces
efficiency by admitting or promoting lesser qualified candidates to meet distributional
targets or quotas. On the other hand, and less often recognized, negative discrimination
and systemic disadvantage also curtail efficiency by, respectively, denying capable
candidates opportunities and persistently inhibiting the human development of certain
groups (Holzer and Neumark 2000). To reiterate a point made in the previous section,
policy-making at the inception of AA grapples with constraints and risks. Another aspect
of the process involves balancing the efficiency losses of not accelerating redress through
AA against the losses due to overly aggressive implementation of programs.

The meritocracy critique must be placed in the context of alternatives to race-based
AA, where lines of causation are, as above, mutual and faint. First, complete absence of
AA may stimulate individual effort and bring about material gains for some in the

9 Adam’s (2000) finding is based on a survey of black aspiring business executives of a project
enabling under-qualified managerial students from educationally deprived backgrounds to
compete for entry into an elite training program at the University of Cape Town. On questions of
perception of being an AA beneficiary, the vast majority did not consider themselves as passive
recipients but as having rightly earned a place in the program, and contrary to conventional
wisdom, did not display different approaches to work compared to participants accepted based on
formal qualification.
disadvantaged group. But disadvantaged and marginalized youth may also perceive tertiary education and upward mobility as inaccessible, and be discouraged from participating. Second, it is unclear how class-based AA will be more effective in motivating excellence. This framework may well create disincentives against raising income to remain below eligibility thresholds, since one’s class can be changed, whereas one’s race cannot. On the other hand, race-based AA might generate competition within the designated group (Weisskopf 2004). AA may become associated with stigmas and negative stereotypes towards the competency of beneficiaries. However, this line of argument often implies that those stereotypes did not exist in the first place (Tierney 1997: 188). A less vigorous critique may maintain that AA reinforces pre-existing stigmas or stereotypes. Still, whether removing AA will whittle away perceptions of the group is uncertain. Persistent absence of a disadvantaged group can reinforce pre-existing stereotypes. This is also, ultimately, an empirical question.

While avoiding absolutist positions for or against race-based affirmative action, we must acknowledge that perennial dependence on state-sponsored intervention can impede, even imperil, its fruition. Perpetuation negates the goal of attaining self-reliance and economic independence, especially as the case for systemic disadvantage diminishes, i.e. as AA succeeds. Dependence on state intervention and a sense of entitlement may become entrenched among the beneficiary group. We should note that this problem is not confined to racial preference, but can also beset other development programs offering some form of protection, which can be broadly subsumed under the infant industry rubric. Nonetheless, the defense of preferential policies can conceivably be more intense where race is the basis of preference, deriving from the strength and resilience of collective
political identity, particularly one associated with past discrimination or exclusion. The likelihood that AA turns into a permanent institution, and the lack of a precedent of a country removing AA (except perhaps white-favoring Apartheid South Africa), reinforce the case for total opposition to the policy. The necessity of eventually removing racial preference also serves a sharp caveat to advocates, and to countries that are implementing the policy for whom complete and instant elimination of AA are not an option. Relevant and productive discourse, therefore, should focus on the possibilities for transitioning away from racial preference.

The complex ramifications of AA on social cohesion and inter-group sentiments must be also be noted here, although these phenomena are manifest less tangibly and their scope is multi-dimensional and much broader than this study’s focus. Race-based AA is impugned for the ways it alienates members of the non-designated group, especially those who are denied entry or promotion to positions offered to less formally qualified persons of the designated group. The contentions of the non-designated group undoubtedly derive from more complex factors than economic opportunity, such as cultural and democratic freedom, personal safety and crime, and governance and corruption. Nonetheless, this antipathy toward personal injustice is palpable, and if protracted and accumulated may generate social discord.

A few perspectives can be briefly outlined. First, the extent to which opportunities become limited significantly depends on economic variables outside AA jurisdiction. Sluggish economic and employment growth compound the difficulties faced by members of non-designated groups; as much or more fault may lie with economic policies or fortuitous circumstances. Second, instituting strict meritocracy, typically presented as the
solution for both instituting fairness and alleviating the alienation of non-designated groups, bears the opportunity costs of perpetuating group disadvantage, perhaps resulting in marginalization and alienation of the group designated under AA. In consonance with the discussion above, on the issue of feelings of grievance among the non-designated group, the trade-off is also not as straightforward as justice and cohesion under meritocracy and the diametric opposite under affirmative action.

2. 1. 3. 4. Overall assessment

Affirmative action intervenes in societies bearing historical injustices, systemic disparities and socio-political schisms between racial groups. Its objectives are as difficult as the conditions it seeks to redress are seemingly intractable. These contradictions cannot be denied nor avoided: positive discrimination to eliminate past discrimination or present disadvantage, designating beneficiaries by race towards the goal of attenuating the role of race in educational and occupational advancement, instituting preferential treatment to attain equal opportunity. Any assessment must take cognizance of the complexities of both the problems and the solutions.

Our overview of contentious issues in affirmative action finds theoretical indeterminacy and context specificity in policy prescriptions. Whether competitive markets or state intervention can dismantle discrimination and overcome systemic disadvantage both depend on ancillary conditions. Market solutions hinge on rapid educational advancement among the disadvantaged group and marked shifts in attitudes and perceptions of towards them by institutions and employers. However, market tendencies to maintain norms – including assumptions about the objectivity and veracity
of merit assessments – and to avoid risk and coordination, while not necessarily precluding racial redress, are likely to militate against substantial and robust progress. State intervention fills in the coordination gap and engenders institutional change, not just behavioral change. But it must then mitigate tendencies for racial preference to proceed unsustainably, with inadequate attention to the amount and suitability of supply of participants, and to become entrenched indefinitely.

The importance of the historical context in which affirmative action is instituted must be reiterated. AA arises out of socio-political pressures amidst expectations of change and uncertainties, factors which research must acknowledge and appreciate. The conjuncture of these conditions gravitates the framework towards designating beneficiaries along the same lines in which previous discrimination or exclusion was manifest, chiefly race, also gender and caste.

Equal opportunity and class-based AA constitute the two basic alternatives; both lack theoretical and empirical cogency. Solutions deriving from belief in the self-demise of discrimination in competitive markets hinge on key underlying assumptions, especially regarding equal access to development and zero barriers to entry. Historical experience of racially divided societies demonstrates these to be false (disparities in development between population groups persist) or partial (informal barriers to entry can prevail, even if formal or legal discrimination is prohibited). A system of class-based AA would benefit the disadvantaged group since they are over-represented among the socio-economically needy. However, in encompassing income-based redistribution in general, this scheme obfuscates the objective of AA – i.e. to redress under-representation – and
proposes a set of policies that will be as permanent as the incidence of income inequality, that is, more permanent than race-based AA.

We submit that anti-discrimination legislation and class-based redistribution should be complementary, not adversarial, to race-based affirmative action, and in concert all should pursue the most effective and opportune means of redressing systemic disadvantage over a bounded time horizon. Race-based AA offers direct and more effective means for facilitating the progress of a disadvantaged group into socially esteemed and economically influential positions. This will involve some inter-generational social mobility, but will also allow for selection of candidates who would not be considered under-privileged, who originate from middle-class households. To the extent prudent and possible, programs can incorporate progressive elements that, within the designated group, prioritize socio-economic criteria.

Of course, affirmative action has its pitfalls. The issues surrounding AA, in terms of its argued effects on vitiating meritocracy, attenuating effort of beneficiaries and generating dependency on state assistance are more nuanced than the criticisms often present. As discussed above, meritocracy and assessment of merit are questionable regarding their objectivity and propensity to preserve a status quo. Thus, absolute deference to norms and standard meters of merit for allocating opportunities is problematic from a social standpoint.

Ascribing preference to disadvantaged groups, however, may curtail the effort exerted by beneficiaries and entrench dependency on state assistance. Although these problems are not confined to race-based AA, they are plausibly more severe than they would be under the alternatives, principally class-based AA. Even more severe is the issue of elite
‘capture’ – the manipulation of policy, especially regarding wealth ownership, for the express enrichment of a politically connected business class. We should note that inequality and corruption could conceivably increase, and middle classes and elites consolidate their position, in the absence of affirmative action. Nevertheless, these pitfalls of AA underscore the need for judiciously formulated and vigorously implemented affirmative action that, like infant industry programs, avert *rentier* behavior and decisively transition away from protectionist and preferential elements.

Other ramifications of affirmative action, specifically the stigmatization of beneficiaries and alienation of non-beneficiaries are real and present, but pertain more to the implementation than the institution of policies, and are primarily empirical matters. Disadvantaged groups may be stigmatized for receiving preferential treatment, or if their presence in esteemed and empowered positions is continually low. Alienation of non-beneficiaries correlates partly with the efficacy and duration of preferential policies that disfavor them, but this must be weighed against the possible sense of deprivation that a disadvantaged group may experience without specific programs that compel and coordinate their upward mobility.

All in all, then, it is more pertinent to ask how race-based affirmative action can be made more effective rather than whether it should exist, and more productive to consider incremental instead of instantaneous elimination of policies, especially in Malaysia and South Africa where the political imperative is overwhelming. Avoiding the polemics and absolutist positions on merit versus preference, the important questions revolve around safeguards that benefits are distributed equitably within the designated group, with a balance of allocation based on present qualification and on potential learning. It is
prudent to limit the scope and duration of AA, placing more emphasis on education and employment and less on procurement and wealth, and to be open to targets and quotas not necessarily equating with strict proportionality.

2. 1. 4. Empirical approaches to affirmative action

The indeterminacy of theories underlying affirmative action and the context-specificity of policies underscore the gravity of researching affirmative action outcomes. Some brief notes on empirical approaches are in order. As with the variety of definitions of AA, we also find a broad range of techniques, focal points and methods. This body of literature broadly falls into two categories: individual-based case studies and country-level analyses. The scope of case studies is as narrow or wide as their subjects. A section of the literature refers to whether legal cases (Beckwith and Jones 1997, Cahn 2002, Curry 1996), others to university admissions (where sample sizes vary, e.g. Bowen and Bok 1998, whose analysis applies to elite colleges), hiring practices and contracting (also dependent on sample size, as surveyed in Bergmann 1996 and Holzer and Neumark 2000). Much of this research, at least the portion falling under the heading of affirmative action, has focused on sectors or localities within the United States. The case study method more deeply analyzes individual beneficiaries than assessments at the national level, but is of limited applicability to this study, since such data are unavailable in Malaysia and South Africa.

Country-level studies are more relevant on the rudimentary criterion of the unit of analysis, but are fraught with other data problems and questions of comparability. Firsthand surveys with national representation are virtually impossible, hence we must
rely either on compiling secondary research or referring to official datasets, or both. Weisskopf (2004) conducts a notably original and systematic benefit-cost of AA in university admissions in the U.S. and India, on a range of socio-economic criteria and based on a synthesis of existing literature. The strength of this analysis is that the broader, qualitative – and sometimes intangible – goals of AA, such as learning environments, sense of group dignity, and race relations – are accounted for in some way. However, the feasibility of Weisskopf’s (2004) approach is contingent on availability of the types of studies he refers to, which are non-existent in Malaysia and sparse in South Africa. We therefore draw on empirical studies of our two countries as reference points, instead of any existing cross-country research.
2. 2. Imperative, content and context of affirmative action: Malaysia

Malaysia’s affirmative action must be situated in historical context, to understand their imperatives and design, their attainments and shortfalls. The programs that have transformed the economy were promulgated from 1971, but to gain an appreciation of the forms of systemic disadvantaged faced by the majority race group, we need to elucidate the conditions from the start, and how those conditions demanded an extensive and intensive regime of AA. Policies were also formulated in a particular socio-political milieu – specifically, the centralization of state control and consolidation of executive power, in the wake of social upheaval – which partly account for the ways Malaysia has pursued affirmative action.

2. 2. 1. Systemic disadvantage and affirmative action imperatives

Legal foundations for preferential measures were embedded in the Federal Constitution, which enshrines both the principle of equality and provisions for the special position of Malay/Bumiputera. Individual equality and prohibition of discrimination is set out in Article 8, with a proviso: “[e]xcept as expressly authorized by this Constitution” (See Appendix 1). Article 153 grants specific authorization, in making provision for the Yang Di-Pertuan Agong (the national king) to “exercise his functions… in such manner as may be necessary to safeguard the special position of the Malays and natives of any of the States of Sabah and Sarawak [i.e. non-Malay Bumiputera] and the legitimate interests of other communities”, through reserving places for the designated group in public sector employment, scholarships, training programs, and licenses.

—

10 Malys were the majority group in Malaya (Peninsular Malaysia) from Independence in 1957. Bumiputera, or “sons of the soil”, include indigenous groups from Sabah and Sarawak, which joined the Peninsula to form Malaysia in 1963.
Bumiputera “special position” has become deeply entrenched in Malaysian politics and policies, and warrants an overview of the socio-economic fractures and dimensions of systemic disadvantage out of which it was negotiated.

When Malaya’s independent era commenced in 1957, its constituent race groups did not enter on equal footing. Fractures had formed through British colonial rule and migration processes in which foreign interests dominated the ownership of resources and capital, while Malays, Chinese and Indians, by and large, lived and worked in separate geographic and economic spheres. European, particularly British, interests held a massive portion of Malaya’s rich primary commodity production, which centered on rubber plantations and tin resources\(^\text{11}\). Across the Peninsula, the vast majority of the Malay population lived in rural settings, engaged in rice cultivation – generally on a subsistence level. They also constituted a large portion of the bureaucracy, police and security services. The Malay community was mostly stratified by its traditional hierarchical structure, comprising an aristocratic elite above an expanding administrative corps, followed by a vast agrarian peasantry mostly detached from wage labor markets and private capital. The Chinese population was highly urbanized, supplying a large share of labor and establishing enterprises in tin mines, plantations, and factories, and gaining a foothold in distribution and retail of goods. The community comprised of a substantial working class and a nascent capitalist class, with clan-based networks providing financial resources. The Indian population was most conspicuous in two areas: laborers on rubber plantations and lower-rung administrators in government services. They would be distributed more evenly between rural and urban economies, but in both spheres had not

\(^{11}\) Khoo (2005: 11) conveys Puthucheary’s (1964) finding that Europeans controlled over 84 percent of large rubber estates and 60 percent of tin output, and accounted for about 70 percent of exports and 60 percent of imports.
managed to advance beyond wage labor (Andaya and Andaya 2001, Gomez and Jomo 1999).

This social structure, outlined in Table 2-1, is aptly described as an ethnic division of labor, in which groups were preponderantly and persistently confined to particular occupations and industries (Khoo 2005). This division of labor, and parallel rural-urban gaps, were reinforced by disparities in educational opportunities and access to credit. Educational institutions were fragmented, again, by race and socio-political factors, and not integrated into a broader system for facilitating social interaction and coordinating curricular content. The common standards of formal education were low, which magnified the advantage to those with access to the minority of institutions offering superior instruction and reputation. More urbanized states demonstrated higher literacy rates, reflecting the educational advantages available to residents of towns and cities, which were largely Chinese populated, although they were also more racially mixed than rural communities (Leete 2007: 178-179)12. The Malay masses were overwhelmingly excluded from these developments, except for the privileged or exceptional few who enjoyed access to elite schools, scholarships and civil service appointments. Indians on plantations were excluded on the grounds that plantations were classified as private property; hence, the educational and health needs of its workers fell outside of the state’s jurisdiction.

---

12 In 1957, literacy rates in Northern Peninsular, Malay-dominant states and East Malaysia (Kelantan, Terengganu, Kedah, Perlis, Sabah, Sarawak) fell below the national average of 50 percent, while the West coast and central Peninsula states recorded notably higher literacy rates (Leete 2007: 199).
Table 2-1. Peninsular Malaysia: Racial distribution of labor force with industries, 1957.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Malay</th>
<th>Chinese</th>
<th>Indian</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice cultivation</td>
<td>95.8</td>
<td>2.4</td>
<td>0.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Rubber cultivation</td>
<td>42.4</td>
<td>32.6</td>
<td>24.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>17.7</td>
<td>68.3</td>
<td>11.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>19.7</td>
<td>72.2</td>
<td>7.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Commerce</td>
<td>16.4</td>
<td>65.1</td>
<td>16.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Government services</td>
<td>52.4</td>
<td>15.4</td>
<td>26.3</td>
<td>5.9</td>
</tr>
<tr>
<td>Police, home guard and prisons</td>
<td>83.2</td>
<td>9.6</td>
<td>4.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Armed forces</td>
<td>76.8</td>
<td>8.8</td>
<td>8.4</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: Khoo 2005.

The Malaysian government, a coalition of race-based parties representing Malays, Chinese and Indians, recognized the problem of racial fragmentation by location and economic activity, but settled on a compromise that did little to fundamentally alter the configuration. Political power was vested in the aristocracy-led Malay majority while Chinese business was granted freedom to operate without distributive obligations, and cultural institutions were sustained (Jesudason 1989, Gomez and Jomo 1999, Leete 2007). Economic policy from 1957 to 1969 was characterized by a *laissez faire* dispensation.

Programs and expenditures were put in place to alleviate rural poverty, reduce urban-rural disparities and bridge inter-racial inequalities, but no broad strategy for overcoming systemic disadvantages was laid out and no specific targets were set (Thillainathan 1976: 72). The regime did little to address the continuing dominance of foreign interests or to foster Chinese-Malay economic cooperation (Jesudason 1989). Schooling continued to be fragmented, as it was under colonial rule. The British provided a tiered system to Malays, while Chinese and Indians were permitted to establish vernacular schools and missionary organizations ran schools with instruction in English. English-medium schools equipped
leavers for formal employment operating in English, but few Malays attended such institutions, for locational or cultural reasons (Pong 1993: 246).

Some preferential policies were implemented in public sector employment and post-secondary education, notably scholarships. The racial composition of federal and state governments in 1969 was 64.5 percent Malay, 18.4 percent Chinese, 15.7 percent Indian, 1.5 percent other categories. At the top rung (Division 1), the estimated proportion of Malays rose from 14.1 percent in 1957 to 39.3 percent in 1970. However, in the elite Malayan civil service, the proportion of Malays rose from 34.6 percent in 1957 to 86.6 percent in 1970. The number of public enterprises increased from 22 in 1960 to 109 in 1970 (Khoo 2005: 18, 30). However, on a national scale, the impact of affirmative action was limited. The public sector comprised 11.9 percent of the working population in 1970, and exerted a modest impact on the overall racial employment profile, although it presumably bolstered the proportion of Malays among professionals and technicians.

The lack of progress in redressing racial disparities and systemic disadvantages, and in raising incomes on the whole, are reflected in urbanization and poverty rates. Table 2-2 shows, between 1957 and 1970, small gains in poverty reduction for all groups – even an increase in absolute poverty among Indians – and only slight changes in the vastly different constitution of urban and rural populations. In sum, as Khoo (2005: 24) puts it, “laissez faire capitalism could not resolve the destabilizing contradictions of an ethnic division of labor”, which remained markedly drawn in 1970 (Table 2-3). Most crucially, development policies had done little to facilitate entry of the vast majority of Malays into the modern, urban economy. However, while it is generally accepted that distributive issues were insufficiently addressed, the Malaysian government faced some major
constraints. Among the many issues government had to confront was a communist insurgency and confrontation with Indonesia, for which British forces aided. Thus, it was hard to intervene with British commercial interest (Jesudason 1989: 52-53). In the education system, immense policy emphasis had to be placed on the more basic issues of unifying a disjointed schooling system, providing rudimentary schooling and reducing drop-out rates (Leete 2007: 188). Narrowing disparities in access to and quality of secondary schooling were in these contexts less urgent.

Table 2-2. Peninsular Malaysia: Composition of population and poverty, by race and area, 1957 and 1970

<table>
<thead>
<tr>
<th>Racial composition of total population</th>
<th>1957</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malay</td>
<td>49.8</td>
<td>53.1</td>
</tr>
<tr>
<td>Chinese</td>
<td>37.2</td>
<td>35.4</td>
</tr>
<tr>
<td>Indian</td>
<td>11.3</td>
<td>10.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Racial composition of urban population</th>
<th>1957</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malay</td>
<td>22.6</td>
<td>27.6</td>
</tr>
<tr>
<td>Chinese</td>
<td>63.9</td>
<td>60.0</td>
</tr>
<tr>
<td>Indian</td>
<td>10.7</td>
<td>11.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poverty rate</th>
<th>1957</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malay</td>
<td>70.5</td>
<td>64.8</td>
</tr>
<tr>
<td>Chinese</td>
<td>27.4</td>
<td>26.0</td>
</tr>
<tr>
<td>Indian</td>
<td>35.7</td>
<td>39.2</td>
</tr>
<tr>
<td>All races</td>
<td>51.2</td>
<td>49.3</td>
</tr>
</tbody>
</table>


Table 2-3. Malaysia: Racial composition of occupation groups, 1970

<table>
<thead>
<tr>
<th>Administrative and managerial</th>
<th>Malay</th>
<th>Chinese</th>
<th>Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and technical</td>
<td>47.2</td>
<td>37.7</td>
<td>12.7</td>
</tr>
<tr>
<td>Clerical</td>
<td>33.4</td>
<td>51.0</td>
<td>14.3</td>
</tr>
<tr>
<td>Sales</td>
<td>23.9</td>
<td>64.7</td>
<td>11.0</td>
</tr>
<tr>
<td>Services</td>
<td>42.9</td>
<td>42.5</td>
<td>13.4</td>
</tr>
<tr>
<td>Agriculture</td>
<td>68.7</td>
<td>20.8</td>
<td>9.6</td>
</tr>
<tr>
<td>Machine operation and elementary</td>
<td>31.3</td>
<td>59.9</td>
<td>8.6</td>
</tr>
</tbody>
</table>

| Overall                        | 51.4  | 37.0   | 10.7   |

Note: rows do not sum to 100 due to exclusion of other groups.
Disaffection had grown in the 1960s within the Malay community towards the lack of material progress, continued small landholdings and indebtedness, and abuse of programs for the poor to enrich wealthy Malays (Gomez and Jomo 1999, Andaya and Andaya 2001). Inter-racial conflict was more manifest in urban areas, where Malays saw gaps between themselves and Chinese that fuelled a sense of exclusion. Pressures for state support and proactive measures to develop a Malay business class grew in the 1960s. Administrative elites had cultivated close ties between government and a nascent capitalist class, as many moved from one sphere to the other or secured a footing in both spheres (Jesudason 1989: 51-52, 65-68). The mid-1960s witnessed the first budget for Malay business development in the First Malaysia Plan (1965-70), and the establishment of Bank Bumiputera in 1965, MARA (Majlis Amanah Rakyat, or the Council of Trust for the People) in 1966, and other development agencies entrusted to fund or train Malay commerce and industry. Thus, on the whole, affirmative action measures expanded from the mid-1960s.

However, income diverging trends persisted through the decade. Inequality increased on a national scale, between racial groups and within racial groups, and deepening sentiments toward the failures of economic and social policies to uplift Malays made for a volatile political setting\(^\text{13}\). Indeed, a political cataclysm compelled a shift of the policy regime onto a drastically different path. The 1969 general elections, in which the ruling coalition suffered losses and the opposition made gains – largely on the back of Chinese votes – created a volatile standoff between ascendant Chinese political power and a

\(^{13}\) From 1957 to 1970, the income share of the top 5 percent of households increased considerably. Inter-racial disparity grew as well, with the Chinese: Malay household income ratio increasing from 1.89 in 1957 to 2.47 in 1967, and the Indian: Malay household income ratio also rising over the same period, from 1.51 to 1.95 (Anand 1983).
backlash from the Malay establishment. On both sides, a sense of trespass escalated, with Malays wary of increased penetration of non-Malay opposition into the political domain, while non-Malays, especially Chinese, reacted against measures perceived to constrict their cultural and commercial space.

The May 13th riots momentously shook, then reinforced, coalition government and overhauled the policy regime. Galvanized by the May 13th tragedy, a top-down approach and centralized executive control set a precedent for Malaysia’s mode of governance (Ho 1992). Politics and policy were infused with a reassertion of Malay dominance and pro-Malay policies, galvanized around a doctrine, somewhat legitimated by the ongoing crisis, that extensive and intensive state intervention would be necessary. Policy discourses were embroiled in a contestation over a new framework, broadly between a pro-market and growth-focused strategy and an intensive state-led expansionist and distributive agenda, the latter of which prevailed (Faaland, Parkinson and Saniman 1990).

2. 2. 2. Affirmative action policies and programs

Malaysia’s affirmative action program burgeoned in scale and scope with the implementation of the New Economic Policy (NEP) from 1971. The NEP itself was more of a political vision statement than a comprehensive set of policies14. It outlined general ideas and objectives towards alleviating poverty and generating growth, and increasing Bumiputera education, labor market participation and ownership, but more specific interventions would unfold over the subsequent years through specific programs, executive decisions and legislations. The NEP term has come to designate and connote

---

14 Author’s interview with Khoo Boo Teik, August 15, 2007.
various things. A very brief overview of its basic tenets is therefore warranted at this juncture, followed by discussion of specific affirmative action programs within its rubric.

The NEP projected two over-riding objectives: first, the eradication of poverty irrespective of race; second, the restructuring of society to reduce and eventually eliminate the identification of race with economic function (Table 2-3). The Second Malaysia Plan fleshed out the agenda in slightly more detail:

“The Plan outlines policies and programmes to modernize rural life, encourage a rapid and balanced growth of urban activities, provide improved education and training programmes at all levels, and above all, ensure the creation of a Malay commercial and industrial community in all categories and at all levels of operation, in order that within one generation Malays and other indigenous people [i.e. Bumiputera] can be full partners in the economic life of the nation” (Malaysia 1971: 6).

The NEP was commissioned to tackle various dimensions of poverty and disparity, much of which lies beyond the scope of affirmative action. Hence, it is important to recognize the NEP as supplying the mandate and impetus for race-based redistribution, but not to equate it with affirmative action.

2. 2. 2. 1. Representation in education

Under the NEP, the agenda of educational reform was substantially carried by newly created institutions and backed by generous increases in public expenditure\textsuperscript{15}. A signification portion of these expenditures did not operate on a race preferential basis, and by conception was progressive in the designation of children of rural and poor

\textsuperscript{15} Annual per capita public education expenditure, which had increased from RM30 in 1961 to RM50 in 1970, burgeoned to RM206 in 1980 and RM356 in 1990 (Leete 2007: 181).
households as the principal beneficiaries. However, Bumiputera witnessed the highest gains in schooling attainment after 1971. Pong (1993) found, by comparing successive cohorts spanning pre-NEP and post-NEP periods, that secondary school completion was increasingly associated with race, after controlling for other socio-economic characteristics.\(^{16}\)

Direct affirmative action policies in education created new school-level institutions for Bumiputera, and quota systems and scholarship programs for university enrollment. Although overall enrollment in university was not far off the racial profile of the country as a whole, the under-representation of Malays in scientific and technical fields was acute, which was attributed in large part to deficiencies in available teachers and facilities in rural schools.\(^{17}\) This shortfall was compounded by the labor requirements of industrialization. From the mid-1970s, ‘manpower planning’ – in particular, cultivation of science and engineering graduates – began to be prioritized in education policy (Lee 1994). To fill the gap, the Ministry of Education established exclusively Bumiputera residential science colleges. MARA also set up junior residential colleges primarily for pupils in rural and underprivileged areas. These institutes, which youth entered after six or nine years schooling, enjoyed higher standards of teaching and facilities, especially in

---

\(^{16}\) Pong (1993) finds that, controlling for parents’ education, occupation and earnings, being Malay increased the probability of attaining secondary school education over successive cohorts, with marked difference between those of school-going age when the NEP came into effect and those who attended school before the NEP. These results are interpreted as suggesting that the gains of public expenditure were disproportionately captured by Malay families. However, the model does not control for urban/rural location and state, which bear correlations with race.

\(^{17}\) In 1970, the University of Malaya was the only university in Malaysia. In science subjects, Malay graduates numbered 22 out of a total 493 in science, 1 out of 67 in medicine, 1 per 71 in engineering, 15 per 49 in agriculture (Selvaratnam 1988: 180).
science classes (Leete 2007: 189). Bumiputera-exclusive matriculation programs have also been established to provide an alternate route to university entrance bypassing national schools and the national higher school certificate examination.

At the tertiary level, new public universities were founded and a centralized government unit was created to process applications and implement enrolment quotas. The racial distribution of university bear out the effect of this policy: in 1970, the student population comprised of 40.2 percent Bumiputra, 48.9 percent Chinese and 7.3 percent Indian. By 1985, campuses had been recomposed to 63.0 percent Bumiputra, 29.7 percent Chinese and 6.5 percent Indian, with variations across universities (Khoo 2005: 21). Notwithstanding this expansion, tertiary enrollment still did not keep up with increasing supply of secondary school leavers. Whereas in the early 1970s about half of applicants were offered place in university, by the mid-1980s this proportion had dropped to a fifth.

Overseas and private education has eased some of the social pressures of insufficient spaces in public tertiary institutes. Many non-Bumiputera who didn’t secure a place in local universities opted to pursue higher education abroad or settle for local non-degree

---

18 Between 1970 and 1990, MARA allocated RM700 million – 67 percent of its total budget – for educational purposes (Faridah 2003). By 1987, enrollment in the Education Ministry’s residential colleges touched over 17,000, while the 390 MARA junior science colleges had 15,000 students (Selvaratnam 1988: 185).

19 Exact quotas were usually not publicly disclosed, but it was reported in the early 2000s that universities observed a Bumiputra: non-Bumiputra quota of 55:45 (Faridah 2003).

20 The proportion of Bumiputera at universities established after 1971, such the National University (73.0 percent), Agricultural University (81.0 percent) and Technological University (76.0 percent), in addition to the exclusively Bumiputera MARA Institute of Technology, undertook to absorb the increasing supply of post-secondary students. Other tertiary institutes, however, registered higher proportions of non-Bumiputera enrollment, such University of Malaya (37.7 percent Chinese), Science University (35.0 percent Chinese, 55.8 percent Bumiputera) and the privately owned TAR College (97.9 percent Chinese).
programs. In 1985, there were more Chinese enrolled in tertiary institutions overseas than in Malaysia\textsuperscript{21}. Private tertiary education grew from the 1980s, when a number of colleges were founded, in affiliation with foreign universities or accreditation bodies, to provide pre-university level diploma or ‘twinning’ programs from which students could continue towards obtaining a degree from a foreign university. The Private Higher Education Act of 1996, which permitted domestic private for-profit degree-granting universities, induced a proliferation of tertiary education institutions from the mid-1990s\textsuperscript{22}. The growth in private higher education is a crucial development parallel to Malaysia’s affirmative action regime. Private higher education caters mostly to non-Bumiputera, and alleviates tensions arising from quota-based constraints (Brown 2007, Sato 2005).

The residential school and university scholarship programs undoubtedly provided educational access to many Bumiputera who otherwise would not have the opportunity. However, the allocation of opportunities has not operated within any formal framework that balances capability and equity as selection criteria. Research on family backgrounds of Bumiputera scholarship recipients is sparse. Malaysia’s five-year plans, while providing official accounts of progress in occupational, income and wealth inequality, have omitted the class distribution of affirmative action benefits, particularly in access to education. One widely cited study found the allocation to follow a regressive pattern. Mehmet and Yip’s (1985) survey of a graduating cohort of 1983 finds the distribution skewed towards children of high income families in general, but most markedly among

\textsuperscript{21} Faridah (2003: 166) reports that in 1985, out of 22,684 students studying overseas, 73.4 percent were non-Bumiputera who failed to gain admission to local public universities or who were offered places in programs not of their choice.

\textsuperscript{22} The proportion of tertiary students (degree, diploma and certificate) enrolled in overseas institutions declined from 40.2 percent in 1985 to 13.8 percent in 1995, while the share of local private institutions increased from 8.9 percent in 1985 to 34.7 percent in 1995 (Wan 2007: 4).
Malay scholars\textsuperscript{23}. This is broadly in line with a report that in the mid-1970s, 63 percent of students in MARA junior science colleges were found to belong to urban middle class households (Selvaratnam 1988: 191). Ball and Razmi’s (2005) survey of Bumiputera scholars studying abroad in the late 1990s, on the other hand, observes that the proportion whose fathers only attained primary schooling was 58 percent, signifying a more progressive distribution. However, while this study is more recent, drawbacks in its sampling warrant circumspection toward its findings\textsuperscript{24}.

In recent years, scholarship programs, both for Malaysians and exclusively for Bumiputera, have become somewhat more transparent in their operations. For instance, it was revealed that a quota has been implemented in awarding Public Service Department scholarships, which was formally raised from 10 percent non-Bumiputera to 45 percent non-Bumiputera around 2000\textsuperscript{25}. However, reports found that from 2000 to 2007 the proportion of scholars who are non-Bumiputera averaged 15 percent at overseas institutions and 20-25 percent in local institutions. Overall, the distribution of

\textsuperscript{23} Mehmet and Yip (1985) sample 45 percent of the graduating class in Malaysia’s five universities in 1983, out of which the number who were on scholarships is a sizable 1,244. They find that in the national population, 49.4 percent of households had income below RM300, but only 12.3 percent of scholars in their sample came from families in that bottom income bracket. Among Malays, 63.2 percent of households had that level of income, while 14.2 percent of scholars were from those households. At the upper end – income above RM1,000 – the national proportion was 10.3 percent compared to the share of scholarships, which registered 25.5 percent. Within the Malay community, this top income range constituted 4.9 percent of families, but 22.9 percent of scholars’ families.

\textsuperscript{24} Ball and Razmi (2005) sample Bumiputera studying under government scholarship in overseas universities and Bumiputera students in the same set of academic disciplines in local universities, within a three year range in late 1990s. They receive a small sample of 385 respondents who returned the questionnaire by mail.

\textsuperscript{25} In 2000, a quota of 10 percent non-Bumiputera enrollment was also introduced in the 40 MARA junior science colleges. The proportion of non-Bumiputera in these colleges was 10.5 percent in 2008 (\textit{The Star}, May 15, 2008).
scholarships continues to be an aspect of affirmative action characterized by lack of clarity and coherence.

2. 2. 2. 2. Representation in upper-level occupations

The restructuring of labor markets in Malaysia abided by a mandate that “employment patterns at all levels and in all sectors... must reflect the racial composition of the population” (Malaysia 1971: 42). The main affirmative action interventions in this regard comprised predominantly of public sector employment, and sporadic regulation of the private sector. Although the general objective was a racially representative workforce, there was no specified timeline for incrementally achieving that target, nor a systematic approach to increasing Malay penetration into the higher occupational levels. Indeed, employment practices in government and requirements imposed on the private sector operated largely without codified regulations and monitoring mechanisms.

Government and statutory bodies served to absorb Malay urbanization and entry into formal wage employment. As noted above, prior to the NEP, measures were already in place to maintain a high Malay presence in the public sector\textsuperscript{26}. Malays comprised 62.5 percent of civil servants in 1970 (Malaysia 1971: 38). Under the NEP, the government augmented the public sector, especially from the 1970s until the early-1980s,\textsuperscript{27} and further increased the Bumiputera share, which have been recently reported at 76.9 percent

\textsuperscript{26} In the elite Diplomatic and Administrative Service corps, a 4 to 1 ratio of Malay to non-Malay quota was introduced in 1953 (CPPS 2006a: 5). Zainal (1994: 612) maintains that the main instrument for increasing Bumiputera participation was through hiring quotas.

\textsuperscript{27} Between 1970 and 1981, public sector employment grew by 6.0 percent per year, above the total employment rate of 3.8 percent per year. Correspondingly, the share of the public sector in total employment rose from 11.9 percent in 1970 to 15.0 percent in 1981 (Author’s calculations from Rasiah and Ishak 2001).
in 1999 (Khoo 2005: 19) and 84.8 percent in 2005 (MCA 2006: 4). Among Division 1 officers, the proportion of Malays rose from 39.3 percent in 1970 to close to 65.0 percent in 1987 (the latter figure includes non-Malay Bumiputera). Public sector employment is a natural extension of the university scholarship program. Mehmet and Yip’s (1985) survey of graduating scholars in the early 1980s found that 86.2 percent for Malays, compared to 61.9 percent of Chinese and Indians, worked for government and statutory bodies.

Preferential employment policies, although targeting a representative public sector, tended to self-generate inertia in gravitating toward higher Bumiputera representation. Increasing Bumiputera employment in some governmental bodies, especially non-administrative statutory bodies, also transpired in the absence of specific policies. For example, the state did not mandate preferential hiring of academic staff or the racial composition of university staff. Nevertheless, the application of quotas to enrolment exerted a demonstration effect of sorts on the hiring process.

The remarkable entry rate of Bumiputera into occupations within the NEP’s original timeframe of 1971-90, especially in occupations broadly classified as professional, can be considerably attributed to public sector employment policies. The proportion of Bumiputera among professionals and technicians increased from 47.2 percent in 1970 to 62.2 percent in 1990. Progress since then, however, has slowed – a point we explore further in Chapters 3 and 4.

The Industrial Coordination Act, passed in 1975, was preponderantly a measure to enforce equity redistribution, but it also required manufacturing establishments to align their workforce in accordance with the proportionality principle. Workers’ ranks, it turns out, were easily filled, especially with young Malay women from villages who flocked to

---

28 Author’s interview with Maznah Mohamed, August 24, 2007.
electronics and textile and clothing factories. Compliance at managerial levels was harder to effect, although employment aspects of the ICA were more strictly enforced before the late 1980s, through submission of Employees Provident Fund (EPF) files to ensure that the reported personnel were being paid, and hence likely to be tasked with meaningful work. Overall, it is likely that the effect of the ICA in terms of increasing Malay representation was limited and concentrated in non-technical responsibilities such as personnel management.

In the past two decades, little emphasis has been placed on the racial composition of Malaysians within firms. There is no general legislation of employment practices in non-manufacturing sectors, although some strive for racial diversity in a selective manner, whether for reasons of strategy or licensing requirements. For example, the tellers and service workers of most banks are mixed, although management tends to identify racially with the banks’ owners. Recently, regulations were proposed for publicly listed companies to disclose corporate social responsibility activities, including ethnic diversity of workforce, but no rewards or consequences for compliance were enunciated.

---

29 Author’s interview with senior industry source, September 5, 2007.

30 Openings for Bumiputera in management and professional in oversight of assembly operations is also constrained by the flat organizational structure of factories, which offer few management or supervisory positions for a given workforce (Author’s interview with Sulaiman Mahbob, Director-General of the Economic Planning Unit, September 11, 2007).

31 Malaysia’s institutional framework governing labor markets provides few instruments for enforcing employment quotas, with the possible exception of non-renewal of licenses (Author’s interview with Tuan Haji Shamsuddin Bardan, Executive Director of the Malaysian Employers Federation, September 5, 2007).

32 Author’s interview with National Union of Banking Employees (NUBE) officials, September 19, 2007.
2. 2. 2. 3. Equity and property ownership

Equity ownership has been the highest prioritized of the NEP’s objectives and the area of starkest Bumiputera under-representation\textsuperscript{34}. This study’s focus on education and employment outcomes, however, excludes empirical consideration of inequality in ownership of equity, and wealth more generally. Nevertheless, this study cannot proceed without some discussion of this subject, given its preponderance in economic policy, as well as its interwoven relationship with racial representation in management. Efforts to secure controlling stakes play a significant part in accompanying, or preceding, the appointment of people of designated groups to managerial positions.

Malaysia underwent various phases in the project of increasing Malay equity holdings. Progress on this front was slow at the inception of the NEP, and front the mid-1970s pressures mounted for the state to intervene more forcefully in the transfer of assets. The Industrial Coordination Act was passed in 1975 under the banner of organizing the industrial sector by requiring firms to obtain manufacturing licenses, but its underlying objective was to mandate the transfer of equity. Firms above a certain threshold in capitalization and/or workforce – a benchmark that has over time been renegotiated to exclude small and medium enterprises – had to obtain a manufacturing license, conditional on allocating at least 30 percent of shares to Bumiputera individuals at prices

\textsuperscript{33} The 2007 and 2008 Federal Budgets, respectively, proposed and reiterated a requirement to “disclose their employment composition by race and gender, as well as programmes undertaken to develop domestic and Bumiputera vendors.”

\textsuperscript{34} Share capital ownership in 1970 (at par value; excluding holdings of government agencies and nominee companies), according to race and citizenship, was 1.9 percent Malay, 22.5 percent Chinese, 1.0 percent Indian, and 60.7 percent foreign. In the all-important agricultural sector, Malays owned 0.9 percent, Chinese 22.4 percent, Indian 0.1 percent and foreigners 75.3 percent; and similarly in mining, the distribution was 0.7 percent Malay, 16.8 percent Chinese, 0.4 percent Indian, and 72.4 percent foreign (Gomez and Jomo 1999: 20).
approved by government authorities. Export-oriented (more than 80 percent of output exported) firms were exempted.

The government also moved aggressively in acquiring stakes, directly or through agencies, in the form of institutional representation of Bumiputera interest. State-operated Bumiputera trust funds were also set up from the late 1970s, selling units and substantially investing in areas of national priority. Such trust funds have attracted broad participation, but the distribution of ownership of trust fund units has consistently been highly skewed\(^3\). One condition of Malaysia’s political economy that worked rather fortuitously to its advantage was the large presence of foreign firms, particularly in the then lucrative and resource-based fields of mining and plantations. State investment funds played a key role in taking over these hitherto foreign establishments. From the late 1980s, privatization proceeded rapidly and voluminously, under various arrangements such as public listing or build-operate-transfer contracts (Gomez and Jomo 1999). More generally, initial public offerings mandate setting aside 30 percent for Bumiputera at a discount.

2. 2. 2. 4. Managerial and enterprise development

This branch of affirmative action overlaps with employment programs aiming to increase Bumiputera representation in management, but focuses on the production of goods and services by private or public enterprises, as distinct from public administration. One of the acutest areas of Malay under-representation was among managers of

\(^{35}\) In the late 1980s 1.3 percent of two million unit holders owned 75 percent of Amanah Saham Bumiputera (then known as Amanah Saham Nasional) shares (Jomo 2004: 14). At the end of 2008, 16 percent of 6.5 million unit holders held 91 percent of the total number of units (Author’s calculations from *Amanah Saham Bumiputera Annual Report 2008*).
enterprises and in manufacturing. Programs in this respect initially centered on state-owned enterprises in the 1970s-mid-1980s, then shifted to privatized (former public) corporations in the 1990s until the 1997 financial crisis, to renationalized corporations, termed ‘government-linked companies’. Licensing and public procurement constitute a second route towards this objective.

2. 2. 2. 4. 1. Public enterprises to privatization to government-linked companies

Throughout most of the NEP, the Malaysian government has adopted a state-centric approach to enterprise development. Various agencies were created or reinvigorated to support Malay business, particularly in the 1970s and 1980s. State-owned enterprises numbered just 22 in 1960, but burgeoned to 109 in 1970, 656 in 1980 and 1149 in 1992, with the largest numbers in manufacturing, services, agriculture, finance and construction. To put the growth in perspective, the number of new public enterprises averaged 9 per year in 1960s, 55 in 1970s, and 41 from 1980 to 1992 (Gomez and Jomo 1999: 29-31). The government’s five-year plan expenditure on non-financial public enterprises flowed in accordance with funding needs in these enterprises36. State Economic Development Corporations (SEDCs) were designated a salient role in spearheading Malay business from the early 1970s, bolstered with seed funds or guarantees from government. However, ventures largely turned out unsuccessful or unsustainable, undermined by poor governance, inexperience, or corruption37.

36 Specifically, such expenditures ballooned from RM3.9 billion (1971-75) to RM12.0 billion (1976-80) to RM27.7 billion (1981-95), then contracted to RM17.7 billion (1986-90) (Ismail and Meyanathan 1993: 19).
As mentioned above, the Malaysian government, through its investment arms, secured ownership of hitherto British-owned companies from the late 1970s, and facilitated entry of Malay managers and professionals into these new sectors. These takeovers of foreign-owned companies contributed to promotion of Malay management. Cadres of public administrators, who had acquired some experience by this stage, were positioned to assume places of leadership in these corporations.

The 1980s witnessed major shifts in the state-sponsored Bumiputera capitalist and entrepreneurial development agenda. In the early 1980s, the heavy industries program commenced with the establishment of the Heavy Industries Corporation of Malaysia (HICOM) and ventures into various sectors, prominently automobiles, steel, and cement. These large firms were to be government-owned and Bumiputera-managed, with financial and operational support from Japan. The global recession of the mid-1980s stymied the launch of heavy industries, but their pre-maturity also showed up in the emergence of excess capacity, lack of competency and gross under-performance. The focus shifted again from the late 1980s to public procurement contracts and privatization of state entities, which were to facilitate the development of individuals in the Bumiputera Commercial and Industrial Community (BCIC), beyond agencies or institutions such as trust funds.

This policy watershed had two crucial implications. First, it positioned the private sector and the BCIC as the main target of state priorities and resources – while affirmative action programs in education and employment continued without substantive revision. Second, it ushered in and pumped resources into private capital accumulation

---

37 In 1981, available information on 260 companies under the purview of the Ministry of Public Enterprises showed that 94 were making losses and 21 had yet to operate (Jesudason 1989: 98-100).
(Gomez and Jomo 1999, Jomo 2004). State-owned enterprises were handed over to a
coterie of new, politically connected individuals. However, in 1997, the financial crisis
left many of these state-sponsored Malay capitalists foundering. The largest corporations
that they had been handpicked to helm were subsequently re-nationalized. The public
enterprise regime has been broadly reconfigured as government-linked corporations –
majority-owned by government – and ostensibly injected with a more corporate ethos.
Government-linked companies (GLCs) in both financial and productive sectors, continue
to play significant roles in Bumiputera advancement, under an implicit mandate to excel
as exemplars of enterprise and to generate employment opportunities.

2. 2. 4. 2. Licensing and public procurement

The Malaysian state has also deployed licensing and public procurement toward
developing a Malay capitalist and entrepreneurial class, although these policy instruments
have operated through relatively less formalized and codified mechanisms. Affirmative
action programs through licensing can be differentiated by sector. For instance, the
Petroleum Development Act (1974) vested ownership of oil reserves in the hands of the
government, and required that management of petrol stations be reserved in Bumiputera
hands, and the issuing of taxi licenses has also been dictated by terms that require
Bumiputera ownership – although this is an area of conspicuous Ali-Baba relationships,
where a Bumiputera partner merely secures a license, then subcontracts the work to other,
usually Chinese, persons. The vendor development program in the automobile sector sets
up a system for development of parts suppliers. “Approved Permits” have also been
distributed, granting quotas to import motor vehicles. The fields of transportation,
telecommunications, and media have seen the issuance of licenses for big and politically strategic operations (Gomez and Jomo 1999: 91-100). The utilization of licensing for promoting Bumiputera business, in spite of the extensive measures and expenditures, is critically considered to have achieved little beyond the allocation of rents to politically connected persons.

The NEP gave impetus to utilizing the public procurement system to stimulate and finance Bumiputera commerce. The 1973 Bumiputera Economic Seminar resolved to prioritize Bumiputera operators in government transportation, supplies and service contracts. Treasury Circular Letters have served as the medium for setting out such policies. A tiered procurement framework was introduced in 1974, in which 100 percent of small projects and 30 percent of the total value of other projects are reserved for Bumiputera contractors. The remaining 70 percent is open for bidding among all companies, Bumiputera and non-Bumiputera. Bumiputera contractors also receive price handicaps, on a sliding scale, that place Bumiputera bids on par with lower priced non-Bumiputera competitors – except for the largest category of contracts. In 1982, a provision was introduced to prioritize members of the Malay Chamber of Commerce. The parameters for classifying contracts and discounts were adjusted in 1995, but the basic framework was retained.

The terms for receiving preferential treatment mentioned in the Malaysian Treasury’s circulars on procurement policy emphasize Bumiputera majority ownership, representation in executive and managerial positions and in financial management. While


it is stipulated that tenders must meet timeline, local content and quality standards, the formal procedures for selecting contractors do not specify rules or incentives structured towards broadening entrepreneurial capacity, or promoting greenfield investment, technological and skills development. Malaysia’s public procurement regime is widely considered to amount to a political patronage network, where deals are sealed on the basis of connection and positioning of powerful figures on company boards. The awarding of lucrative deals without open and competitive tender concurs with general assessments that the system is built around patronage and enrichment, without unclear strategies and timelines for increasing transparency and productivity.

Table 2-4. Malaysia: Affirmative action programs and notable features

<table>
<thead>
<tr>
<th>Programs</th>
<th>Notable features</th>
</tr>
</thead>
</table>
| Secondary and tertiary education | • Residential colleges  
• Matriculation colleges  
• Expansion of tertiary institutions, enrollment quotas in public universities  
• University scholarships  
• Exclusively Bumiputera (until 2000)  
• Exclusively Bumiputera (until 2002)  
• Extensive growth of Bumiputera in tertiary education; but concerns of decline in quality  
• Important in facilitating access to university education, but scarce systematic consideration of equity aspects |
| Employment in managerial and skilled positions | • Public sector employment  
• Industrial Coordination Act  
• De facto quota, but largely ad hoc in implementation; absorption of urbanizing Malays; major factor in Malay professional and middle class  
Proportional representation in production workforce, minimal impact at managerial and professional level; no impact on SMEs |
Table 2-4 (continued)

<table>
<thead>
<tr>
<th>Programs</th>
<th>Notable features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enterprise and managerial development</strong></td>
<td><strong>Public enterprises</strong></td>
</tr>
<tr>
<td></td>
<td><em>Span all sectors, but largely under-performing or failing; post-1997 crisis: government-linked companies given reinvigorated mandate to spearhead BCIC agenda</em></td>
</tr>
<tr>
<td></td>
<td><em>Takeover of foreign companies</em></td>
</tr>
<tr>
<td></td>
<td><em>Resulted in a number of Bumiputera control and management of some conglomerates; limited impact on a national scale</em></td>
</tr>
<tr>
<td></td>
<td><em>Licensing</em></td>
</tr>
<tr>
<td></td>
<td><em>Confined to fields with limited technological growth; no incentive structure, particularly for SMEs</em></td>
</tr>
<tr>
<td></td>
<td><em>Public procurement</em></td>
</tr>
<tr>
<td></td>
<td><em>Little impact on broadly cultivating self-reliant Bumiputera business; widely viewed as patronage regime; no incentive structure, particularly for SMEs</em></td>
</tr>
<tr>
<td><strong>Equity ownership</strong></td>
<td><strong>Industrial Coordination Act</strong></td>
</tr>
<tr>
<td></td>
<td><em>Modest effect, no effective control transferred</em></td>
</tr>
<tr>
<td></td>
<td><strong>Privatization</strong></td>
</tr>
<tr>
<td></td>
<td><em>Concentrated wealth accumulation; many requiring rescue in 1997 crisis</em></td>
</tr>
</tbody>
</table>

2. 2. 3. Political economic context

2. 2. 3. 1. Malay hegemony and executive dominance

Affirmative action under the NEP was formulated in the wake of a political crisis to which Malay nationalism responded with vigor and force. The political watershed was characterized by consolidation of Malay political hegemony and enlargement of a Malay dominant ruling coalition. Accordingly, affirmative action policies expanded and intensified a framework that was partly in place, deploying many government agencies
that were set up in the 1960s. Notwithstanding some continuities, the 1970s marked a clear break from the past in that state institutions involved in economic policy were infused with a more assertive pro-Bumiputera, and especially pro-Malay, agenda.

Lacking policy models to emulate, Malaysia adopted a practical and experimental approach. This combination of a strong state and pragmatist disposition concurs with the emergence of a state-centric regime often making discretionary decisions and policy shifts, oriented more around executive power than statutes or formalized procedures. Malaysia’s centralized and executive dominant mode of policy-making and implementation has effected change that would otherwise involve more negotiation and formalization, and that would probably transpire less rapidly. Exclusive Bumiputera programs, such as education institutions, scholarships, and licensing, were politically possible and quantitatively feasible. Quotas in education, employment and ownership were also implemented with greater speed and latitude than would be conceivable in most countries.

2. 2. 3. 2. Dynamics of race relations

The Malay-dominant state notwithstanding, policy-making has been shaped by the dynamics of race relations in Malaysia. While economic issues have been important to the Chinese and Indian communities, they have generally been more steadfast and voluble in advocacy of cultural preservation and access to mother tongue schooling and tertiary education than of state deregulation in principle. The quota system for university enrollment and for scholarships, in particular, has been a source of friction, especially for Chinese families who cannot afford to send their children abroad. Chinese- and Tamil-

41 Author’s interviews with former Economic Planning Unit officials.
medium schools provide avenues for linguistic and cultural expression, while proliferation of private higher education and increased non-Bumiputera quota in government scholarships has alleviated to some extent grievances arising from restricted entry to university due to quotas.

Domestic-foreign interactions have also shaped development and affirmative action policies. It is important to note, at the inception of the NEP, that Chinese did not control all sectors – indeed, foreign ownership and control was pervasive, especially in key commodities. The government, in service of the Malay/Bumiputera interest, had established banks and development funds and taken over hitherto foreign-owned entities. The existence of a non-domestic target for transfer of equity ownership significantly insulated Malaysia from an internal conflict over assets, particularly in primary commodities. At the same time, new foreign capital has been seen as a counterweight to Chinese capital, and has thus been courted, especially in manufacturing, as part of Malaysia’s export oriented industrialization program.

Some ramifications of the dynamics of race relations on affirmative action may be noted. Malaysia has engaged more in implicit “bargaining” over safeguarding special domains for each race group, instead of broad efforts to make all socio-economic spheres multiracial. Policies for attaining equitable representation within organizations, especially to foster Bumiputera-non-Bumiputera cooperation, were not pursued in a systematic manner in the private sector. The public sector, state-owned enterprises, privatized entities, and regulations on foreign capital were the main vehicles for increasing Bumiputera participation in management and highly skilled occupations, largely to the exclusion of meaningful engagement with non-Bumiputera. These inter-racial and cross-
national dynamics are interwoven with the process of developing independent Bumiputera enterprises, which is one area where achievements have conspicuously fallen short of expectations. Bumiputera involvement in SMEs, particularly in manufacturing, is lacking, and largely dependent on subsidies. Additionally, lack of cooperation between government and predominantly Chinese SMEs has arguably stunted skills training, research and development and technological upgrading (Ritchie 2005, Henderson and Phillips 2007, Jomo 2007).

2. 2. 3. 3. Economic growth and public expenditures

The Malaysian economy has enjoyed steady economic growth over the past 50 years, including some bursts of sustained rapid growth. Average annual real GDP growth registered 5.8 percent (1957-70), 6.3 percent (1971-87), 8.8 percent (1987-97), and 3.9 percent (1997-2006). Our interest is not in explaining causes of growth, nor in exploring interactions between growth and distribution, but to keep in view the fact that economic growth for the most part provided ample means for Malaysia to undertake its extensive and intensive AA programs. Additionally, discovery of oil reserves in the 1970s coincided with the OPEC price hikes and availed a windfall source of funds. While the actual allocation of such funds is unknown – since Petronas, the government agency mandated to claim oil royalties, is exempted from financial disclosure – it is believed that substantial amounts were spent in social development, especially in the latter 1970s and the 1980s.

Malaysia also augmented public expenditure at a time when international convention was less inimical towards expansionary macroeconomic policies than has subsequently

---

42 Authors interview with Suresh Narayanan, August 14, 2007.
been the case\textsuperscript{43}. The accumulation of fiscal debt, partly in foreign denomination, forced cutbacks in public spending and hiring in the mid-1980s, and accelerated the shift to privatization. Nonetheless, a relatively large public sector, in terms of employment and expenditure, has continued as a mainstay of the affirmative action program.

\textsuperscript{43} Public expenditure per GDP registered 29.0 percent in 1970, 39.9 percent in 1979, and 58.4 percent in 1981.
2. 3. Imperative, content and context of affirmative action: South Africa

Any consideration of post-Apartheid South Africa’s problems must be framed within the comprehensive structures of disenfranchisement, oppression, and discrimination that prevailed under colonialism and Apartheid. Non-whites were systemically disempowered in terms of citizenship and political voice, socially excluded from urban centers, legally prohibited from upward mobility and ownership – except in the Bantustans\(^{44}\) – and forced into inferior education, health services and employment. This study cannot proceed without an attempt to survey the breadth and depth of Apartheid’s legacy, even though some errors of over-simplification and omission will unavoidably be committed. However, the error of decoupling post-Apartheid policy formulation and outcomes from inherited conditions would be greater\(^{45}\). The following brief overview will focus on aspects of Apartheid that most directly impacted on the transition to democracy, the transformations of South Africa’s political, social and economic order, and the formulation of affirmative action policies.

2. 3. 1. Apartheid legacy and affirmative action imperatives

The transition out of Apartheid applied pressures and constraints on affirmative action. Black South Africans for many generations were denied equal rights to vote, to own property and to organize labor or work on fair terms, and were deprived of equal access to education, employment and self-determination. These various and enormous

\(^{44}\) The author is grateful to Gerhard Maré for highlighting major differences between the Bantustans and townships.

\(^{45}\) Indeed, economic historian Sampie Terreblanche in his seminal *History of Inequality in South Africa, 1652-2002* acknowledges that, “[w]ith the wisdom of hindsight we now know that the legacy of colonialism, segregation and Apartheid was much worse, and the pauperizing momentum inherent in it much stronger, than was realized in 1994” (p. 29).
inequities of the Apartheid state and its racial division of labor – arguably more systematized than in any other country – had to be redressed, while negotiating a precarious rebalance of power. South Africa is distinctive for transferring political dominance from a domestic minority racial group with entrenched influence and generally well-developed human capabilities, to a majority group characterized by an ascendant political elite and incipient capitalist class, economic disadvantage and mass poverty. The situation differs from countries that have introduced affirmative action, such as Malaysia, while largely preserving the political order. Affirmative action in South Africa, aiming to redress multitudinous socio-economic disparities, rested on a political transformation. Inevitably, political and economic transitions were necessary; the question was whether they would take shape simultaneously or sequentially. It turned out more toward the latter. Political transformation – a thoroughly new Constitution negotiated between old and new political blocs – preceded, and had to supercede, socio-economic transformation. Discourses over the post-Apartheid economic order no doubt took place concurrently with the political transition, but were spread over a diversity of forums between delegations, and unfolded in more disparate and opaque processes. This important element of the South African transition will be discussed later in this section.

Apartheid reinforced disparities through all-encompassing and institutionalized exclusion and repression, while effectively implementing affirmative action in favor of the white, specifically Afrikaner, population. Blacks were forced into low-wage and unskilled labor on farms, mines or factories, where they had no rights, or to residency – millions by force – in the ostensibly self-governing but resource-deprived and economically dependent Bantustans, or “independent homelands”, while over 80 percent
of South Africa’s land was in the hands of the white population. Township populations at the periphery of cities and towns burgeoned, as blacks flocked to seek menial work under heavily policed conditions. South Africa’s government and service delivery system was splintered into central government and homeland administrations. The employment profile of these departments reflected Apartheid policy and enforcement. The public sector and parastatals constituted an important channel of employment, skill acquisition, and upward mobility for whites. More generally, whites were disproportionately employed in senior positions and in security services, while blacks were predominantly laborers, or educators and nurses in the homelands (Naidoo 2008: 102-103).

The education system was further segregated and stratified under Apartheid from the mid-1950s. Schools were reordered towards ethnic homogeneity, while universities were explicitly segregated by law and education departments were segmented by race or in alignment with ‘independent homeland’ borders. Curricula were designed to prevent Africans from aspiring to positions beyond subservient functions of production or Apartheid administration, and black populated schools were systemically deprived of funds. Schools in the Bantustans and tertiary institutions in general operated with a degree of autonomy; some universities enrolled blacks from the 1970s. On the whole, the education system was segmented and stratified by race, and academic learning was disrupted by political ferment and anti-Apartheid struggle that pervaded many schools. A glance at education statistics is revealing: in 1986, the passing rates for standard 10 examinations were 51.6 percent for Africans, 67.6 percent for Coloreds, 87.1 percent for Indians and 93.1 percent for Whites. In 1990, the passing rate for Africans had declined

---

46 In 1993, there were 172 departments in the central government and homeland administrations (Naidoo 2008: 101).
to 36.7 percent, while that for other race groups continued to increase (MERG 1993 and Motala et al. 2007)\textsuperscript{47}.

Repression, segregation and discrimination in the labor market are widely documented. Racial conflict and systematic discrimination were far more direct and blatant in capitalist-worker relations than in other arenas. Terreblanche (2002) describes the persistent structural feature of the South African labor market as black labor repression, which has taken on various forms over three and a half centuries. The Apartheid regime from 1948 reinforced discriminatory measures in various ways, whether through law or arbitrary exercise of power. A few directly relevant to labor markets are worth mentioning here for illustrative purposes. Amendments to the Industrial Conciliation Act in 1953 reserved certain classes of work for specified racial categories to “safeguard against inter-racial competition”, and in 1956 prohibited registration of “mixed” unions. Black trade unions were not recognized until 1979. The Apartheid system militated especially aggressively against black advancement up skill levels, through training and promotion, and blacks in management. White unions prevented training of African artisans, resulting in no African apprenticed outside the Bantustans before 1975 (Seekings and Nattrass 2005: 138). Until 1977, it was illegal to employ African managers in urban areas (Nzimande 1996: 190).

\textsuperscript{47} In 1990, the standard 10 passing rate was 79.4 percent for Coloreds, 95.0 percent for Indians and 95.8 percent for Whites. Per capita educational expenditure in 1988 registered R276 for Africans, R1,358 for Coloreds, R2,225 for Indians and R3,080 for Whites, while the proportion of teachers with professional qualification in 1990 also showed disparities within the black population, with 87 percent for Africans; 96 percent for Coloreds and 98.5 percent for Indians (MERG 1993: 129-134). Other sources yield different estimates for disparity in education spending, e.g. Motala (et al. 2007: 3 and 12) report ratios of average spending on whites to blacks of 3.2 in 1993, and as high as 15 in 1990.
The mid-1970s signaled new directions for South Africa. The 1973 Durban strikes forcefully marked a shift in worker activism from the relative quiescence of the 1960s. More momentously, the 1976 uprisings in Soweto and nationwide protest that it spawned were triggered by the imposition of Afrikaans instruction in black schools outside the Bantustans, and other contributory factors. By then, township communities had settled beyond being migrant, transient populations, which in turn yielded township-born generations of schooled youths who were inflamed against their abject living conditions. The Apartheid government strategy of concentrating development for blacks in the Bantustans, to the neglect of urban townships, had laid conditions for such a backlash (Seekings and Nattrass 2005: 108). The state and big business responded, notably through the Wiehahn, Riekert and de Lange Commissions, the Human Sciences Research Council and the Urban Foundation, which made recommendations for reforms in housing, industrial relations and social policy. Black trade unions were formally recognized from 1979. This strategy partly aimed at deflecting public protest away from black working class mobilization against the racist Apartheid state towards conflict within formal industrial relations, and achieved this to some extent.\footnote{Author’s interview with Professor Eddie Webster, October 29, 2007.}

The reforms, however, were selective and amounted to an upward shift of the color bar – barriers to black advancement were raised, but were far from removed. Standing, Sender and Weeks (1996: 386) point out, for instance, that none of the Commissions made substantive recommendations towards the deracialization of training schemes.\footnote{Racial segregation persisted in skill formation. Africans comprised about 10 percent of qualified artisans by 1990, but were concentrated in six relatively low-skill trades, including welding, boiler-making, fitting and sheet metal working, while whites continued to predominate}
There was a steady relaxation of restrictions on African trade and business in urban areas, yet black business development remained severely inhibited (Southall 2004: 316).

Nevertheless, legal amendments to labor relations and policy attention to urban social and housing development from the late 1970s would set in motion two important developments in the distributional dynamics of South Africa. First, superficially altering Apartheid and perforating some barriers to black upward mobility became accepted as strategic objectives within the corporate world and the state. The business sector became more politicized in the 1970s, while at the same time more autonomous from the Apartheid state machinery and pro-active in advocating reforms. Second, the changes accentuated class differentiation in the African population – an important precursor to the process of social stratification in the post-Apartheid era (Marais 2001, Seekings and Nattrass 2005, Terreblanche 2002). The reforms of ‘petty Apartheid’, however, coincided with intensification of political repression and manipulations to maintain power, which fuelled resistance and mass mobilization through the 1980s. Thus, the Apartheid system faced demands for removal – in highly volatile circumstances.

This very brief overview of systemic disadvantage in South Africa raises a few themes that are taken up later. First, Apartheid was comprehensive. Correspondingly, redress measures – affirmative action and broad reforms – needed to be comprehensive. It is inconceivable to expect prohibition of discrimination alone to redress the breadth and depth of Apartheid’s socio-economic legacy. Active measures for South Africa had to chart a path through multiple transitions unlike any other country in the late 20th century, and progress had to be substantial and expeditious given the social pressures and

in higher skill trades in metal, engineering, electrical and motor sectors (Standing, Sender and Weeks 1996: 388).
expectations of tangible change. The post-Apartheid state was constrained to respond urgently to a plethora of basic and deep-seated problems, notably, fragmented government and service delivery systems and grossly inadequate basic education and health provision.

Second, features of the political and economic transitions impacted on the formation of affirmative action policies. South Africa faced enormous challenges, but enjoyed wide political legitimacy, to redress systemic disadvantage and inequality. At the same time, the imperative of dismantling Apartheid demanded a new Constitution and negotiations among top leadership, amid a volatile political climate. These circumstances subordinated economic policy formulation to a less centralized, transparent and coordinated process than the concurrent political reconstitution, effectively preempting broader economic bargains that could have bolstered the economic transformation, such as transitory wealth taxes\(^50\). In addition, historical and ideological factors, especially the end of the cold war, South Africa’s reemergence from isolation and global pressures for financial liberalization, weighed in on an ANC leadership inexperienced in economic matters.

The Freedom Charter of 1955, de facto manifesto of the anti-Apartheid struggle, expressed intentions to return the nation’s wealth to the people and to guarantee freedom of economic engagement. The Charter did not spell out economic programs for redistribution and black empowerment; its most resonant policy was a reference to nationalization. Economic negotiations from the 1980s, however, had reached an elite pact that laid the groundwork for conservative policies. With reconciliation forming the basis of political transformation, the ANC, leading the Government of National Unity, initially adopted an accommodative stance towards white capital, but grew more assertive

\(^{50}\) Author’s interview with Sampie Terreblanche, January 21, 2008.
over time towards cultivating a black capitalist class (Southall 2004). Thus, the vision of a non-racial and non-sexist democracy, conceived in the liberation struggle and sustained as a bargaining position, became embedded in the Constitution, as were provisions for affirmative action. The fact that specific legislation and policy on affirmative action was promulgated after the enactment of a new Constitution derives from the urgency of fostering political stability and a power-sharing deal, while formal AA legislation was introduced from the late 1990s.

Third, structural aspects of the Apartheid political economy further complicated the transition and introduction of affirmative action programs: entrenchment of a developed capitalist class and marked class boundaries, reservation of upper rung jobs in the formal economy for the white minority, presence of nascent black professional and middle classes, and rise of political elites seeking reward for past discrimination. Apartheid’s cultivation of Afrikaner capital and appeasement of English-speaking capital perpetuated monopolistic and oligopolistic markets. Hence, the challenge of overcoming racial inequality would inevitably be fraught with the complications of a multi-dimensionally divided society and economy.

2. 3. 2. Affirmative action policies and programs

2. 3. 2. 1. Terms and principles

This study’s conceptualization of affirmative action includes policies that conventionally go by other terms in South Africa (See Appendix 2). Chapter 3 of the Employment Equity Act carries the heading ‘Affirmative Action’, probably resulting in the common equation of affirmative action with employment equity. However, AA as
conceptualized in this study spans a wider range. Employment equity and BEE qualify as AA under the broad definition applied in this paper, in the spheres of employment, management and ownership. Also by convention, South Africa’s education policies are less couched in AA terms. Unlike in Malaysia, where enrolment quotas and race-delineated educational institutions have become policy mainstays, in South Africa the concept and language of redress and transformation pervades, constituting not fixed targets or racially exclusive academies for beneficiaries, but a mandate to redress past inequalities in access to education and achieve more equitable racial representation, which inevitably involves some extent of preferential selection. In sum, then, to establish common ground in this two-country study, and to cohere with the definition of AA we have set out, we take AA in both Malaysia and South Africa to encompass measures that are both explicitly and implicitly preferential and aimed at redressing racial inequalities, in the spheres of education and training, employment and ownership.

The underpinnings of affirmative action were crystallized in the Constitution of the Republic of South Africa, which stipulates principles for safeguarding equality and prohibiting *unfair* discrimination (emphasis added), while recognizing the legacy of past discrimination (See Appendix 1). Article 9 serves as the cornerstone of affirmative action, where it is specified that, “[t]o promote the achievement of equality, legislative and other measures designed to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination may be taken”. The importance accorded to affirmative action in the public sector is upheld in the Constitution. As pointed out by Jain (2006), Article 195(1) sets forth the mandate that “[p]ublic administration must be broadly representative of the South African people”, and Article 217(2) provides for “categories of preference in
the allocation of contracts” and “protection or advancement of persons, or categories of persons, disadvantaged by unfair discrimination”. The Employment Equity Act (1998) distinguishes two stages to the process of attaining equity: legislation of non-discrimination, and official provision for affirmative action to correct historical unfair discrimination. This study, it is worth reiterating, locates employment equity in the labor market as a component of the broad rubric of affirmative action.

2.3.2.2. Representation in education

As observed above, the challenges in the education domain were to restructure its fragmented and unequal state and to promote equitable access. Under Apartheid, education was partially available to discriminated groups, but historically black schools, teknikons and universities were also purposely kept inferior in teacher capacity, facilities, funding and curriculum. Thus, the mandate for transformation was cast broadly, including measures to increase and improve basic education for the mass population, to reorganize or merge tertiary institutes, and to pursue equitable representation in the systematically superior, historically white institutions. With institutions already segregated, emphasis was placed on integration. Any creation of racially exclusive elite schools and colleges would be at odds with the objective of deracializing education.

At the primary and secondary levels, under-provision or poor quality of schooling warranted the priority placed on basic education. The composition of schools corresponds with the population of the surrounding district/s; hence, pursuing racial proportional representation would be unproductive in some cases, notably in black-dominant township or rural schools. However, it was imperative to integrate historically white institutions.
These processes did not involve affirmative action measures, but are an important backdrop to the transformation that has been pursued at the tertiary level. In a 1990 restructuring program, most urban white public schools had opted for a ‘Model C’ format, which gave schools latitude to collect fees and have jurisdiction over major decisions, including enrollment, subject to approval of the school governing authority\textsuperscript{51}. Devolving some authority and financing to the school, it was argued, would also democratize school governance and encourage parental participation, while availing public funds to other more needy schools (Chisholm 2008, Motala et al. 2007). The Model C structure and user fees were preserved into the post-Apartheid era, motivated by concerns of exodus of whites to private schools and of public finance constraints. Furthermore, the struggle for education rights had historically not been cast in racialist terms, thus the policy to provide education was “based principally on the constitutional guarantees of equal educational rights for all persons and non-discrimination” (White Paper on Education and Training 1995).

However, while these political and pragmatic considerations exerted substantial weight, the policy process was also infused at the ideological level by a ‘pro-market’ orientation and attendant cost efficiency arguments (Weber 2002: 265), which outweighed the flipside of user fees, namely its propensity to reinforce and perpetuate privilege and inequality by excluding those who cannot afford to pay (although this would be legally prohibited) and by allowing schools that charge fees to poach better teachers from other schools. Another dimension of equity stems from the reality that

\textsuperscript{51} Technically, schools could enroll blacks, and some did, although at a very low pace in the early 1990s (MERG 1993).
black households are larger and hence would face more difficulty sending children to fee-charging schools (MERG 1993: 100-102).

Education policy discourses did not acquire the language of affirmative action. While the exact reasons are unclear, it appears to stem from acceptance of the convention of confining AA terminology to employment processes, coupled with abstention from formal racial or gender targets or quotas in schools and universities. Nevertheless, we can locate policies geared towards overcoming systemic disadvantage and under-representation of blacks under the rubric of transformation and redress. Another challenge in summarizing AA in education is the incremental path it followed, which can be traced out in a series of official documents: government white papers (1995-1998)\textsuperscript{52}, the 1996 National Commission on Higher Education report\textsuperscript{53}, the 2000 Council on Higher Education report\textsuperscript{54}, and the 2001 \textit{National Plan for Higher Education}\textsuperscript{55}. Early policy objectives were outlined in the 1995 and 1996 \textit{White Papers}, which gave priority to integration of administrative bodies, and expansion and improvement of basic schooling. “Affirmative action” would be applied only in the recruitment of teaching staff. The papers recognized problems of higher education, particularly its racially splintered


\textsuperscript{53} An Overview of a New Policy Framework for Higher Education Transformation, 22 August 1996.

\textsuperscript{54} The full title is: Policy Report: Towards a New Higher Education Landscape: Meeting the Equity, Quality and Social Development Imperatives of South Africa in the Twenty-first Century.

\textsuperscript{55} This report was authored by the Ministry of Education.
and stratified structure, but deferred policy proposition to the newly formed Commission on Higher Education.

Affirmative action in terms of student composition, under the banners of transformation, redress and equity, were most salient in higher education– which had been perhaps the educational level at which blacks witnessed quantitatively both the greatest disparity and fastest growth prior to the transition. Between 1986 and 1993, the number of African students at universities and teknikons increased by 14 percent per year, against 0.4 percent for whites. However, in 1993 the participation rates were starkly far apart, at 70 percent for college-age whites versus 12 percent for Africans (White Paper 1997). The need for redress in higher education has been consistently articulated with respect to unequal access based on race, gender, class and region, but measures to unify, restructure and coordinate education administration took precedence in the early post-Apartheid years. Statements on the process reflect the manifold challenges of transforming both structure and access, e.g. “[h]igher education must be transformed to redress past inequalities, to serve a new social order, to meet pressing national needs and to respond to new realities and opportunities” (White Paper 1997). Notably, transformation and redress in education institutions have not been legislated. National Education Policy Act 1996, which stipulates terms of reference for establishing educational institutions and formulating education policy, and the Higher Education Act 1997, which outlines a framework for restructuring and administering higher education, provide no explicit legal framework for affirmative action.

56 Teknikons were technical colleges, renamed universities of technology in 2005.

57 The National Education Policy Act stipulates equitable access and redress of past inequality as guiding principles, and specifically mentions gender equality in educational access as a national
The transformation mandate in higher education was formulated in two layers: institutional redress and social redress. The gulfs between historically white institutions (HWI) and historically black (or historically disadvantaged) institutions (HBI) needed to be bridged. Structural inequalities in access to higher education – due to past racial or gender discrimination, regional restrictions, or inability to afford fees – were also to be rectified. Initially, much policy focus was channeled toward narrowing the disparities between HWIs and HBIs. The framework for funding of the mid- to late-1990s designated public funding for general operations, proportionate to enrollment, and earmarked funding for institutional redress (between HWIs and HBIs) and individual or social redress (financial aid to students, e.g. the National Student Financial Aid Scheme (NSFAS)) (CHE 1996).

In practice, institutional redress was effected to a larger extent. However, the mid- to late-1990s saw a decline in enrollment in public higher education institutions, partly due to mismanagement of historically black institutions, but also due to stagnation in quality of school graduates. The HBIs faced acute difficulties, inter alia, in collecting fees – while expectations of redress funding did not materialize – and in providing academic programs and facilities, fuelling downward spirals in enrolment and financial sustainability. At the national level in the late 1990s, the proportion of black, especially policy objective. The preamble to the Higher Education Act validates the social desirability of efforts to “redress past discrimination and ensure representivity and equal access”.

58 The White Paper on Transformation of Higher Education (1997) maintains that “transformation involves not only abolishing all existing forms of unjust differentiation, but also measures of empowerment, including financial support to bring about equal opportunity for individuals and institutions”.

African, students increased, as many entered public HWIs and technical universities, which saw substantially higher enrollment growth, while many whites opted for private higher education. The higher education participation rate, however, remained static, and enrolment in sciences and engineering did not increase as desired (Imenda, Kongolo and Grewal 2004, Morrow 2008, CHE 2000).

Thus, by the late 1990s a transformation program for higher education began to take shape more extensively and vigorously. The 1997 *White Paper* asserted that “changing the composition of the student body will be effected through targeted redistribution of the public subsidy to higher education. The relative proportion of public funding used to support academically able but disadvantaged students must be increased.”

From around 2000, higher education policy shifted in some important ways, with institutional redress becoming less narrowly focused on leveling playing field between HBI and HWI and increasingly geared towards social redress (CHE 2000, MOE 2001). The proportion of students receiving NSFAS aid increased clearly, though still gradually, from 20 percent in the late 1990s to 25 percent in the early 2000s. Mergers and combinations of HBIs and HWIs were formally proposed, on a case by case basis. The number of higher education institutes fell from 36 in 1995 to 29 in 2004 to 25 in 2005, and the demarcation of HBI and HWIs was officially phased out, consistent with the shift to de-emphasize institutional redress and broaden the transformation program in higher education.

---

60 Universities would be required to request “goal-oriented public funding” conditional less on enrollment size and more on a set of plans, including an academic development plan, equity plan, capital management plan, and performance improvement plan.

61 We should note that institutional redress and social or individual redress, especially with the mergers and restructuring of institutions, are conceptually but not necessarily functionally distinguishable (Personal correspondence with Nazeema Mohamad, Director of Transformation, University of the Witwatersrand).
2. 3. 2. 3. Representation in upper-level occupations and skills development

In the workplace, the Apartheid legacies of acute skills shortage, labor repression and barriers to upward mobility posed some deep and fundamental policy challenges. The formation of affirmative action policies was far from a straightforward and consensual process. From the early 1990s, a number of organizations advocated variations of AA, notably the Black Management Forum (BMF), the National African Federated Chamber of Commerce (NAFCOC), and organized labor, while others lobbied against AA, saliently the South African Chamber of Business (SACOB) (Horwitz 1996, Adam 2000). ANC policy documents mirror these political pressures and electoral expectations, with Ready to Govern (1992) and the RDP (1994) both making firm and broad statements on AA, only to be circumscribed by the follow-up RDP White Paper (1994). As mentioned above, the latter expressed commitments to affirmative action only in public sector employment, while becoming silent on interventions to redress disadvantage in private sector employment62.

It is not surprising that affirmative action was taken up in the public sector with greater vigor. The public services were a mainstay of pro-white affirmative action under Apartheid. However, this inherited condition made for a complicated transition towards a more representative workforce, especially at the administrative level and in highly-skilled occupations, due to limited room for maneuver in restructuring government offices (existing departments and officials performing crucial functions cannot be replaced) alongside shortages in skill and experience among blacks. As with all areas of transition, affirmative action was a component of a much broader transformation agenda. The 1995

62 Bond (2000: 99) points out that the authoring of the White Paper, which was delegated to partisan individuals at the Development Bank of Southern Africa, reflects of the capture of the policy agenda by neoliberal-leaning ideology and personnel.
White Paper on Transformation of the Public Service highlighted a swathe of problems: shortfalls in representativeness, in popular legitimacy (the state being viewed as an Apartheid appendage) and in service delivery, and operational defects or obsolescent practices such as top-down management, lack of accountability and transparency, low productivity, low pay and demotivated staff. One severe constraint in the initial post-Apartheid years was the need to manage the continuation of senior and skilled staff from the previous administration, which gave rise to ‘the sunset clause’ and averted mass evacuation of key government posts, and was also a vital bargaining point in transitional negotiations.

Affirmative action in the public service was formally set out in the 1998 White Paper within the framework of the Employment Equity Bill. Thus, there is little to differentiate, in principle and procedure, affirmative action in the public and private sectors. However, one distinguishing element of AA in the public service in the 1990s is the stipulation of specific targets and timeframes. The state’s direct control over employment in the public sector is reflected in its rapid schedule for increasing black representation in administration, the flipside of which is the possibility of setting overly ambitious goals\(^{63}\).

Another problematic aspect of affirmative action in the public sector is the widely believed disproportionate distribution of gains among ethnic groups within the black population.

\(^{63}\) Percentage of designated group, baseline targets and timeframe

<table>
<thead>
<tr>
<th>Target</th>
<th>December 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black people at management level</td>
<td>50% by 1999</td>
</tr>
<tr>
<td>Women new recruits to the management level</td>
<td>30% by 1999</td>
</tr>
<tr>
<td>People with disabilities</td>
<td>2% by 2005</td>
</tr>
</tbody>
</table>

Source: White Paper on Affirmative Action in the Public Service
Obstacles to effecting AA in the private sector were steeper. The state can exert only indirect influence, through persuasion or legislation, over hiring decisions, while entrenched ownership and managerial interests are disposed to pursue private interests over the social principle of equity and redress. Some blacks had enjoyed social mobility, through “black advancement” initiatives in the 1980s, but had been subjected to a moving color bar often lodged at middle level management or human resource management (Nzimande 1994). In the early 1990s, some companies began to voluntary undertake affirmative action, largely in anticipatory compliance with future legislation and quotas. Blacks, however, remained glaringly under-represented in managerial positions, with high incidences of ‘window-dressing’ or nominal, non-executive appointments (Adam 2000). That the under-representation of blacks is due to combinations of discrimination and lack of experience and training is undeniable, but no definitive conclusion on the balance of these determinants has been, and perhaps never can be, reached. The outcome of negotiations over employment legislation reflects the dual objectives of ending discrimination and promoting opportunity – and a premise that free markets do not self-regulate towards the eradication of discrimination.

Affirmative action in employment was institutionalized after an interim, during which basic labor legislation was passed (LRA 1995 and BCEA 1997), macroeconomic policy was imposed (GEAR 1996) and the transformation agenda as a whole was gathering momentum. The Employment Equity Act (EEA), passed in 1998, sets out to distinguish

---

64 A 1995 FSA-Contact survey reported 94 percent of private sector organizations had implemented some form of AA (67 percent formally; 27 percent informally), mainly at the managerial, professional and technical levels. By 1996, however, 85-95 percent of senior positions remained held by whites, and the black proportion of top management was a mere 3 percent (Adam 2000: 82). The lack of standard definitions of what constitutes AA and benchmarks for black advancement is reflected in these developments preceding the EEA.
unfair discrimination from affirmative action, to register prohibition of unfair
discrimination and, most importantly, to establish a legislative framework for
implementing affirmative action in hiring, promotion and training. The EEA states as its
chief intent the equitable representation of suitably qualified people from designated
groups in all occupational categories and levels in the workforce. It makes provision for
preferential treatment – i.e. fair discrimination - and numerical goals, but not explicit
quotas. It is applicable to ‘designated employers’, which encompasses government
departments and municipalities (excluding national defense and intelligence services),
and companies with either 50 or more employees or turnover above various sector-
specific thresholds, broadly corresponding to conventional definitions of medium-size
enterprise in South Africa.

In the selection process for recruiting, promoting and training employees, the EEA
stipulates that, among ‘suitably qualified’ candidates, employers are to give preference to
persons from designated groups, defined as black people, women and persons with
disabilities. The EEA requires government departments and designated employers, in
consultation with workers, to: (1) submit employment equity reports of their workforce
profile and their progress made towards equitable representation, disaggregated by race,
gender and disability categories; (2) devise employment equity plans specifying targets
for increasing the number of members of disadvantaged groups who benefit from
promotion, skills development or recruitment. The baseline target of workforce

65 The EEA is sparing in its chapter on unfair discrimination. Legislation governing such matters
is more fully developed in the Promotion of Equality and Prevention of Unfair Discrimination
Act, 2000, which stipulates legal grounds for prosecution of individual cases.

66 The unqualified designation of women in the EEA has stirred controversy over whether white
women can be considered as disadvantaged as black men, leading to assertions of a further order
of priority: black female, black male, white female, white male.
composition at every occupational level is the economically active population of South Africa, although in practice the Department of Labor takes into account the racial and gender composition of the province where employers are located\textsuperscript{67}.

The outcomes and problems of employment equity legislation will be discussed at various junctures of this study. At this point, we should note that South Africa’s EEA has a broad scope and formalized mechanisms, since it encompasses public and private sectors, imposes self-regulatory requirements and a penalty system for non-compliance, and integrates skills development as a component to enable disadvantaged employees to be upwardly mobile within firms\textsuperscript{68}. In practice, however, employment equity has proceeded more vigorously in the public sector, and in general involves preferential hiring and/or promotion more than skills development. Professional and managerial positions were formerly the most inaccessible and presently the most coveted, and have thus come under the most pressure and public scrutiny to demonstrate equitable representation. The public sector, under the direct purview of government, has absorbed large numbers of tertiary educated blacks into technical, professional and administrative occupations, coupled with a shift in public policy toward ‘managerialism’ which has increased the proportion of management-level posts (Chipkin 2008, Edigheji 2007). Implementing employment equity in the private sector is relatively more complex and fraught with obstacles and resistance.

\textsuperscript{67} Author’s interview with Employment Equity Division official, Department of Labor, November 30, 2007.

\textsuperscript{68} The Skills Development Act, also passed in 1998, provides for the establishment of Sector Education and Training Authorities (SETAs) and a one percent of payroll levy that firms can reclaim through enrolling staff in the SETAs, irrespective of company size. The skills development program operates largely in tandem with employment equity for medium-scale and larger enterprises.
The skills development component of EE is arguably more pertinent to clerical, service or production workers. However, the record of skills development and reputation of SETAs are also generally not held in high esteem; many companies pay the levy and pass it on as a cost to consumers. Complying with EE is also considered an added cost, on top of labor regulations, or at an even more basic level – a carry-over from Apartheid-era mentality – many South African employers are plainly predisposed against regulation of any sort, as reflected in unreceptive attitudes toward gender equity and safety regulations. For the most part, therefore, it seems that employment equity has been an operational cost to which firms comply minimally, especially for medium-scale firms (small-scale firms are exempted). Basic problems of illiteracy or low formal education among workers impair their involvement in the consultation process and enhance the bargaining power of employers in negotiating employment equity plans. In addition, unskilled workers are concerned primarily with basic issues of wages, benefits and unfair dismissals, and less invested in employment equity, especially where they are pessimistic about prospects for skill acquisition and promotion.

The Black Economic Empowerment (BEE) mandate and legislation provide an incentive structure for employment equity and skills development in favor of the black population. The concept of BEE, although it had been articulated since the late 1980s, was formalized through the BEE Commission’s proceedings and institutionalized in the Broad-Based BEE Act (2003). Beyond compliance with employment equity legislation,

69 Author’s interviews with Johan de Lange, senior official, Confederation of Employers of South Africa (COFESA), November 26, 2007, and Andries Bezuidenhout, October 30, 2007.

70 Author’s interview with Johan de Lange.

71 Author’s interview with Rudi Dicks, Labor Market Coordinator, Cosatu, December 4, 2007.
BEE institutes a metering system – the BEE Scorecard, audited by private firms – in which participants earn a composite score for performance across seven weighted elements. The weightage of ownership, skills development and employment equity are relatively high.

The BEE program adds a dimension to affirmative action in employment, in that participation of employers is voluntary, and is incentivized by the rewards of public procurement and state-private sector dealings. Furthermore, BEE’s targets are centered on black advancement, whereas employment equity legislation does not specify targets and includes women and disabled as beneficiaries, and certain minimal compliance levels are higher under BEE. The organizational constraints of firm scale are incorporated into legislation through allowance under BEE for small companies to select four out of seven elements, i.e. small businesses can opt to not pursue employment equity.

2.3.2.4 Corporate ownership and control

Black Economic Empowerment (BEE) is subject to various interpretations in terms of its meaning and scope, and its relation to employment equity and affirmative action. As with the Malaysian case of the Bumiputera Commercial and Industrial Community (BCIC), our interest in BEE recognizes the political and economic importance of ownership and control over capital, especially in its potential influence on increasing black representation in management and on the distribution of earned income. BEE is

---

72 For instance, whereas the mandatory skills development levy is one percent of payroll for all employees, to obtain points under BEE companies must spend three percent on training black employees.

73 Author’s interview with Jeffrey Ndumo, Director of BBBEE partnerships, Department of Trade and Industry, November 27, 2007.
often thought of as a program for redistributing ownership and wealth – and in both concept and practice, that was the case from 1994 to the early 2000s\textsuperscript{74}. Black corporate ownership proceeded in an ad hoc manner through the 1990s, at the initiative of white capital and through a series of mechanisms, with limited and erratic outcomes. The formation of the BEE Commission in 1998 and its deliberations yielded discourses on ‘maximalist’ and ‘minimalist’ paradigms of BEE, based on the scope of black empowerment as well as the intensity of intervention – whether the state administers programs in a more indicative or dirigiste manner. The Commission decided on a maximalist approach, with expansive objectives including ownership and control over capital, employment equity, and skills development (Gqubule 2006). However, up until the final Commission Report of 2001, the main thrust of BEE remained in the arena of ownership and control (Ponte, Roberts and van Sittert 2007)\textsuperscript{75}.

The Commission’s foundation and reports signified government’s serious commitment to BEE and served notice to white capital to take up transformation more seriously\textsuperscript{76}. Business sectors began drafting industry charters of procedures, targets and timelines for ownership transfer and broader inclusion of historically disadvantaged individuals. At the same time, public outcries over concentrations of ownership among a black, politically-linked elite, compelled construction of a broader scheme for spreading

\textsuperscript{74} The rhetoric of the early Mbeki Presidency is telltale. Speaking to the Black Management Forum in 1999, he asserted: “As part of the realization of the aim to eradicate racism in our country, we must strive to create and strengthen a black capitalist class. A critical part to create a non-racial society, is the deracialization of the ownership of productive property” (cited in Gumede 2002: 207).

\textsuperscript{75} The decision in the Commission’s report to name the proposed legislation the BEE Act, instead of the commercial equity act, was made at the last minute (Author’s interview with Duma Gqubule, November 3, 2007).

\textsuperscript{76} Author’s interview with Roger Southall, December 7, 2007.
benefits. Aside from criticisms of wealth acquisition, the hoped for and hyped up impact of a ‘patriotic African bourgeoisie’ on transformation within firms also largely failed to materialize, whether for systemic-behavioral reasons – black capitalists are as self-interested as any capitalists – or practical reasons – having incurred heavy debt to acquire stakes, they were primarily motivated to pay back\textsuperscript{77}. The Broad-Based BEE Act of 2003 consolidated the empowerment project, and laid the groundwork for the drafting of ‘codes of good practice’ for measuring BEE. The BEE Codes, drafted and redrafted over a long process and finally gazetted in February 2007, schematize a BEE points system, as well as align industry charters to a coordinated set of targets. The seven categories and respective score allocations demonstrate an institutional broadening of BEE, although it is too soon to evaluate the impact.

A few other strands of intervention that can potentially engage in advancing black ownership and control are worth mentioning, to fill in this overview of affirmative action institutions. Some agencies pursue transformation in a trustee-type relationship, on behalf of the black community as a whole. The National Empowerment Fund (NEF), an agency of the Department of Trade and Industry, provides financing for BEE equity transactions. The Public Investment Corporation (PIC), wholly owned by the South African government, deploys public pension funds to push for transformation in companies through exerting stakeholder influence\textsuperscript{78}.

\textsuperscript{77} Author’s interview with Lumkile Mondi, Chief Economist, Industrial Development Corporation, November 28, 2007.

\textsuperscript{78} A number of other development finance institutions operate with a more restricted scope of AA. Two main entities, the Industrial Development Corporation (IDC) and Khula Enterprise Finance Ltd, officially allocate credit on developmental, not race preferential, bases. However, BEE considerations are factored into their operations (Consulta Research 2007, Khula Annual Report 2007).
2. 3. 2. 5. Managerial and enterprise development

2. 3. 2. 5. 1. Employment Equity

The development of black managerial and entrepreneurial capacities can be connected to four legislative or policy elements: employment equity, preferential public procurement, BEE and public enterprise employment. As discussed above, black representation in management and in owning and operating businesses remains one of the more elusive areas of South Africa’s transformation. While employment equity can compel management to become more racially representative, relinquishment of decision-making power will assuredly face resistance, especially in family-based companies and medium-size firms with relatively fewer positions to reallocate. Additionally, large firms have resources to create either token positions or insert blacks into management posts without commensurate responsibility.

One rationale behind employment equity is the mandate for suitably qualified persons of disadvantaged groups previously unfairly denied recruitment or promotion to be given opportunities to acquire experiences that can only be learned on the job, perhaps leading to such persons venturing on their own. Resistance toward enforced entry to top management may propel capable blacks to start own businesses, although this will depend on a confluence of other ancillary factors, especially access to credit. Considering the constraints, we should take note that EE is limited in its capacity to cultivate black-owned and operated enterprises.
2. 3. 2. 5. 2. Preferential Public Procurement + BEE

The preferential public procurement program has become a key instrument of affirmative action in managerial and enterprise development. South Africa began to leverage its lucrative government contract system to promote black-owned and operated business from about 2000. The terms of engagement were broadly codified in the Preferential Public Procurement Framework Act (PPPFA) (2000), which stipulates allocation of 80-90 points for price and 10-20 points for specific goals, depending on the size of contract. The specific goals stated in the Act include “contracting with historically disadvantaged by unfair discrimination on basis of race, gender or disability” and “implementing programs of the RDP”. Hence, procurement practices operated with a clear template for AA, although the initial terms of engagement were rather imprecise. The procurement system has been given greater clarity and structure under the aegis of BEE, with the BEE Codes, which are much more detailed than the goals outlined in the PPPFA, serving as the basis for preferential selection. In practice, of course, government procurement is still exposed to misuse and abuse, most acutely through fronting, especially for higher value-added projects. The BEE Codes, by drawing in other empowerment meters, may attenuate fronting, although the practice remains controversial and is widely believed to be pervasive.

Factoring BEE scores into open tenders for government projects presumably injects a competitive dimension and gives bidders a fillip to pursue the various elements of the points system. The Codes are in fact designed with public procurement in view – with implication that every organ of state and public entity must take codes into account in

79 Author’s interview with Lumkile Mondi, November 28, 2007.
issuing licenses or concessions, in developing and implementing preferential procurement, in the sale of SOEs, and in partnerships with the private sector. Large companies also earn points in accordance with the BEE score of their subsidiaries and vendors, or for financially assisting the development of smaller enterprises. BEE and preferential procurement is a recently institutionalized centerpiece of government policy pursuing affirmative action objectives; hence, its material effect is largely yet to be realized. Licensing, by forging a tighter relationship between government and license-holder, is arguably more effective than procurement in advancing black business development. However, the scope for licensing is more limited, and more favorable to large-scale operations.

2. 3. 2. 5. 3. Public Enterprises

South Africa’s public enterprises have emerged as institutions for pursuing AA objectives in employment, and are specially positioned as a training ground for black enterprise development. The privatization agenda pushed in the early post-Apartheid years – on more ideological, free market grounds than as a redistributive instrument for affirmative action – unraveled in the late 1990s, and momentum fizzled out. The prominence of public enterprises was reinvigorated in the early 2000s, together with a shift toward a more expansive role for government procurement and state agencies. While the public enterprises are similar to government departments in terms of the state’s direct influence over employment equity practices, public enterprises are largely engaged in production and are relatively more exposed than the bureaucracy to competition.

80 Author’s interview with Duma Gqubule, November 3, 2007.
South Africa’s experiences with poor service delivery have also raised expectations of paying consumer on monopolies such as power utility Eskom. Public enterprises occupy a space in between the public services, where blacks have risen into administrative ranks but may not be sufficiently equipped for managing in competitive markets, and the private sector, which has embraced employment equity unevenly. However, the socio-psychological effects on the black community of demonstrating competency and attaining success in visible ways are significant and important.

Table 2-5. South Africa: Affirmative action programs and notable features

<table>
<thead>
<tr>
<th>Program / Legislation</th>
<th>Notable features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary Education</td>
<td></td>
</tr>
<tr>
<td>Institutional redress to narrow HWI-HBI disparities</td>
<td>Institutional autonomy emphasized</td>
</tr>
<tr>
<td>Individual / social redress to increase enrollment of disadvantaged persons</td>
<td>AA programs devolved to institution level, public funding available for implementing equity plans</td>
</tr>
<tr>
<td>NSFAS operates on an individual basis</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
</tr>
<tr>
<td>Employment Equity Act 1998</td>
<td>Mandatory for:</td>
</tr>
<tr>
<td>Black Economic Empowerment (BEE)</td>
<td>public sector (except defense)</td>
</tr>
<tr>
<td></td>
<td>private sector (except small enterprises)</td>
</tr>
<tr>
<td></td>
<td>EEA scope:</td>
</tr>
<tr>
<td></td>
<td>recruitment, promotion and skills development</td>
</tr>
<tr>
<td></td>
<td>BEE: voluntary participation, public procurement provides incentive to engage in elements, including employment equity</td>
</tr>
</tbody>
</table>

81 For example, South African Airlines competes internationally, and public highways have applied competitive pressure on Transnet, the railway operator (interview with Sean Phillips, Department of Public Enterprises, December 5, 2007).
<table>
<thead>
<tr>
<th>Programs / Legislation</th>
<th>Notable features</th>
</tr>
</thead>
</table>
| **Ownership and control** | - BEE  
  - Initiative from private capital in 1990s  
  - More structured and institutionalized with BEE Commission, industrial charters and BEE codes |
| **Managerial and enterprise development** | - Employment Equity  
  - Black managers hired or promoted under employment equity may start own companies  
  - Role in demonstrating competency and capacity to deliver  
  - Public enterprises  
  - Preferential public procurement  
  - Framework from 2000: preference on basis of ownership (previously disadvantaged persons)  
  - BEE  
  - BEE Codes (2007) broaden scope of criteria for public procurement  
  - Seven elements (and points):  
    - Ownership (20)  
    - Management control (10)  
    - Employment equity (15)  
    - Skills development (15)  
    - Preferential procurement (20)  
    - Enterprise development (15)  
    - Socio-economic development (5) |
2. 3. 3. Political economic context

2. 3. 3. 1. Complex transitions: Political and economic dimensions

Negotiating a political settlement took primacy in South Africa’s transition out of Apartheid, for fundamental and strategic reasons. Fundamentally, a comprehensively new and democratized political order provided the bedrock for facilitating concurrent transformations – and incorporating tensions – in economic and social realms. Of particular relevance to this study are the political and constitutional provisions to balance majority rule and minority rights, black political dominance and white economic security, fair discrimination and equal opportunity. Strategically, the ANC had for decades emphasized Apartheid’s political dimension over socio-economic modes of oppression, encapsulated in the Freedom Charter, its “only official statement of economic intent” (Sparks 2003: 176). The liberation movement, under ANC leadership, accordingly pressed first and foremost for political democratization, having also mobilized masses to undermine the Apartheid government and economy. Strategies for the late Apartheid state and white capital to preserve rights and interests and resolve a decades-long accumulation crisis also converged on a negotiated political transition (Marais 2001).

A maelstrom of circumstances in the late 1980s and early 1990s that could not be fully predicted or controlled, including mass social instability, potential civil war, anxieties over the military’s allegiance and uncertainties over homeland administrations, further compelled the centralized, summit-level level political bargaining and constitution-building that took place (Sparks 2003, Terreblanche 2002). The means for resolving the clash of political and ideological agendas across the spectrum of issues, and for unifying a fractured nation and fostering continuity in public administration, came in
the form of a negotiated settlement transferring political power and guaranteeing socio-economic rights.\footnote{82}{Even equal suffrage was contested. Up to 1992, the NP and de Klerk assured white constituents of commitment to uphold a “statutory entrenched minority [i.e. white] vote”. However, in September 1992 the NP accepted “sunset clauses” under the auspices of the Government of National Unity (GNU), with the important guarantee of continuity of employment of white bureaucrats, which elicited agreement to a “one person one vote” system and the five-year power sharing arrangement in the GNU (Terreblanche 2002: 80).}

The transition to a post-Apartheid economic order, however, stands in marked contrast to the negotiated political settlement. While the political transition was a high-level bargaining process, dialogue and deal-making over economic spheres were conducted by various delegated groups or agenda proponents in a dispersed, non-consultative, and somewhat opaque and tentative manner. Economic policy and development of post-Apartheid economic institutions happened through more gradual and contested processes that reflect conflicting ideology, lop-sided power and experience, and lack of coordination. We touch on only a few out of many proposals and documents, and their respective proponents.

From the mid-1980s, ANC economists met outside of South Africa with various groups, including NP government delegates. Between 1955 and 1990, the ANC had published no new statement on economic policy issues except to reaffirm a commitment to the Freedom Charter in its 1988 constitutional guidelines.\footnote{83}{Marais (2001) points out that the lack of specific outlines of economic policy in the Freedom Charter also afforded the ANC room to maneuver in negotiations.} From the late 1980s, various ‘economic scenarios’ were promulgated, most prominently by corporate conglomerates (e.g. Anglo American, Old Mutual), parastatals (e.g. Sanlam) or business organizations (e.g. the South African Chamber of Commerce). These overtures reflect the strength and autonomy of the corporate sector, as well as the conservative milieu of the
NP administration, which had initiated privatization from the 1980s and shifted towards deflationary macroeconomic policy in the early 1990s. Big business went out of its way to warn the democratic movement of ostensible dangers in pursuing a comprehensive redistributive program, and maintained a position on Apartheid that not only denied profiting from the system, but also asserted that economic crisis resulted from an over-regulated system – and therefore supply-side policies and trickle-down effects would restore growth and prosperity to a stuttering economy (Bond 2000, Terreblanche 2002).

In contrast to the constant message emanating from the NP and business sector, ANC stances wavered. By the late 1980s, the ANC had gravitated away from Freedom Charter pronouncements towards social democratic visions. This ideological conversion was augmented by the collapse of the Soviet Union and the portent of a triumphal global capitalist order. Amid the plethora of policy groups and policy documents, a few stand out as landmarks on South Africa’s winding path to a new economic order. In terms of overall programs of action, the ANC’s Department of Economic Policy (DEP) initially called for an active role for the state. However, its 1992 report, Ready to Govern, which had become a de facto draft electoral platform, had excised mention of growth through redistribution and scaled down its envisioned role of the state. The Reconstruction and

---

84 Shifting positions on nationalization reflect the uncertainties and ambiguities in economic policy formulation, and its weaker hand in the debate. At Mandela’s release in 1990, nationalization retained salience on the ANC’s agenda. Over the following two years, however, the ANC altered its position on nationalization and an expansive redistribution agenda. The 1992 World Economic Forum marked a watershed event, where Mandela decisively turned against nationalization and towards a system centered on the private sector with limited roles for the public sector in social and welfare services (Sparks 2003: 174-176).
Development Program, the ANC’s 1994 election manifesto, articulated a broad outline for reform, but never translated into actual policy priorities or allocation of resources\(^85\).

More rigid foundations were laid in the specific quest for a macroeconomic paradigm. In 1993, the NP government’s Department of Finance promulgated its *Normative Economic Model* (NEM), a document propagating economic orthodoxy that would cement state dispositions on economic matters beyond the transition (Bond 2000, Marais 2001, Terreblanche 2002). South Africa’s macroeconomic framework was consolidated with the adoption in June 1996 of the Growth, Employment and Redistribution (GEAR) program. South Africa adopted GEAR under some duress from the corporate and finance sectors\(^86\), but its conception and behind-the-scenes formulation, from late 1995, as an enhancement of the NEM suggest that the policies would have become regimented, regardless of public debate (see Hirsch 2006: 99-101)\(^87\). GEAR has been broadly criticized on its theoretical underpinnings, and in light of the South African economy’s falling short of all major growth, employment and investment targets except deficit reduction (Michie and Padayachee 1998, Habib and Padayachee 2000, Weeks 1999,

---

\(^85\) The RDP was diluted and altered almost beyond recognition in the 1994 White Paper on the RDP. The RDP Minister was not a designated government department and clear jurisdictions, rendering the program practically inoperative (Sparks 2003).

\(^86\) The SAF (South Africa Foundation) published *Growth for All* with the support of the 50 largest corporations, asserting that the government had no credible and comprehensive economic policy framework. The appointment of Trevor Manuel as Finance Minister in February 1996 was received negatively by business. The South African economy was also performing poorly in early 1996, saddled with high unemployment and stagnant growth, and the Rand was sliding, to which Manuel responded by announcing initiatives to placate the corporate and financial sectors (Terreblanche 2002).

\(^87\) GEAR was written and pushed aggressively, and obtained approval from the ANC’s National Executive Committee, despite opposition from alliance partners COSATU and SACP, with Mbeki and Manuel closing the matter as “non-negotiable”, while Mandela acknowledged: “I confess even the ANC learnt of GEAR far too late – when it was almost complete” (Marais 2001: 162).
Gqubule 2006, Pollin et al. 2006, Terreblanche 2002). Public positive opinion of GEAR is harder to find, and points to the decline in fiscal deficit and generally lower inflation rates as stabilizing outcomes and preconditions to the upswing in growth and employment after 2001 (Hirsch 2006).88

GEAR has nominally faded as a policy platform, but its macroeconomic mainstays and policy instruments are well entrenched, particularly with the official adoption of inflation-targeting in 2000. Nonetheless, while keeping inflation within its designated 3-6 percent band dictates monetary policy, the government’s position on public spending has become more expansionary. This shift responds to societal pressures, skills shortages and BEE demands, as well as more effective tax revenue collection. The Accelerated Shared Growth Initiative – South Africa (ASGISA), launched in 2006, has given a new mandate for harnessing public investment towards growth and distributive goals, focusing on infrastructure and skills development.

The negotiated transition broadly traded-off political and economic demands and concessions, but omitted alternative visions and some potential trade-offs within the economic terrain. The enfranchised black majority was able to bring moral and electoral weight to bear on political negotiations. But it conceded much of the economic agenda to supply-side and trickle-down arguments, persuaded by pro-market ideas and efficiency arguments and apparently believing that the economy would benefit from a structural break from the past and a jolt into a new economic order. Of course, it is difficult to present counterfactuals, and inconclusive how growth and distribution would have turned out under a different ideological orientation.

88 Author’s interview with Cheslyn Mostert, former economic policy co-ordinator in the ANC Presidency (December 6, 2007).
However, the marginalization of varying proposals, such as from MERG, and dismissal of alternatives in general, precluded some potential bargains. For instance, the black population’s demands for transformation could have been moderated in return for predominantly white capital’s acceptance of bearing a higher share of transformation costs. In the face of mounting fiscal debt on the one hand, and growing prospects for private finance, South Africa could have widened revenue collection through wealth related sources such as the capital gains tax (which was subsequently introduced in 2001). Also, the momentum towards trade and financial liberalization swung rapidly, arguably providing insufficient time to develop industrial policy and adapt capital controls to new modes of global finance. Reintroducing or amending regulations may have raised concerns about non-cooperation or abuse by business and fears of capital flight, but it is also perceivable that the clout and resistance of domestic capital, and expectations of capital inflows, were over-estimated89.

Another aspect in which the political and economic transitions are important to our study concerns the temporal unfolding of affirmative action policies. Early after the 1994 elections, much effort was invested in industrial relations and regulation of basic work conditions, areas of gross injustices and focal points of the liberation struggle, which accordingly became urgent areas of tri-partite engagement. Policies for racial redress and transformation of education and public sector employment (1995-97) preceded the Employment Equity and Skills Development Act, both of which were passed in 1998. Preferential public procurement and BEE were formalized soon after, with the formation of the BEE Commission in 1998 and BB-BEE Act in 2003 as official markers.

89 I am grateful to Seeraj Muhamed for this insight.
The point in sketching out the contestation for South Africa’s macroeconomic regime and the unfolding of AA-related legislation is not so much to deduce a logic to how AA transpired, but to locate AA programs in politico-economic and temporal context and to be cognizant of manifold constraints. South Africa’s multiple ransitions were characterized by varying degrees of coordination and reaction, while facing resource constraints and striving to accommodate complex, contending interests. While criticism abounds on the lack of policy coherence and particular policy designs, but it is questionable whether a coherent and systematic process of transformation was even possible.\(^\text{90}\)

2.3.3.2. Economic structure and performance

2.3.3.2.1. Advanced capitalist class and big business

Various features of the South African capitalist class mentioned or alluded to above are worth reiterating. By the 1980s, white capital was politicized and organized, and concentrated in ownership, yet significantly autonomous from government. The English-speaking section of the capitalist class, dominant in privately-built business, had acquired considerable experience and tact in cultivating personal ties and reaching accommodations with the Afrikaner-dominant state.\(^\text{91}\) Afrikaner capital, significantly grown out of Apartheid affirmative action programs, was more entwined in institutional relationship with the state, but had been shifting ideologically, perhaps expediently as well, towards privatization and looser ties with government. It is hard to discern an

---

\(^{90}\) Author’s interview with Steven Friedman, November 22, 2007.

\(^{91}\) Indeed, until 1997-98, white business remained hostile towards the ANC and still placed faith in the NP within the GNU. It was only after the passage of GEAR that white business began to see ANC as a friendly to them, a factor in the subsequent rapid demise of the NP (Author’s interview with Stephen Gelb, November 1, 2007).
organized black capitalist class poised in the early-1990s with a clear agenda for pursuing its interest. Although organizations such as NAFCOC and BMF, lacking liberation struggle credentials, strove to exert policy influence, the rise of a nationally powerful black business elite is a later development. Practical constraints were also difficult to surmount. Southall (2005) notes the problems to black capital formation posed by industrial concentration, but assesses that lack of experience and skill, and constricted access to capital were greater obstacles.

What are the implications on affirmative action? First, the redistribution program on the whole was eroded, as the post-Apartheid state embraced a macroeconomic regime preserving capitalist levers of power. The state’s capacity to formulate and execute policy is circumscribed by the structural power of capital and the favorable macroeconomic framework in place. While it will be an overstatement to describe the state as captured by capital, it is beholden to the primacy of sustaining ‘investor confidence’.

Second, while big business most volubly advocates neoliberal policies, it also possesses most resources to engage in affirmative action and BEE, having more employment positions and assets to redistribute, as well as economic power. The upper strata of society are among the most racially integrated\(^\text{92}\). The basic structure of BEE that has emerged out of interactive processes between the ANC government, BEE Commission and industry charters, has also shifted the process “(possibly unintendedly) partly away from political debate and towards technical and system performance discussions” (Ponte, Roberts and van Sittert 2007: 941-942). The BEE codes do correspond with less state intervention in selection processes, although the determination of development projects remains in state hands. Policies to cultivate black ownership and

\(^{92}\) Author’s interview with Adam Habib, November 20, 2007.
enterprise run the risk of departing from original socio-economic and developmental objectives towards passive market-based solutions.

Third, there appears to have been little penetration into main sectors or growth in scale of black business established during the Apartheid era. Those who have prospered in big business in post-Apartheid years are largely composed of a new generation of black capitalists (Southall 2004, Randall 1996, Iheduru 2004). Inevitable limits to ownership transfer will also be reached in areas and firms dominated by white capital, which underscores the importance of creating of new, politically independent black enterprises. The GNU administration did express a priority for developing small, medium and micro enterprises (SMMEs), and passed the Small Business Act in 1996, but the program has failed to take off.

Fourth, the entry of blacks into an entrenched capitalist structure poses dilemmas for the transformation project. BEE projected the notion of ‘patriotic’ African bourgeoisie to engender change within firms and trickle-down benefits to wider society, as a furtherance of the ‘national democratic revolution’ (Marais 2001 and Southall 2004). This endeavor has not been pursued much beyond a code of conduct for black capitalists, or a form of moral suasion with voluntary participation. The nouveau riche, however, are generally observed to behave in no substantially different manner than general wealth owners towards the community – although their obligations to extended families are likely to be more extensive. Thus, expectations of positive impacts of black capitalist class development are more realistically placed on psychological confidence-boosting effects of breaching historical barriers, should black businesses, public enterprises and government departments demonstrate capacities to compete, innovate and govern.
2. 3. 2. 2. Economic growth and public expenditures

The South African economy entered its democratic era characterized by a contradictory mix of slow growth (annual real GDP growth averaged 0.3 percent per year over 1990-1994), high unemployment and mass poverty, alongside deindustrialization, relatively high capital-intensity and skills shortages. Low growth in the 1980s had crippled training and apprenticeship programs, administered mostly by parastatals, which still have not managed to recover. These conditions posed major limitations on the priority accorded to and resources available for affirmative action.

Since 1994, the overall economic performance went through various phases, as indicated by two key indicators: real growth in GDP and public expenditures. From 1994 to 1998, real GDP grew 2.6 percent per year, while real public expenditures contracted by 0.6 percent per year. Average annual real GDP growth subsequently saw continued slow growth until the mid-2000s, registering 3.3 percent (1998-2000), 3.2 percent (2000-03), and 5.1 percent (2003-06). Real annual growth in government consumption saw a steadier increase, from 1.7 percent (1998-2000) to 4.6 percent (2000-03) to 5.4 percent (2003-06).

The patterns of public expenditure impact on the resources available for public sector employment and affirmative action programs involving procurement. Fiscal tightening

---

93 The proportion of industry in GDP declined continuously from 45.7 percent in 1981 to 40.1 percent in 1990, 34.8 percent in 1995, 31.8 percent in 2000 and 30.7 percent in 2005 (World Bank World Development Indicators).


95 Author’s calculations from data accessed at: databank.worldbank.org.
resulted in employment losses in the public sector in the late 1990s. However, public administration also shifted organizationally, in its adoption of ‘managerialism’ and market-oriented initiatives, namely ‘new public management’ (Chipkin 2008). The public sector was reoriented around an expanded and managerial role for officials, in contrast to conventional hierarchies and bureaucratic operations. As a result, the proportion of public service employees classified as managers has risen, which also increases the openings for blacks at those occupational and salary levels. Accordingly, the number of public service workers of management rank increased from 24,000 in 1995 to over 70,000 in 2001, while total employment declined by 125,000 between 1994 and 2001 (Naidoo 2008: 108-109). However, as Chipkin (2008) argues, the new system has promoted under-qualified personnel to posts, sometimes newly created and poorly defined, who are unable to perform the functions, and has induced rivalry between departments for staff, potentially inflating mobility and vacancy rates and hampering service delivery.

___

96 A ‘leaner government’ strategy was endorsed by Mandela in February 1998 in a state of union address, stressing the need to shed some of 1.2 million public sector jobs to prevent over-spending (Hirsch 2006: 164).
2. 4. Malaysia and South Africa in Comparative Perspective

Comparisons of affirmative action policies in Malaysia and South Africa and their political economic contexts have faded in and out of academic attention. In the early- to mid-1990s, when South Africa sought out other countries’ experiences in devising its economic policies, Malaysia stood out as a model of majority-favoring affirmative action in a diversified economy. Much of this attention, it seems, was not substantively informed, prompting Emsley (1996) and Hart (1994) to caution against overestimating the commonalities between Malaysia and South Africa. The fact that South Africa initially adopted little of Malaysia’s policies – saliently, in drawing on inputs from Canada and the U.S. for employment equity legislation – may have been influenced by intellectual realization of some fundamental differences with Malaysia, but was also – if not more – likely compelled by the constraints of negotiating multiple transitions (democratization, governmental restructuring, counterbalancing white dominance in every sector, etc.) outlined in the previous section.

Nearly twenty years after the democratic transition, and almost a decade and a half into formal affirmative action, similarities and differences between Malaysia and South Africa have remained, but have also shown some new characteristics, providing valuable material for comparative analysis. This section will discuss notable comparative elements of affirmative action programs in Malaysia and South Africa, and the political economic context out of which the policies emerged.
2. 4. 1. Affirmative action programs

2. 4. 1. 1. Representation in tertiary education

Malaysia has maintained a centralized administration of affirmative action in tertiary education and, to a lesser extent, in secondary education. The main instruments, formed at a time of severe under-provision of secondary and tertiary education, consist of enrollment quotas in public universities and government scholarships, and Bumiputera-exclusive institutes and scholarships. In contrast, South Africa has adopted a more decentralized framework and implemented AA programs only at the tertiary level. Universities had their autonomy preserved and were mandated to pursue broadly defined redress agendas. Having inherited vastly unequal historically white institutes (HWIs) and historically black institutes (HBIs), much focus was placed on increasing black representation in HWIs and narrowing disparities between HWIs and HBIs. Very little comparative attention has been paid to educational institutions, with rare exceptions such as van der Westhuizen (2002: 45) who maintains that Malaysia’s enrolment quotas are “far more discriminatory” than corresponding programs in post-Apartheid South Africa. The contrast between the two countries in AA instruments in tertiary education will be discussed further in later sections of this study.

2. 4. 1. 2. Representation in upper-level occupations

The measures Malaysia adopted to increase Bumiputera representation in managerial, professional and technical positions are comparatively lesser in scope, and implemented through a less formalized and codified process. The public sector has abided by de facto hiring and promotion quotas or race preference norms, and has desisted from instituting
mechanisms for monitoring or inducing equitable group representation within government departments. There is no broad private sector and cross-industry program along the lines of employment equity legislation, although the Industrial Coordination Act (1975) may have had some impact – limited at best – in the manufacturing sector, while some sectors appear to have adopted *ad hoc* targets for increasing Bumiputera representation in management. The guideline for group representation in employment, as stipulated in the New Economic Policy in 1971, is the racial composition of the population.

In marked contrast, South Africa institutionalized an employment equity law requiring medium- and large-scale firms to increase the proportion of previously disadvantaged individuals and provide training where they are under-represented, chiefly in professional and managerial positions. The legislation, backed by monitoring mechanisms and punitive consequences for non-compliance, covers all industries and encompasses private and public sectors, forming the bedrock of affirmative action in the labor market. Black economic empowerment, through leveraging the reward of public procurement, theoretically supplements employment equity by providing some inducement for firms to increase their efforts in hiring and promoting disadvantaged persons. South Africa adopts as a baseline that the racial and gender composition of organizations should reflect the economically active population.

Overall, Malaysia’s and South Africa’s respective approaches to the employment branch of AA serve as contrasting case studies. However, both countries are alike in setting the racial composition of the population as quotas or targets from the start, instead
of an incremental approach in correspondence with growth in the supply of suitably qualified candidates.

2. 4. 1. 3. Managerial and enterprise development

Malaysia’s passage towards cultivating Bumiputera owned and operated enterprises followed a meandering, experimental and heavily state-led path, from emphasis on state-owned enterprises (SOEs) and takeover of foreign-owned companies, to heavy industries, privatization of SOEs, followed by renationalization and resurgence of government-linked companies. Government procurement and licensing have also been geared towards Bumiputera enterprise development.

South Africa’s approach has also been incremental, but in contrast, leans relatively more on statutory and market-based instruments. Formal programs did not take shape until the late 1990s, with the establishment of the Black economic Commission in 1998 and passage of the BEE Act in 2003. Concomitantly, government procurement and licensing operated within a less codified preferential framework, but became subsumed into the black economic empowerment program with the BEE Act and the expansion of government procurement. The BEE Codes, promulgated in 2007, lay out an incentive framework for granting preference based on performance in advancing black persons in, *inter alia*, ownership and control, and enterprise development. Although South Africa indicated in the mid-1990s that privatization of parastatals, initiated in the 1980s, would proceed, the policy largely did not materialize, and public enterprises have incorporated the BEE mandate.
2. 4. 2. Political economic context

First, the provisions for affirmative action are embedded in the respective constitutions of both countries, with some noteworthy differences. The Malaysian Constitution stipulates Bumiputera “special position” as the basis for specific reservations and quotas, while the South African Constitution provides for measures to protect or advance persons disadvantaged by unfair discrimination. In retrospect, one can debate the wisdom and/or language of these constitutional articles, but more productive energy will be spent on prosecuting affirmative action effectively and prudently, within the bounds of the Constitution. In both cases, preferential programs are optional, not mandatory. In the case of Malaysia, Article 153 stipulates safeguarding Bumiputera “special position” not as a mandate in absolute terms, but as one to be exercised “as may be necessary” (See Appendix 1). South Africa’s legal establishment of disadvantage due to unfair discrimination as the basis for AA is judiciously worded to statutorily limit the scope and duration of policies. Thus, in both countries, the pursuit of AA, but not its perpetuation, is constitutionally legitimated.

Second, contrasts in the transition towards extensive affirmative action must be reiterated. Malaysia sustained a Malay-dominant political order and bureaucracy throughout post-Independence nationhood, then reinforced Malay political power when it expanded and intensified AA. South Africa transformed from Apartheid minority rule to democratic majority rule. As affirmative action incrementally unfolded, the Malaysian executive branch of government expanded its powers and reasserted a pro-Malay/Bumiputera agenda, while the South Africa democratized and grappled with balancing black advancement against potential backlashes from a white population.
dominant in every industry and across public and private sectors\textsuperscript{97}. Emphatically, the Malaysian state was in a much stronger position vis-à-vis capital, and faced problems of lesser magnitude. South Africa negotiated a transition to democratic rule amidst social instability and fears of capital flight, and had to unify a fragmented public service, integrate separate systems of education, among other challenges which required a more conciliatory posture. On the other hand, the government could engage white economic and governmental entities from the standpoint of directly correcting previous discrimination, whereas in Malaysia, Bumiputera and non-Bumiputera establishments were not historically opposite sides of directly exploitative relationships. Thus, while South Africa adopted a more legislative route with a more constraints on executive power, the scope of some of its AA institutions, notably employment equity, are broader than in Malaysia.

The extent of domestic inter-racial confrontation impacted on AA policy in the initial stages. The command of whites over the South African economy vastly exceeds the command of the non-Bumiputera over the Malaysian economy. Whites owned virtually all productive land and capital, held all senior positions in government and business across all industries, and reserved the best schools and universities, whereas Chinese and Indians held substantial but not entirely dominating positions in education, employment and ownership. Additionally, the dearth of tertiary education in Malaysia allowed for creation of new universities favoring Bumiputera enrolment, whereas South Africa’s reputed historically white institutions and backward historically black institutions pre-existed affirmative action. The Malaysian state also exerted relatively more leverage over

\textsuperscript{97} Padayachee and Valodia (2002) make a general point about the cross-country differences in democratic constraints on executive power.
capital, and could target foreign owned companies as sources of wealth transfer and employment, somewhat buffering domestic conflict (Crouch 2001). In contrast, South Africa’s conflicts were more internal, with the power of white capital entrenched and able to utilize the threat of capital flight more credibly in a financially globalized environment (Hart 1994).

These differences, nonetheless, were not all sustained over time, as affirmative action programs and laws unfolded in both countries. In particular, the means for affirmative action expanded in South Africa, and its government’s stance grew more assertive. Of course, policy approaches and instruments still differ markedly, as we discuss later. Among the manifestations of this heightening of state-led policy include the expansion of employment equity in the public sector while the ‘sunset clause’ – the retention of white officials for administrative continuity – waned, which established the crucial role of government as an employer enforcing affirmative action in South Africa. Public sector employment has all along sustained a large portion of Bumiputera occupational mobility in Malaysia. Another area in which similarity has increased over time concerns privatization and state-ownership. Both countries have also passed through a phase where privatization was on the agenda – and was implemented and failed massively in Malaysia, but largely did not take off in South Africa – to a reinvigoration of large scale public enterprises in the 2000s.

Third, there was a contrast in economic performance and conditions in the initial stages of affirmative action. The Malaysian economy grew robustly in the 1970s, while the South African economy experienced sluggish growth in the 1990s. The difference between Malaysia’s growth outcomes and South Africa’s growth prospects were
highlighted as key differences during the latter’s mid-1990s transition period (Emsley 1996, Padayachee and Valodia 2002). Additionally, global conventions were more accommodating of expansionary policies in the 1970s, and oil prices soared, which funded development spending in Malaysia. Conversely, South Africa adopted, in line with the mainstream but also on its own accord, a deflationary macroeconomic framework, in a period of stable mineral prices (Padayachee and Valodia 2002). Overall, we can observe rapid economic and employment growth and public sector expansion in Malaysia, and sluggish growth, employment losses and public sector contraction in South Africa.

The 2000s, however, see broadly similar conditions, with both economies growing modestly, and government spending expanding at higher rates. Malaysia recorded annual real GDP growth of 4.9 percent and annual real growth in government consumption of 9.1 percent over 2000-2006. Correspondingly, South Africa registered 4.1 percent real GDP growth and 5.0 percent real government consumption growth\textsuperscript{98}.

\textsuperscript{98} Author’s calculations from data accessed at: databank.worldbank.org.
<table>
<thead>
<tr>
<th>Area</th>
<th>Malaysia</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary education</td>
<td>• Racial quotas in public tertiary institutions; creation of Bumiputera-exclusive institutions and scholarships</td>
<td>• Redress programs within and between institutions</td>
</tr>
<tr>
<td></td>
<td>• Centralized administration</td>
<td>• Institutional autonomy</td>
</tr>
<tr>
<td></td>
<td>• Fragmentation by location and type:</td>
<td>• Persistent disparities in student performance overall (black, especially African students lagging), and between HWIs and HBIs</td>
</tr>
<tr>
<td></td>
<td>• Local public institutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Local private institutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Overseas institutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper-level occupations</td>
<td>Employment equity legislation: applies to public sector and medium- to large-scale private companies</td>
</tr>
<tr>
<td>Management and enterprise development</td>
<td>• Phases of policy emphasis:</td>
<td>Public enterprises</td>
</tr>
<tr>
<td></td>
<td>• State-owned enterprises (1970s)</td>
<td>Black Economic Empowerment (BEE):</td>
</tr>
<tr>
<td></td>
<td>• Takeover of foreign companies (1970s)</td>
<td>• codifies award system for public procurement and licensing</td>
</tr>
<tr>
<td></td>
<td>• Heavy industries (early- to mid- 1980s)</td>
<td>• reinforces employment equity and skills development</td>
</tr>
<tr>
<td></td>
<td>• Privatization of state entities (late-1980s – late-1990s)</td>
<td>• integrates enterprise development through support for vendors/subsidiaries</td>
</tr>
<tr>
<td></td>
<td>• Government-linked companies (late-1990s – )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Licensing and public procurement:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ownership and executive representation are predominant criteria</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>Malaysia</td>
<td>South Africa</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Constitution</td>
<td>▪ Provisions for affirmative action</td>
<td>▪ Provisions for affirmative action</td>
</tr>
<tr>
<td></td>
<td>▪ Basis: special position of Bumiputera</td>
<td>▪ Basis: disadvantage due to unfair discrimination; equitable representation</td>
</tr>
<tr>
<td>Institutional framework</td>
<td>▪ Discretionary executive authority</td>
<td>▪ Statutory and codified system</td>
</tr>
<tr>
<td>Racial dynamics in governance and economic ownership</td>
<td>▪ Continuous Malay/Bumiputera political power and dominance in bureaucracy</td>
<td>▪ Shift from white minority rule to black majority rule</td>
</tr>
<tr>
<td></td>
<td>▪ High foreign ownership, Chinese presence not dominant in all sectors</td>
<td>▪ Dominant white ownership across all sectors</td>
</tr>
<tr>
<td>Economic performance</td>
<td>▪ Robust growth and fiscal expansion (except for mid-1980s and late 1990s recession)</td>
<td>▪ Sluggish growth and fiscal contraction in late 1990s, steadier growth and fiscal expansion in 2000s</td>
</tr>
</tbody>
</table>
2.4.3. Empirical approaches to affirmative action in Malaysia and South Africa

The paucity of literature comparing Malaysia and South Africa extends to empirical work, where we find no reference point for constructing a framework for this study. Research on both countries individually has focused more on inequality on a national scale, not on the specific dimensions of inequality most pertinent to affirmative action – inter-racial disparities in educational and occupational outcomes. We will engage with those studies in the following chapters, but will not replicate an existing work or draw on any particular precedent.

This study will survey outcomes in the key objectives of affirmative action, specifically by evaluating evidence on racial representation in tertiary education and targeted occupational groups. Earnings disparity officially lies outside the ambit of affirmative action. However, while affirmative action focuses on inequality in access and participation, the consequences of inequality in labor market outcomes, chiefly inter-racial earnings disparity, are paramount. Increasing upward mobility of the designated group is expected to translate into narrowing earnings gaps, and hence warrants empirical enquiry. We refrain from attempting to measure asset or wealth inequality, maintaining our focus on earnings inequality that corresponds with AA policies in education and employment. Moreover, financial data are notoriously unavailable or incomplete, and non-earned income in higher income households tend to be under-reported.
3. 1. Overview

This chapter will explore patterns of racial inequality in Malaysia, with attention to educational and occupational dimensions that are particularly relevant to affirmative action. Our approach is empirical and exploratory, framing assessments around affirmative action objectives. We also navigate around the absence of the race variable in our income dataset, which precludes direct analyses of correlations of race with individual earnings, despite its centrality to this study. However, by tapping labor force and population census data, we are able to gather information on the correlations of race with group representation in upper educational and occupational strata. This chapter aims, specifically, to:

1. Compile available statistics and address gaps in the literature on education and employment outcomes pertinent to affirmative action;

2. Explore inter-racial earnings inequality, in view of severe data restrictions, by juxtaposing original findings against literature documenting inter-racial household income inequality;

3. Compute patterns in the correspondence of educational attainment and occupational position with earnings;

4. Summarize main findings and propose questions to be taken up in Chapter 4.

This chapter proceeds as follows. First, we derive, from a range of sources, information on the educational and occupational composition of the labor force and
employed population, including aspects that are often overlooked in the literature about racial representation and the progress of AA programs. We find gains in tertiary education attainment across race groups, although Indians and especially non-Bumiputera are lagging. The tertiary educational attainment of professionals and managers increased in Malaysia as a whole, suggesting that expansion of tertiary education is facilitating entry into these occupational groups.

However, we also observe some disjunctures in the transition of graduates into the labor market, more markedly among Bumiputera. Labor force participation declines among tertiary educated working-age persons, while unemployment rises within the tertiary educated labor force and among young adults. Both trends occur by larger margins among Bumiputera. We reproduce official statistics showing that Bumiputera representation in upper-level occupations remained static over 1995-2005, in contrast to preceding periods during which their proportions grew. We also draw attention to the underlying pattern that most Bumiputera professionals continue to work in the public sector, predominantly as teachers. Hence, while affirmative action has undoubtedly increased Bumiputera tertiary education access and sustained their presence in managerial and highly-skilled occupations, momentum towards the ultimate objectives of Bumiputera self-sufficiency and elimination of racial preference appears to have stalled.

Second, we present an overview of inequality in household income – the preponderant focus of literature addressing affirmative action and the only income variable in which racial designation is available over time. We consider if inter-racial individual earnings inequality patterns can be deduced from household income inequality patterns, and find little correspondence between the two income variables. Between 1995
and 2004, national household income inequality shows a downward trend, but individual earnings inequality widens. Hence, we find no grounds to deduce that Bumiputera-Chinese and Bumiputera-Indian individual earnings gaps have declined alongside the narrowing of inter-racial household income gaps. These findings underscore the importance of focusing on individual earnings inequality in appraising affirmative action, and caution against interpreting inter-temporal changes in inter-racial household income inequality as indications of the effects of affirmative action on the labor market.

The third section of this chapter addresses the substantial gap in the literature by examining patterns of earnings inequality corresponding with education and occupation levels. We find high employment growth, but much slower earnings growth, among tertiary educated workers. This translates into a diminishing earnings differential between degree holders, in particular, and less qualified workers. In our occupational analysis, we find premiums on holding a managerial or professional position rising, alongside fairly robust employment growth. We thus find counteracting patterns of earnings growth in educational and occupational categories targeted by affirmative action. While overall average earnings returns on tertiary education have declined, premiums on upper-level occupations have risen. However, without racial disaggregation of these data, we are unable to compute the net effect on the racial inequality, in particular the inter-racial disparities among tertiary educated workers, managers and highly-skilled occupations.

The fourth section recapitulates our main findings and outlines key themes for Chapter 4. While tertiary education has grown, the momentum of Bumiputera entry into upper-level occupations has waned and dependence on the public sector persists. Tertiary educated and young Bumiputera have registered a larger increase in their unemployment
rates between the mid-1990s and the mid-2000s. This combination of outcomes suggests that qualitative differences in tertiary education constitute an important determinant of group representation in upper-level occupations, and that Bumiputera may hold a disproportionately higher share of lesser regarded qualifications. This is a crucial question to be further probed. We also found exceptionally slow earnings growth among degree-qualified workers. Hence, a second and parallel question arises, whether Bumiputera beneficiaries of affirmative action are disproportionately affected in terms of declining earnings capacity.

3. 2. Review of official accounts and literature

3. 2. 1. Tertiary education expansion

Malaysia’s rapid expansion of tertiary education from the mid-1990s is evidenced in enrollment statistics (Table 3-1). The 1995-2000 period saw a spike in enrollment, registering annual growth rates of 13.9 percent in diploma/certificate-level public institutions and 17.7 percent in degree-level public institutions. Growth slowed down over the subsequent five-year interval (2000-05). However, over this same period the student population in private institution degree programs grew rapidly, by 13.1 percent per year. Private institutions increased their national share of degree-level enrollment, from 24 percent in 2000 to 31 percent in 2005, while maintaining a large share (62-63 percent) of overall diploma/certificate enrollment.
Table 3-1. Malaysia: Average annual growth in tertiary education enrolment, 1990-2005

<table>
<thead>
<tr>
<th></th>
<th>Public institutions</th>
<th>Private institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total enrollment</td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>37,180  60,036  115,214  136,884  198,810  226,377</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>97,190  147,927  313,374  390,388  261,047  341,310</td>
<td></td>
</tr>
</tbody>
</table>

|               | Average annual growth |
| Diploma / certificate | 3.1  10.1  13.9  3.5  2.6 |
| Degree         | 9.7  7.9  17.7  5.0  13.1 |
| Total          | 6.9  8.8  16.2  4.5  5.5 |

Sources: *Malaysia Plan*, various years.

These figures reflect the dynamics of continual affirmative action in public institutions together with expansive private provision of tertiary education, which was partly motivated by the need to absorb non-Bumiputera who may be excluded from public universities by quota, or who opt for private institutes by choice. The overall enrollment figures at face value represent progress in expanding education. However, the public/private divide also corresponds with a considerable degree of racial separateness, as Bumiputera overwhelmingly enroll in public institutions, while the student bodies of private institutions are predominantly non-Bumiputera. Some concurrent developments are indicative of deterioration in quality of schooling and difficulties of Bumiputera students, in particular, in gaining entry into universities. Matriculation colleges, a shorter and widely considered easier route to university entrance compared to Sixth Form in the national schooling system, were expanded in the late 1990s (Loo 2007: 223). Enrollment in these Bumiputera-only\(^{99}\) colleges burgeoned from 15,470 in 1995 to 46,509 in 2000, at

\(^{99}\) A 10 percent non-Bumiputera quota was introduced in 2002.
a growth rate of 24.6 percent per year\textsuperscript{100}. This broadening of a tiered university entrance system is arguably a component of the problem of diluting academic standards in public universities, which disproportionately affects Bumiputera students.

The effect of tertiary education growth extends to the labor force (Table 3-2). The proportion of the labor force with tertiary education increased from 11.4 percent in 1995 to 18.8 percent in 2004. The share of tertiary educated persons in the Malay and Chinese labor forces in 2004 were, respectively, 20.9 percent and 21.1 percent. However, differences persist across race groups. By 2004, the Indian workforce still lagged in formal educational attainment, with 16.9 percent reaching the tertiary level, and the non-Malay Bumiputera workforce trailed further behind, with 9.7 percent holding tertiary qualifications.

Table 3-3 further breaks down tertiary education into diploma and degree levels. The respective proportions of the Chinese and Malay labor force with diploma are even, while the corresponding figures among Indians and non-Malay Bumiputera are less. Starker disparities surface at the degree level. The proportion of degree-qualified persons is highest among Chinese (8.9 percent), followed by Malays (7.7 percent) and Indians (6.7 percent), while just 2.5 percent of non-Malay Bumiputera labor force are university graduates. In sum, access to and completion of tertiary education, especially at degree-level, has expanded, but the opportunities available to Indians and especially non-Malay Bumiputera are consistently narrower.

\textsuperscript{100} Author’s calculations from the \textit{Eighth Malaysia Plan}.
Table 3-2. Malaysia: Percent of labor force with tertiary education, within race group, 1995-2004

<table>
<thead>
<tr>
<th>Race Group</th>
<th>1995</th>
<th>1999</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bumiputera</td>
<td>11.4</td>
<td>13.8</td>
<td>18.8</td>
</tr>
<tr>
<td>Malay</td>
<td>13.1</td>
<td>15.7</td>
<td>20.9</td>
</tr>
<tr>
<td>Non-Malay Bumiputera</td>
<td>4.4</td>
<td>6.4</td>
<td>9.7</td>
</tr>
<tr>
<td>Chinese</td>
<td>12.0</td>
<td>15.1</td>
<td>21.1</td>
</tr>
<tr>
<td>Indian</td>
<td>9.5</td>
<td>11.9</td>
<td>16.9</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11.1</td>
<td>13.2</td>
<td>18.2</td>
</tr>
</tbody>
</table>


Table 3-3. Malaysia: Percentage of labor force with diploma or degree, within race group (2004)

<table>
<thead>
<tr>
<th>Race Group</th>
<th>Diploma</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bumiputera</td>
<td>8.4</td>
<td>6.8</td>
</tr>
<tr>
<td>Malay</td>
<td>9.2</td>
<td>7.7</td>
</tr>
<tr>
<td>Non-Malay Bumiputera</td>
<td>4.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Chinese</td>
<td>9.2</td>
<td>8.9</td>
</tr>
<tr>
<td>Indian</td>
<td>7.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>8.5</td>
<td>7.3</td>
</tr>
</tbody>
</table>


3.2.2. Graduate and youth unemployment

Graduate unemployment, especially among Bumiputera, has become a major concern in recent years. Discussion often lacks systematic substantiation, and the gravity imputed to the problem is perceivably more proportionate to its political than empirical weight. Nonetheless, this general diagnosis that Bumiputera graduates experience higher unemployment is widely accepted\textsuperscript{101}. Before examining unemployment statistics, it is

\textsuperscript{101} Most saliently, the number of unemployed graduates was first cited at 40,000 around 2000, apparently based on registrations with Ministry of Human Resource’s job placement scheme. The 40,000 figure was reiterated until 2006, when a new figure of 60,000 became popularly cited. Few specifics, if any, are provided on the content or reliability of these aggregates (duration of unemployment, rate of job placement, etc.). This method of counting the unemployed is based on voluntary participation in a program, not on random and representative sampling, and must therefore be received with circumspection. The more important task, given data scarcity, is to assess if the problem has heightened over time, and less to supply precise gross numbers of unemployed.
instructive to observe labor force participation rates, where we find some differences across race groups. Malaysia’s labor force participation rate exhibited a marginal difference between 1995 and 2004, i.e. 64.1 percent compared to 63.0 percent. However, the tertiary educated working-age population’s labor force participation rate fell from 71.4 percent to 64.3 percent, within which the Bumiputera differential was highest (73.1 percent in 1995 and 62.9 percent in 2004), compared to Chinese (68.6 percent and 66.7 percent) and Indian (70.2 percent and 66.3 percent).

Turning now to unemployment, we see that changes over time also vary by educational attainment. The share of tertiary educated persons among the unemployed grew from 8.9 percent in 1995 to 20.9 percent in 2004, while the share of secondary school educated fell from 70.3 percent to 62.9 percent. Table 3-4 provides a breakdown by race of unemployment within educational categories. The rate among tertiary educated Bumiputera is notably high, and increased between 1995 and 2004. The problem is also pronounced among tertiary educated Indians, who tend to be overshadowed by the spotlight on Bumiputera graduates. The margin of change in unemployment rates over time varies across race groups. Tertiary educated Bumiputera and Indian workers experienced an increase, respectively, from 3.8 percent and 2.6 percent in 1995, to 4.8 percent for both in 2004, while Chinese saw a decrease from 2.3 percent to 1.9 percent. The unemployment rate for tertiary educated non-Malay Bumiputera is highest of all, at 7.9 percent in 2004.

102 Unpublished Labor Force Survey data on graduate unemployment data were made available to Leete (2007), who reports similar levels and trends. Among both Bumiputera and Chinese, graduate unemployment was approximately 3 percent in 1995, but this trended upward for Bumiputera towards 5 percent in 2004, while fluctuating within a 2-3 percent band for Chinese (Leete 2007: 217).
Table 3-4. Malaysia: Unemployment rate within race group, by highest education, 1995-2004

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>1.7</td>
<td>2.2</td>
<td>2.7</td>
<td>2.2</td>
<td>0.8</td>
<td>2.3</td>
<td>1.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Secondary</td>
<td>4.0</td>
<td>4.1</td>
<td>6.0</td>
<td>4.8</td>
<td>1.7</td>
<td>2.3</td>
<td>3.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Tertiary</td>
<td>3.1</td>
<td>4.1</td>
<td>3.8</td>
<td>4.8</td>
<td>2.3</td>
<td>1.9</td>
<td>2.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Overall</td>
<td>3.1</td>
<td>3.5</td>
<td>4.6</td>
<td>4.2</td>
<td>1.5</td>
<td>2.2</td>
<td>2.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: Author’s calculations from Labor Force Survey Reports.

Differentials in unemployment rates between age brackets inform another aspect of the problem of unemployed graduates and its differential impact across groups. Young people constitute the bulk of the unemployed, with 15-24 year-olds accounting for about 70 percent over 1995-2004, but amidst this continuity we find some differences within age groups. Between 1995 and 2004, the biggest change in unemployment rate occurred among 20-24 year-olds – among whom a significant portion would be university graduates (Table 3-5).


<table>
<thead>
<tr>
<th>Years</th>
<th>1995</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>17.1</td>
<td>16.4</td>
</tr>
<tr>
<td>20-24</td>
<td>5.7</td>
<td>9.9</td>
</tr>
<tr>
<td>25-29</td>
<td>2.0</td>
<td>2.8</td>
</tr>
<tr>
<td>30-34</td>
<td>1.0</td>
<td>1.3</td>
</tr>
<tr>
<td>35-44</td>
<td>0.7</td>
<td>1.0</td>
</tr>
<tr>
<td>45-64</td>
<td>1.1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Author’s calculations from Labor Force Survey Reports.

Cross-tabulating the age and race dimensions of unemployment, we next consider unemployment rates within age brackets by race group, for 2004 (Table 3-6).

Unemployment in the 20-24 age brackets is higher among Bumiputera (12.4 percent), especially non-Malay Bumiputera (16.1 percent), followed by Indians (8.8 percent) and
Chinese (5.3 percent). The pattern also obtains in the 15-19 years category, where unemployment among Indians (16.7 percent) is only slightly lower than Malays (18.5 percent) and non-Malay Bumiputera (19.6 percent). In view of Malaysia’s schooling system we may assume the majority of economically active persons in the 15-19 age range have not attained post-secondary education (secondary schooling is completed at 17), while a sizable portion of the 20-24 year category likely have obtained a diploma or degree. The unemployment drops steeply from the 20-24 years to the 25-29 years category, but still remains higher than subsequent age brackets.

Table 3-6. Malaysia: Unemployment rates, by age bracket and race groups, 2004

<table>
<thead>
<tr>
<th>Years</th>
<th>All</th>
<th>Malay Bumiputera</th>
<th>Non-Malay Bumiputera</th>
<th>Chinese</th>
<th>Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>18.7</td>
<td>18.5</td>
<td>19.6</td>
<td>9.4</td>
<td>16.7</td>
</tr>
<tr>
<td>20-24</td>
<td>12.4</td>
<td>11.5</td>
<td>16.1</td>
<td>5.3</td>
<td>8.8</td>
</tr>
<tr>
<td>25-29</td>
<td>3.1</td>
<td>2.7</td>
<td>5.2</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>30-34</td>
<td>1.5</td>
<td>1.3</td>
<td>2.4</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>35-44</td>
<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>45-64</td>
<td>1.0</td>
<td>0.9</td>
<td>1.3</td>
<td>1.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Overall</td>
<td>4.4</td>
<td>4.0</td>
<td>6.0</td>
<td>2.3</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Source: Author’s calculations from Labor Force Survey Reports.

Statistics derived from voluntary registration of unemployed persons with the Malaysian government’s job placement agency provide an additional reference point on the educational and age profile of the unemployed. These databases are not random samples, although they maintain a consistent age profile throughout 1995-2005 similar to that of the labor force survey, with around 70 percent aged 15-24 and 30 percent aged 25 and above. This series also reports an increase in tertiary educated among unemployed persons, but at a much higher rate, i.e. from 14.4 percent of registered unemployed in
1997 to 23.3 percent in 2000, and 49.8 percent in 2005\textsuperscript{103}. The proportion of Malays among unemployed graduates registers an exceedingly high 88-90 percent for 2004-2006\textsuperscript{104}, which is a large differential away from the 74 percent Bumiputera share of tertiary educated unemployed, as reported in the nationally sampled labor force surveys. These findings indicate that the propensity for unemployed graduates, especially Malays, to participate in public employment programs has burgeoned, and concur that Bumiputera graduate unemployment to be a serious, albeit somewhat overstated, problem.

3. 2. 3. Representation in targeted occupations

Representation of racial groups across occupational groupings has been a vital objective of affirmative action, and a benchmark of progress monitored over time. The tremendous gains in Bumiputera entry into professional and highly-skilled occupations under the New Economic Policy (1971-1990) was overviewed in Chapter 2. Developments since 1990 suggests some marked differences, as shown in Tables 3-7 and 3-8. It must be noted that the official classification system was changed, which likely accounts for discrepancies observed before and after 2000. The tables thus report both the former and current classifications, and we do not compare pre-2000 with post-2000 figures. Bumiputera representation in the administrative and managerial category, which had increased modestly from 1970 to 1990 (from 22.4 percent to 30.3 percent), recorded faster growth in the subsequent half decade, reaching 36.8 percent by 1995. However, this share did not rise between 1995 and 2000, and barely changed between 2000 and

\textsuperscript{103} Yearbook of Statistics, various years.

2005 under the new classification scheme. In professional and technical occupations, the facilitation of Bumiputera entry also appears to have lost momentum since the 1990s. Whereas Bumiputera representation increased from 47.2 percent in 1970 to 62.2 percent in 1990, it changed just slightly between 1990 and 2000. Moreover the contribution of teaching and nursing positions to total employment in these occupational categories has been, and continues to be, considerably higher among Bumiputera (Torii 2003). Over 2000-2005, the proportion of Bumiputera increased marginally among professionals and technicians, and remained consistently high among teachers and nurses.

Table 3-7. Malaysia: Distribution of occupation by race, percentage of Malaysian, 1990-2000

<table>
<thead>
<tr>
<th>Occupation</th>
<th>1990</th>
<th></th>
<th></th>
<th>1995</th>
<th></th>
<th></th>
<th>2000</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>C</td>
<td>I</td>
<td>B</td>
<td>C</td>
<td>I</td>
<td>B</td>
<td>C</td>
<td>I</td>
</tr>
<tr>
<td>Admin. and managerial</td>
<td>30.3</td>
<td>65.5</td>
<td>4.2</td>
<td>36.8</td>
<td>52.5</td>
<td>4.8</td>
<td>37.0</td>
<td>52.3</td>
<td>5.5</td>
</tr>
<tr>
<td>Professional and technical</td>
<td>62.2</td>
<td>29.9</td>
<td>7.9</td>
<td>64.4</td>
<td>25.7</td>
<td>7.0</td>
<td>63.9</td>
<td>25.8</td>
<td>7.6</td>
</tr>
<tr>
<td>Excl. teachers and nurses</td>
<td>58.0</td>
<td>33.2</td>
<td>8.8</td>
<td>60.0</td>
<td>28.5</td>
<td>7.2</td>
<td>59.3</td>
<td>29.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Teachers and nurses</td>
<td>68.8</td>
<td>24.7</td>
<td>6.4</td>
<td>72.3</td>
<td>20.5</td>
<td>6.6</td>
<td>73.2</td>
<td>18.4</td>
<td>6.9</td>
</tr>
<tr>
<td>Clerical workers</td>
<td>52.6</td>
<td>38.8</td>
<td>8.6</td>
<td>57.5</td>
<td>33.8</td>
<td>7.4</td>
<td>56.8</td>
<td>32.9</td>
<td>7.6</td>
</tr>
<tr>
<td>Sales and service workers</td>
<td>46.4</td>
<td>45.0</td>
<td>8.6</td>
<td>47.0</td>
<td>35.8</td>
<td>7.2</td>
<td>47.9</td>
<td>35.3</td>
<td>7.7</td>
</tr>
<tr>
<td>Agricultural workers</td>
<td>76.5</td>
<td>15.3</td>
<td>8.1</td>
<td>61.2</td>
<td>11.9</td>
<td>6.9</td>
<td>61.2</td>
<td>10.3</td>
<td>6.9</td>
</tr>
<tr>
<td>Production workers</td>
<td>46.4</td>
<td>42.1</td>
<td>11.5</td>
<td>44.2</td>
<td>33.7</td>
<td>9.6</td>
<td>44.7</td>
<td>33.8</td>
<td>10.0</td>
</tr>
<tr>
<td>Overall</td>
<td>56.3</td>
<td>34.6</td>
<td>9.1</td>
<td>51.4</td>
<td>29.6</td>
<td>7.9</td>
<td>51.5</td>
<td>29.7</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Sources: *Seventh Malaysia Plan, Eighth Malaysia Plan.*
Notes: B=Bumiputera, C=Chinese, I=Indian; Rows do not total 100 due to omitted ‘Others’ category.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin. and managerial</td>
<td>Bumi-putera</td>
<td>Chinese</td>
</tr>
<tr>
<td>Professionals</td>
<td>36.6</td>
<td>55.8</td>
</tr>
<tr>
<td>Professionals</td>
<td>57.3</td>
<td>33.5</td>
</tr>
<tr>
<td>Excl. teachers and lecturers</td>
<td>45.4</td>
<td>44.2</td>
</tr>
<tr>
<td>Teachers and lecturers</td>
<td>74.4</td>
<td>18.2</td>
</tr>
<tr>
<td>Technicians and assoc. pro.</td>
<td>59.5</td>
<td>30.3</td>
</tr>
<tr>
<td>Excl. teachers and nurses</td>
<td>54.6</td>
<td>34.0</td>
</tr>
<tr>
<td>Teachers and nurses</td>
<td>71.1</td>
<td>21.4</td>
</tr>
<tr>
<td>Clerical workers</td>
<td>56.6</td>
<td>35.4</td>
</tr>
<tr>
<td>Sales and service workers</td>
<td>51.2</td>
<td>40.6</td>
</tr>
<tr>
<td>Agricultural workers</td>
<td>77.1</td>
<td>13.9</td>
</tr>
<tr>
<td>Production workers</td>
<td>53.2</td>
<td>31.5</td>
</tr>
<tr>
<td>Overall</td>
<td>56.4</td>
<td>32.5</td>
</tr>
<tr>
<td>Overall</td>
<td>56.5</td>
<td>32.4</td>
</tr>
</tbody>
</table>

Source: Ninth Malaysia Plan.
Note: Rows do not total 100 due to omitted ‘Others’ category.

Professional association membership rolls serve as another data source on racial composition of the employed, shedding light on some of the uppermost professional strata in terms of qualification and earnings. Table 3-9 shows that the combined Bumiputera share of registered professionals – select occupations predominantly in the private sector – increased from 29.0 percent in 1990 to 33.1 percent in 1995, 35.5 percent in 2000 and 38.8 percent in 2005, with some variation across occupations. In a few categories – specifically, architects, dentists and lawyers – the proportion of Bumiputera grew more robustly. On the whole, though, Bumiputera representation in professional organizations has climbed slowly, and trails the group’s share of professionals as estimated in labor force surveys (see Tables 3-7 and 3-8).
Table 3-9. Malaysia: Registered professionals by race, 1990-2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountants</td>
<td>11.2</td>
<td>81.2</td>
<td>6.2</td>
<td>16.1</td>
<td>75.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Architects</td>
<td>23.6</td>
<td>74.4</td>
<td>1.2</td>
<td>27.6</td>
<td>70.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Dentists</td>
<td>24.3</td>
<td>50.7</td>
<td>23.7</td>
<td>30.9</td>
<td>45.7</td>
<td>21.9</td>
</tr>
<tr>
<td>Doctors</td>
<td>27.8</td>
<td>34.7</td>
<td>34.4</td>
<td>33.4</td>
<td>32.1</td>
<td>31.9</td>
</tr>
<tr>
<td>Engineers</td>
<td>34.8</td>
<td>58.2</td>
<td>5.3</td>
<td>38.1</td>
<td>55.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Lawyers</td>
<td>22.4</td>
<td>50.0</td>
<td>26.5</td>
<td>29.0</td>
<td>43.3</td>
<td>26.6</td>
</tr>
<tr>
<td>Surveyors</td>
<td>44.7</td>
<td>49.6</td>
<td>3.7</td>
<td>48.3</td>
<td>45.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>35.9</td>
<td>23.7</td>
<td>37.0</td>
<td>40.2</td>
<td>23.7</td>
<td>33.5</td>
</tr>
<tr>
<td>Overall</td>
<td>29.0</td>
<td>55.9</td>
<td>13.2</td>
<td>33.1</td>
<td>52.4</td>
<td>12.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountants</td>
<td>17.0</td>
<td>56.2</td>
<td>5.6</td>
<td>20.8</td>
<td>73.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Architects</td>
<td>42.1</td>
<td>56.2</td>
<td>1.5</td>
<td>45.3</td>
<td>53.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Dentists</td>
<td>35.2</td>
<td>42.4</td>
<td>20.5</td>
<td>44.4</td>
<td>35.3</td>
<td>18.4</td>
</tr>
<tr>
<td>Doctors</td>
<td>36.8</td>
<td>31.0</td>
<td>29.7</td>
<td>36.7</td>
<td>29.9</td>
<td>26.6</td>
</tr>
<tr>
<td>Engineers</td>
<td>42.6</td>
<td>51.1</td>
<td>5.2</td>
<td>46.0</td>
<td>47.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Lawyers</td>
<td>32.3</td>
<td>40.1</td>
<td>26.8</td>
<td>38.0</td>
<td>37.1</td>
<td>24.1</td>
</tr>
<tr>
<td>Surveyors</td>
<td>45.1</td>
<td>49.6</td>
<td>3.4</td>
<td>48.2</td>
<td>47.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>41.7</td>
<td>27.7</td>
<td>27.4</td>
<td>39.0</td>
<td>32.2</td>
<td>24.8</td>
</tr>
<tr>
<td>Overall</td>
<td>35.5</td>
<td>51.2</td>
<td>12.0</td>
<td>38.8</td>
<td>48.7</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Sources: Seventh Malaysia Plan, Ninth Malaysia Plan.
Note: Rows do not total 100 due to omitted ‘Others’ category.

3.2.4. Convergence of tertiary education and upper-level occupations

Affirmative action programs converge where tertiary educated beneficiaries expand their presence in upper-level occupations, particularly in managerial or professional positions (which constitute 12-14 percent of the employed population). It is thus instructive to view the occupational profile of tertiary educated earners, and the educational profile of upper-ranking occupations. Table 3-10 displays the percentage of degree- and diploma-holders working in management, professional and technical positions in 2000 (derived from census data). 29.0 percent of Chinese degree-holders are managers, compared to 18.8 percent and 16.9 percent of, respectively, Bumiputera and
Indian degree holders. Bumiputera and Indian workers display a commonality in that, relative to Chinese, degree-qualified persons are more likely to be professionals and diploma-qualified persons are more likely to be technicians (which includes teachers and nurses). These distributional patterns indicate that affirmative action in tertiary education has facilitated upward mobility of Bumiputera, but to a lesser extent in management than in professional and technical jobs.

Table 3-10. Malaysia: Proportion of degree and diploma holders working as managers, professionals, and technicians (2000)

<table>
<thead>
<tr>
<th></th>
<th>Bumiputera</th>
<th>Chinese</th>
<th>Indian</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degree</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>18.8</td>
<td>29.0</td>
<td>16.8</td>
<td>22.4</td>
</tr>
<tr>
<td>Professionals</td>
<td>56.5</td>
<td>45.9</td>
<td>62.7</td>
<td>52.7</td>
</tr>
<tr>
<td>Technicians</td>
<td>16.0</td>
<td>14.1</td>
<td>11.7</td>
<td>15.1</td>
</tr>
<tr>
<td><strong>Diploma</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>8.9</td>
<td>18.3</td>
<td>13.9</td>
<td>12.3</td>
</tr>
<tr>
<td>Professionals</td>
<td>21.5</td>
<td>23.9</td>
<td>20.7</td>
<td>22.0</td>
</tr>
<tr>
<td>Technicians</td>
<td>49.1</td>
<td>31.1</td>
<td>41.0</td>
<td>42.6</td>
</tr>
</tbody>
</table>

Source: Author’s calculations from the 2000 Population Census.

The recent proliferation of degree-level institutions has raised the educational profile of these occupation groups (Figure 3-1). Between 1995 and 2004, figures derived from the Household Income Survey show the proportion of degree holders among managers growing from 17.1 percent to 25.2 percent, while the proportion of diploma holders among managers increased from 10.3 percent to 15.7 percent. Among professionals, the proportion with degree-level qualification burgeoned most rapidly, from 32.8 percent in 1995 to 57.5 percent in 2004, while diploma qualified persons comprised a fairly constant share, at 19.2 percent in 1995 and 20.8 percent in 2004. Degree- and diploma-holders as a percentage of technicians, respectively, grew from 4.3 percent to 8.4 percent, and from
18.9 percent to 24.6 percent. For a breakdown of these figures by race group, we again refer to data extracted from the 2000 Census, for a single temporal cross-section. Table 3-11 shows that higher portions of Bumiputera are tertiary educated in all three occupation categories, although not by wide margins. This is expected, given the more formal channels Bumiputera depend on for upward mobility, whereas Chinese have relatively more established business networks, family enterprises and informal apprenticeships. Importantly, substantially larger proportions of Bumiputera managers and professionals are employed in the public sector, compared to Chinese and Indian (Table 3-12). Almost 60 percent of tertiary educated Bumiputera professionals and technicians work for government.

Figure 3-1. Malaysia: Percentage of managers, professionals and technicians with diploma or degree, 1995-2004

Source: Household Income Survey.
Table 3-11. Malaysia: Proportion of managers, professionals and technicians with degree or diploma, percentage of total within race group (2000)

<table>
<thead>
<tr>
<th></th>
<th>Bumiputera</th>
<th>Chinese</th>
<th>Indian</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with degree</td>
<td>22.4</td>
<td>17.1</td>
<td>15.4</td>
<td>19.4</td>
</tr>
<tr>
<td>with diploma</td>
<td>10.1</td>
<td>8.6</td>
<td>10.3</td>
<td>9.2</td>
</tr>
<tr>
<td>Professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with degree</td>
<td>56.3</td>
<td>50.2</td>
<td>56.7</td>
<td>54.7</td>
</tr>
<tr>
<td>with diploma</td>
<td>20.4</td>
<td>20.8</td>
<td>15.0</td>
<td>19.7</td>
</tr>
<tr>
<td>Technicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with degree</td>
<td>7.2</td>
<td>9.1</td>
<td>4.5</td>
<td>7.7</td>
</tr>
<tr>
<td>with diploma</td>
<td>21.2</td>
<td>15.9</td>
<td>12.8</td>
<td>18.7</td>
</tr>
</tbody>
</table>

Source: Author’s calculations from the 2000 Population Census.

Table 3-12. Malaysia: Proportion of managers, professionals and technicians working in the public sector, percentage of total within race group (2000)

<table>
<thead>
<tr>
<th></th>
<th>Bumiputera</th>
<th>Chinese</th>
<th>Indian</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total workforce</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>11.7</td>
<td>1.1</td>
<td>2.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Professionals</td>
<td>55.4</td>
<td>16.7</td>
<td>23.7</td>
<td>39.7</td>
</tr>
<tr>
<td>Technicians</td>
<td>45.9</td>
<td>14.7</td>
<td>15.0</td>
<td>34.0</td>
</tr>
<tr>
<td>All occupations</td>
<td>19.9</td>
<td>3.8</td>
<td>7.0</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Tertiary educated workforce

<table>
<thead>
<tr>
<th></th>
<th>Bumiputera</th>
<th>Chinese</th>
<th>Indian</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>20.2</td>
<td>2.3</td>
<td>5.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Professionals</td>
<td>57.6</td>
<td>19.0</td>
<td>26.0</td>
<td>42.4</td>
</tr>
<tr>
<td>Technicians</td>
<td>58.6</td>
<td>21.7</td>
<td>27.8</td>
<td>46.2</td>
</tr>
<tr>
<td>All occupations</td>
<td>47.8</td>
<td>12.6</td>
<td>20.3</td>
<td>33.2</td>
</tr>
</tbody>
</table>

Source: Author’s calculations from the 2000 Population Census.

3.2.5. Public sector employment

Employment trends in the public sector warrant our specific attention, given the continuing dependence of affirmative action on government employment. Malay representation rises as we climb the civil service occupational ladder, reflecting a heavier affirmative action thrust at the upper rungs. In the government employment roll of June 2006, the racial composition of government-linked companies (GLCs), which employed 325,722 personnel (about 3 percent of the employed population) in 2006, are also relevant in view of the important role of these institutions in affirmative action, but unfortunately, such data are unavailable (The Star, September 8, 2007).
2005, Malays comprised 83.9 percent of top management, 81.6 percent at management and professional level, and 75.8 percent of support staff, for an overall share of 77.0 (CPPS 2006a). The proportion of Chinese and Indians at all occupational layers were, respectively, around 9 percent and 5 percent – in other words, the extent of under-representation is even across the three main occupational layers. Malay over-representation corresponds with exceptional under-representation of non-Malay Bumiputera at managerial and professional levels. Non-Malay Bumiputera occupy only 1.4 percent of top management positions and 3.2 percent of management and professional, and a substantially higher 9.0 percent among support workers, although this is still below their share of the workforce.

The contribution of these distributive statistics to racial representation in the economy, of course, must be referenced against the employed population. The importance of the public sector in generating employment grew in the early 2000s, especially in the higher echelons (See Appendix Table 3-1). The share of the public sector in employment increased between 2000 and 2005, from 10.4 percent to 11.3 percent, and by a greater margin among management and professional occupations – from 11.3 percent to 17.0 percent. One of the steps taken to solve the unemployed graduate problem has been to intensify public sector hiring. These statistics reflect how growth in teaching and nursing positions sustained the absorption of tertiary graduates into the labor market, and may partly account for the low unemployment rate for 25-29 year old Malays (see Table 3-6).

106 The Education Ministry contributed massively to the net increase in public sector employment at managerial and professional levels, i.e. 89.5 percent over 1996-2000 and 74.5 percent over 2000-2005. The Health Ministry maintained a consistently large share of net growth in public sector support staff, with 36.0 percent over 1996-2000 and 61.7 percent over 2000-2005.
The socio-economic importance of these employment outcomes must not be overlooked; teachers and nurses sustain vital education and health services, and at the very least must be continually hired apace with student population growth and retirement of senior workers. However, while absorption of tertiary educated workers into the civil service provides jobs, the intensification of this process may mask problems with quality and employability of graduates of tertiary education, especially those entering through some measure of racial preference. In the context of affirmative action, we must consider possible long-term ramifications of dependence on government employment of Bumiputera graduates, particularly the challenges it poses for cultivating self-dependence and for facilitating participation in private sector labor markets.

3.2.6. Household income inequality

The mapping of income distribution between and within race groups in Malaysia has been confined to household income inequality. The sole data series for measuring inequality is the Household Income Survey (HIS), which is conducted twice every five years. Access to the data is tightly controlled, leaving researchers to refer to statistics published in the Malaysia Plans or to obtain partial access to the datasets. Some studies have managed, nonetheless, to collate series of inequality indicators from 1970 onwards (Rogayah 2008, Ishak 2000 and Leete 2007). This section presents disparity ratios between race groups, and Gini coefficients within race groups and for Malaysia as a whole. Figure 3-2 shows how the income ratio of non-Bumiputera to Bumiputera broadly declined from 1970 to 1987. The Chinese-Bumiputera and Indian-Bumiputera ratios

(Author’s calculations from the Personnel List of Government Ministries and Departments in the Federal Budget Estimate. The author thanks Liew Chin Tong for his help in suggesting and obtaining these data).
indicate an upward trend from 1987 to 1997, followed by a decline towards 2004, arriving back at inequality levels similar to 1987. In sum, the trend of declining inter-racial inequality was discontinued from the late 1980s, and reversed slightly for a decade. After 1997, in the post-crisis era, Bumiputera: Chinese and Bumiputera: Indian household income inequality moderately declined.

Figure 3-2. Malaysia: Chinese: Bumiputera and Indian: Bumiputera inequality ratios, 1970-2004 (gross household income and household income per capita)

A few studies look beyond aggregated mean gross household income and devise supplementary indicators of inequality, notably Leete (2007) and Meerman (2008). Leete (2007: 167-168) computes household income per capita by dividing official gross household income figures by average household size, to obtain an income metric that more closely reflects living standards. The net effect over the NEP period (1970-90) is that inter-racial inequality in household income per capita declines, although by a lesser margin than in gross household income. However, Chinese-Bumiputera and Indian-Bumiputera disparities grow in the 1990s, bringing the Chinese-Bumiputera ratio in 1999
to the same level as in 1970, and the Indian-Bumiputera ratio to the same level as in 1979. The ratios drop towards 2004, but remain considerably above the degree of disparity in 1990 (Figure 3-2). These outcomes are attributable to a much steeper decline in birth rates and family size among Chinese households\textsuperscript{107}.

Meerman (2008) interacts race and location to estimate Bumiputera to non-Bumiputera gross household income ratios within urban and rural areas. The rationale for separately computing inequality by location is the concentration of poverty in rural areas and the preponderance of Bumiputera in rural populations. Non-Bumiputera-to-Bumiputera ratios of aggregated mean household income therefore overstate inter-racial disparities. Meerman (2008) maintains that the chief concern in rural areas is poverty alleviation and development policies in which racial preference is redundant, while racial inequality and affirmative action are germane to urban areas. Making creative usage of limited official data, he estimates urban non-Bumiputera-to-Bumiputera household income ratios to fall between 1.15 and 1.31 in 2004. Accounting for the urban-rural divide substantially reduces the racial gap in the urban sector, where this dimension of inequality is relevant. Meerman (2008: 104) postulates that lesser pay in the public sector explains the remaining 15 to 31 percent difference between Bumiputera and non-Bumiputera household income.

Leete (2007) and Meerman (2008) both add further insight by extending beyond the official and over-generalized inter-group ratios of average gross household income, although the connection remains distant between these findings and the specific affirmative action objectives of facilitating Bumiputera tertiary education and upward

\textsuperscript{107} The average household size for Chinese fell momentously, from 5.8 in 1970 to 4.7 in 1990 and 4.1 in 2004, whereas among Bumiputera households average size dropped only marginally, from 5.1 in 1970 to 4.8 in 1991 and 4.7 in 2004.
occupational mobility. The areas of inequality most instructive to this study are racial individual earnings disparities within groups targeted by AA, especially the tertiary educated workforce, and managers and professionals.

Gini coefficients for Malaysian household income at the national level, and within race groups, trace out a similar downward trend from the late 1970s before arriving at a break point around 1990 (Figure 3-3). Thereafter, national inequality rises from 1990 to 1997, then follows no particular trend. Inequality within Bumiputera, Chinese and Indian populations run roughly parallel to the national trend until 1990, but over 1990-97 inequality increases among Bumiputera and Indian households, while remaining constant among Chinese. The 1997-2004 period sees inequality increase within Chinese and Indian populations, and fluctuate among Bumiputera households.

Figure 3-3. Malaysia: Gini coefficient of gross household income, by race (1970-2004)

Sources: Ishak 2000, Ragayah 2008, Malaysia Plan, various years.

The slight increase in household income inequality – both inter-racial and intra-racial – over the 1990s until the 1997 financial crisis has been the subject of some attention, but analyses have so far been conjectural, and due to official data constriction, short on
empirical support (Ishak 2000, Ragayah 2008, Zainal 2001). Most studies focus on liberalization (particularly of investment regulations) and privatization, which unequally widened the latitude for asset and wealth accumulation presumably captured in the non-earned component of gross household income. Zainal (2001) conjectures that Malaysian Chinese were better positioned to take advantage of new opportunities generated in the wake of economic liberalization. Ragayah (2008) suggests that rising skill premiums drive the growth in overall inequality.

This study, being interested primarily in labor market outcomes, focuses on individual earnings – comprising wages and salaries, and self-employment income – although, as discussed above, the available statistics directly connecting race with income refer to household income as the income variable. Milanovic (2006) provides an exceptional snapshot of inter-racial earnings inequality. He reports a Chinese-Bumiputera earnings ratio of 1.46, and an Indian-Bumiputera earnings ratio of 0.98, for 1997 (race variables were made available for only one dataset). These figures considerably depart from the contemporaneous household income disparity ratios, i.e. 1.82 between Chinese and Bumiputera and 1.41 between Indian and Bumiputera. Inter-racial individual earnings disparity in 1997 was markedly lower than inter-racial household income disparity – i.e. by about 40 percentage points. Chinese-Bumiputera disparity holds, but parity of Bumiputera and Indian average earnings rebuts the official account of inequality, which has maintained that the Indian population on the whole is better off than the Bumiputera population. While we are unable to follow up on Milanovic’s (2006) findings, we must take note of its implication – that sections of the Indian population may be
marginalized from the overall development process – and be mindful that Bumiputera-favoring affirmative action may exclude Indians in particular ways.

3. 3. Findings from Household Income Surveys, 1995 – 2004

3. 3. 1. Data quality

The scarcity of existing literature on inequality is largely attributable to restricted access to household income data. Correspondingly, there has been little critical assessment of HIS data quality and engagement with the survey practitioners, a problem this study has not been able to obviate. Nevertheless, a few points pertaining to survey method and data quality are worth registering at this juncture. The HIS questionnaire asks respondents to state their total income from various categories over the previous year. This method is vulnerable to inaccurate reporting, due to recall or arithmetic error. Moreover, respondents are not provided guidance toward recalling their income, e.g. by being asked how often they receive a paycheck. On the positive side, the sample size of wage earners hovers at a substantial 60,000, and the questionnaire maintained the same format over the period of our focus, 1995–2004, and was mostly unchanged from 1984. Hence, procedural change can be reasonably discounted as a variable affecting inequality measurement, although the flipside of the unchanged questionnaire format is that the HIS has retained its former flaws and neglected international standard practices\(^{108}\). In addition,

\(^{108}\) There are few alternate resources against which the HIS can be referenced. Bhalla and Kharas (1992: 44-45) compare wages in manufacturing jobs extracted from the 1987 HIS with wage statistics obtained from the Censuses and Surveys of Manufacturing Industries, finding a virtually uniform result (the average wage according to the HIS is 0.99 that of the manufacturing survey). We replicate this procedure using the Annual Manufacturing Surveys, obtaining a ratio of average wages in the Manufacturing Survey to the HIS of 0.91 in 1995 and 0.87 in 2004. The figures differ slightly over this interval, but significantly depart from Bhalla and Kharas’ (1992) findings for 1987. The causes of the differential cannot be ascertained; the HIS may undercount wages or
sampling design and competency of numerators may also have deteriorated over time\textsuperscript{109}. The computation of income variables from these datasets may also contain errors and discrepancies, as discussed later regarding household income values in the 1997 HIS.

Aside from the closer relevance of labor market outcomes to affirmative action, this study also observes individual earnings instead of household income due to concerns over the reporting of non-earned income (rent, interest, dividends, etc.). A brief enquiry into this aspect of data quality affirms this concern. We disaggregate household income into its component sources – wages and salaries, self-employment income, property income and transfers – and compare these proportions by income deciles. We find that in the first (poorest) decile, household income consists of around 55 percent earnings and 26 percent transfers, while the second decile has 70 percent earnings and 16 percent transfers. As expected, the dual trend of rising share of earnings and falling share of transfers continues as we ascend the income scale. Their respective proportions of household income are 84 percent and 7 percent in the fifth and sixth deciles, 88 percent and 3 percent in the ninth and tenth deciles. However, property income (rent, interest and dividends) somewhat implausibly contributes a larger proportion of household income among low-income households. Household incomes in the first decile on average comprise of 17 percent property income, a percentage that declines steadily as we move up the deciles, until it stabilizes at 9 percent across the fifth to tenth decile. This finding

\textsuperscript{109} Author’s correspondence with a former Department of Statistics senior official.
corroborates our concern that non-earned income and wealth flows are substantially under-reported among higher-income households.

3. 3. 2. National earnings inequality

Before proceeding, Malaysia’s macroeconomic conditions must be placed in the background of the spotlighted statistics. Temporal reference points are dictated by the schedule of the HIS (1995, 1997, 1999, 2002 and 2004), which, it turns out, roughly coincides with some turning points. The 1995-97 period corresponds with the closing stages of Malaysia’s economic boom, beginning in 1988 and ending with the financial crisis of 1997. The financial crisis struck in 1997 and the Malaysian economy contracted in 1998, but recovered (more or less to 1997 output levels) by 1999. Unfortunately, income surveys prior to 1995 were not accessible; hence, we are unable to compute earnings statistics for the duration of the 1988-97 economic boom. Nonetheless, the HIS intervals provide a temporal framework that helps distinguish structural developments from crisis effects. Our approach will be to interpret patterns broadly sustained from 1995 to 2004 as reflective of longer-term, structural change in labor markets, and to regard humps or troughs over 1995-97 and 1997-99 periods as market shocks triggered by the financial crisis. In addition, some discrepancies show up in the 1997 dataset\(^{110}\).

\(^{110}\) The 1997 HIS introduces complications on the empirical front. We generate gross household income from raw data – a summation of incomes of all household members – but this does not correspond with the figures provided by the Economic Planning Unit, which oversees the HIS. The correlation coefficient of my series with the official series is 0.756. The 1997 HIS is anomalous, because corresponding correlation coefficients were 1.000 for the 1995, 1999 and 2004 HISes, and 0.917 for the 2002 HIS. The official household income figures provided are exceedingly high for 1997, further raising alert. Given the discrepancies found in official household income data, we refer to the self-computed income variables.
The Gini coefficients for individual earnings and household income trace out significantly contrasting lines (Figure 3-4). The Gini for earnings inequality declined from 0.456 in 1995 to 0.441 in 1997, then increased steadily to 0.454 in 1999 and 0.471 in 2004. Over the 1995-1997 and 1997-99 intervals household income inequality moved in the opposite direction as individual earnings inequality. The divergence of inequality patterns is difficult to explain, especially since household earned income inequality evidently drives gross household income inequality, as shown in Figure 3-5. The share of non-earned income in household income and the number of earners per household, both of which might cause discrepancy between individual earnings inequality and household income inequality, do not change in ways that qualify them as explanations. However, we observe concurrent movements in the incidence of zero earnings and household income inequality. The proportion of households with zero earned income – i.e. completely dependent on transfers – appears to be an important corollary of household income inequality, and a reason why household income inequality has not moved in tandem with individual earnings inequality (Figure 3-5).

111 For instance, an increase in the proportion of non-earned income or an increase in the number of earners in lower income households may counteract low or negative earnings growth, i.e. reduce household income inequality even while earnings inequality expands.
Figure 3-4. Malaysia: Gini coefficient of individual earnings and household gross income (1995-2004)

Source: Household Income Survey.

Figure 3-5. Malaysia: Gini coefficient of household earned income (including zeroes), household gross income, and the proportion of households with zero earned income (1995-2004)

Source: Household Income Survey.

It follows that trends in racial disparity in individual earnings cannot be extrapolated from available household income data. The above discussion, however, has underscored the importance of focusing on individual earnings for analytical and policy purposes.
Referring to household income as an indicator of employment policy outcomes is problematic, since this neglects possible changes in composition of income. Property income is prone to be under-reported, especially by high-income households. Earned and non-earned income, moreover, are determined by considerably different sets of factors, which become muddled when aggregated into household gross income.

To sum up this section, we find evidence that earnings inequality has grown. We also note that expansion in inequality of individual earnings does not translate into parallel shifts in household earned income inequality. The extent of inter-racial earnings inequality is less than inter-racial household income inequality, but we are unable to deduce any patterns in this relationship over time. In any case, incomes averaged over an entire race groups reflect broad labor market and social outcomes that lie beyond the specific objectives of affirmative action programs. Our main interests in earnings inequality are disparities in the education and occupation groups targeted by affirmative action. Still, what we have found provides clear demonstration that household income inequality does not necessarily move in tandem with earnings inequality, and hence, the mildly declining trend in Chinese-Bumiputera and Indian-Bumiputera household income over 1995-2004 does not equate with diminishing inter-racial individual earnings inequality.

3.3.3 Earnings inequality by educational attainment

Before examining earnings associated with educational attainment, a brief discussion of Malaysia’s educational certification and labor market engagement is in order. The system is highly centralized, with a succession of national examinations, starting at the
completion of primary school and onward to secondary school, in which students obtain education certificates. Table 3-13 explains these various certificates – Lower, Malaysia and Higher – and their corresponding regular number of schooling years.

Table 3-13. Malaysia’s education certificates and equivalent schooling.

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Years of formal education</th>
<th>Equivalent schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>No certificate</td>
<td>0-8</td>
<td>No schooling, or less than mid-secondary</td>
</tr>
<tr>
<td>Lower certificate</td>
<td>9-10</td>
<td>Complete mid-secondary</td>
</tr>
<tr>
<td>Malaysia certificate</td>
<td>11</td>
<td>Complete secondary</td>
</tr>
<tr>
<td>Higher certificate</td>
<td>13</td>
<td>Matriculation / pre-university</td>
</tr>
<tr>
<td>Diploma</td>
<td>12-14</td>
<td>Technical qualification</td>
</tr>
<tr>
<td>Degree</td>
<td>14-17</td>
<td>University</td>
</tr>
</tbody>
</table>

These certificates serve as reference points, credentials or filters in labor market engagement. The importance of possessing certificates is reflected in the distribution of the workforce by years of schooling, which sees heavy concentrations at 6 years (complete primary school), 9 years (mid-secondary schooling / Lower Certificate of education) and 11 years (complete secondary schooling / the Malaysian Certificate of education) (Appendix Figures 3-1 and 3-2). Furthermore, dropping out of school before attaining certain benchmarks correlates negatively with earnings outcomes. Computing mean earnings by years of schooling, we find that earnings for those with 10 years of schooling are consistently lower than those with 9 years, and likewise, workers with 12 years of schooling earn less than workers with 11 years of schooling (Appendix Figures 3-3 and 3-4). The additional year beyond 9 and 11, instead of equating with more ‘human capital’, actually sends negative signals to employers, or adversely affects earnings capacity in other ways. However, mean earnings associated with education certificates displays a linear increase from persons with no certificate to those holding a diploma,
followed by a steep climb for the degree-qualified. These findings demonstrate the veracity and relevance of computing inequalities with reference to education certification, not on the basis of years of schooling.

Growth in real earnings and employment vary by education group, as shown in Table 3-14. Real earnings growth does not vary significantly across educational attainment groups, with the exception of degree-qualified workers, who on average experience a 0.9 percent per annum contraction. The number of employed with tertiary education rapidly increases, at annual rates of 11.8 percent for diploma-holders and 12.8 percent for degree-holders. Influxes of degree holders would be expected to slow down earnings growth and compete away premiums. However, concurrent developments indicate that quantity of education is not a complete answer. While the proliferation of degree-granting institutions is the most momentous change in Malaysia’s education system from the mid-1990s, the growth of employed persons with complete secondary school (11 years education) or who obtained diplomas was also high, with respectively, 8.0 percent and 11.8 percent per year growth between 1995 and 2004. This increase in supply, however, did not correspond with a drop in real earnings.

Table 3-14. Malaysia: Real earnings and employment growth, by highest education certificate attained (corresponding number of years)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8 years</td>
<td>0.7</td>
<td>0.0</td>
<td>32.4</td>
</tr>
<tr>
<td>9-10 years</td>
<td>1.0</td>
<td>6.2</td>
<td>15.7</td>
</tr>
<tr>
<td>11 years</td>
<td>1.0</td>
<td>8.0</td>
<td>33.5</td>
</tr>
<tr>
<td>13 years</td>
<td>1.0</td>
<td>3.8</td>
<td>3.4</td>
</tr>
<tr>
<td>Diploma</td>
<td>0.6</td>
<td>11.8</td>
<td>7.8</td>
</tr>
<tr>
<td>Degree</td>
<td>-0.9</td>
<td>12.8</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Source: Household Income Survey.
The above earnings growth rates translate into earnings ratios, relative to Malaysia certificate holders (11 years schooling / complete secondary school), as shown in Figure 3-7. Only in the relative earnings of degree-qualified workers do we notice any significant change. The ratio per workers with complete secondary school plunges between 1995 and 1997 but mostly rebounds toward 1999. The apparent aberration in 1997 warrants a brief note. This outcome – and parallel occupational disparity patterns seen below – may be interpreted as a transitory shock due to the 1997-98 recession. However, the timing of these earnings trends does not concur with economic events; the economy grew for part of 1997 and the recession struck most severely in 1998 but recovered by 1999. The possibility that data error in the 1997 HIS causes the outlying results therefore cannot be discounted\textsuperscript{112}. Our approach to the findings will thus largely disregard 1997 and focus on the longer term trends between 1995 and 2004, where we see the earnings differential of degree-holders over secondary school completers decline from 3.5 in 1995 to 2.9 in 2002 and 2004.

This downward trend raises significant implications for affirmative action, since it is extensively implemented in university education, and as tertiary education in general expands, formal qualifications become increasingly requisite for accessing the upper rungs of the occupational ladder. As noted above, questions revolve around whether the decline in relative earnings of degree-holders is due more to the quantitative effects of the influx of graduates, or to the qualitative effects of racial quotas and preferential policies, or deteriorating standards of instruction more generally. The expanding problem of

\textsuperscript{112} The proportion of managers earning less than RM1,000 per month (per total managers) rises from 29 percent in 1995 to 37 percent in 1997, then falls to 20 percent in 1999. Among degree-qualified workers, the proportion earning less than RM1,000 per month swells from 6 percent in 1995 to 20 percent in 1997, before plummeting to 4 percent in 1999. These fluctuations simply defy plausibility. See footnote 12 for other indications of data discrepancy.
graduate unemployment reinforces the notion that tertiary education is struggling to maintain quality and cultivate employability.

Figure 3-6. Malaysia: Earnings by highest education attained, per complete secondary schooling (11 years)

Source: Household Income Survey.

3.3.4. Inter-occupational earnings differentials

Real earnings growth rates of occupational groups demonstrate some variation along the hierarchy (Table 3-15). The managerial and professional classes enjoyed relatively faster earnings growth\textsuperscript{113}. Technicians on average register low earnings growth. At the lower end, machine operators and farmers saw markedly low growth. The categories with high earnings growth also record high rates of employment growth, suggesting that robust demand pulled up wages. Rearranging the findings in terms of relative earnings,

\textsuperscript{113} Earnings trends for craft workers, machine operators and elementary workers must be taken with circumspection. Due to a change in Malaysia’s occupation classification system in 2000, categories had to be matched between the old and new codes. Congruence was not difficult to achieve for most categories, but some ambiguity remains in production-level occupations, especially in the category of elementary workers.
the significant changes in the earnings position of managers and professionals is clearly visualized (Figure 3-8). The respective ratios of managerial and professional earnings, per service and sales workers, dip from 1995 to 1997, but follow an uptrend from then to 2004, resulting in a net increase over our time period. Between 1995 and 2004, the ratio rose from 3.37 to 3.89 for managers, and from 2.46 to 2.80 for professionals.

Table 3-15. Malaysia: Real earnings and employment growth, by occupation group.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Average annual growth in real earnings</th>
<th>Average annual growth in employment</th>
<th>Share of total employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>2.6</td>
<td>7.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Professionals</td>
<td>2.5</td>
<td>4.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Technicians</td>
<td>1.1</td>
<td>8.7</td>
<td>13.5</td>
</tr>
<tr>
<td>Clerks</td>
<td>2.2</td>
<td>4.7</td>
<td>9.9</td>
</tr>
<tr>
<td>Service and sales</td>
<td>1.0</td>
<td>1.7</td>
<td>14.5</td>
</tr>
<tr>
<td>Craft</td>
<td>2.0</td>
<td>0.9</td>
<td>10.4</td>
</tr>
<tr>
<td>Machine operators</td>
<td>1.2</td>
<td>5.6</td>
<td>15.6</td>
</tr>
<tr>
<td>Elementary</td>
<td>3.8</td>
<td>4.8</td>
<td>11.4</td>
</tr>
<tr>
<td>Farmers</td>
<td>-0.9</td>
<td>5.0</td>
<td>11.4</td>
</tr>
<tr>
<td>Overall</td>
<td>2.3</td>
<td>4.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Household Income Survey.

Figure 3-7. Malaysia: Earnings by occupation group, per service and sales worker

Source: Household Income Survey.
3. 4. Main findings

A few findings stand out in this chapter. First, the period in focus witnessed massive expansion of tertiary education and growth in the proportion of professionals, managers and technicians with degree- and diploma-level qualifications. All communities, including Bumiputera, increasingly obtained tertiary education, although non-Malay Bumiputera attainment in this aspect substantially lags, and Indian attainment slightly lags, that of Malays and Chinese. The facilitation of Bumiputera into upper-tier occupations has slowed down from the mid-1990s onwards, compared to preceding growth rates. The degree of Bumiputera representation remains low in management, and passage into managerial and professional positions continues to depend heavily on the public sector. Persistent shortfalls in translating quantitative growth in tertiary education into Bumiputera representation in managerial positions and upper-ranking occupations outside the civil service suggest that qualitative differences in tertiary education are increasingly consequential, and that Bumiputera are more adversely affected.

Second, we have found that the household income variable, although conventionally used as a meter of affirmative action, is problematic on conceptual and empirical grounds. Gross household income contains various earned and non-earned income components, and often includes contributions of more than one income earner. However, given the absence of race-delineated earnings data, we have referred to inter-racial household income inequality and considered if inter-racial individual earnings inequality follows the same trends. This is an important enquiry, since Bumiputera-Chinese and Bumiputera-Indian household income inequality declined between 1995 and 2004, and the question that follows is whether inter-racial earnings disparities also narrowed. Considering a few
discrepancies in household income data, we find no grounds to take the decline in inter-racial household income inequality to imply a corresponding drop in inter-racial individual earnings inequality.

Third, the most salient trends in the correlation of educational attainment and occupational position with earnings involve groups targeted by AA. We find a decline in the earnings premium on holding a degree, and increases in the premiums on being a manager or a professional. In the absence of data to compute inter-racial disparities within these groups, a few questions arise that make some inferences on possible disproportionate effects of these trends in educational and occupational earnings premiums on Bumiputera and non-Bumiputera. In terms of tertiary education, it is worth investigating whether the quantitative gains in access to tertiary education have come at the expense of producing quality graduates, and whether Bumiputera are more adversely affected. Inter-racial disparities among managers and professionals are of interest to this study, but there appears to be very limited means for inferring any differential impacts between Bumiputera and non-Bumiputera.

This chapter lays out some tasks to be undertaken in Chapter 4 to clarify the implications of our findings on affirmative action. First, we need to evaluate determinants of managerial and skilled employment in an econometric framework, to estimate the effects of various factors, including race, on the likelihood of being employed in upper-level occupations, and where possible, to separate public and private sectors. Second, we aim to account for the effects of quality of tertiary education on occupational attainment, and draw on supplementary data sources to inform questions about the quality and employability of graduates and possible differences across race. Third, we run earnings
regressions, and consider whether the earnings determination process differs between occupation and age groups. In particular, we are interested in the labor market experience of younger, more recent beneficiaries of affirmative action.
4. 1. Overview

This chapter assesses the causes of inter-racial disproportionalities in representation and disparities in earnings, especially in upper educational and occupational strata. We follow up on the patterns of inequality outlined in chapter 3 by running regressions for occupational attainment and earnings determination, out of which we may infer with more precision the independent effects of a set of determinants – as much as possible including race – on outcomes pertinent to affirmative action. This chapter sets out four main objectives:

1. To estimate the effect of tertiary education on the probability of attaining managerial and highly-skilled occupations;
2. To investigate the role of tertiary education quality on occupational attainment in the public and private sectors, using location of institution as a proxy for quality;
3. To estimate the effects of educational attainment and occupational position on earnings;
4. To discuss the implications of our findings on affirmative action.

The first portion of this chapter reports weighted logit regressions estimating the independent effects of a set of individual characteristics on the probability of attaining a managerial, professional or technical job. Results for these regressions, on household income survey (HIS) data over the period 1995-2004, show substantial and increasing effects of degree-level qualification on the probability of being employed as a manager or
as a professional. We are able to account for race by running probit regressions on the 2000 Census data, in which we find that Chinese and Indians are slightly more likely, compared to Bumiputera, to attain managerial and professional jobs, holding other determinants constant.

The second major task of this chapter is to qualitatively differentiate tertiary education, and to observe occupational outcomes separately between private and public sectors. The 2000 Census affords us data to examine this question, through its typology of tertiary institutions by location: local public, local private, and overseas. These categories broadly correspond with racial composition patterns; tertiary educated Bumiputera pursue their studies predominantly in local public institutions. We then run another set of probit regressions for attaining a managerial or professional job, on a sub-sample of tertiary educated workers extracted from the Census, with location of institute incorporated as an explanatory variable. On the outcome side of our equation, we bifurcate targeted occupations into public and private sectors, in view of the considerable role of the former as a vehicle for Bumiputera upward occupational mobility.

We find that graduates from overseas institutes, relative to graduates of local public institutes, and Chinese and Indians, relative to Bumiputera, are substantially more likely to be a manager or professional in the private sector. Local public institute graduates and Bumiputera face higher prospects of attaining professional jobs in the public sector. These findings are consistent with the fact that affirmative action policies in employment effectively only apply to Malaysia’s public sector, and with our earlier observation of deficiencies in the facilitation of Bumiputera movement up the occupational ladder through tertiary education.
To test if the impacts of this broad measure of institutional quality differ across race groups, we interact race with institute type, and obtain some noteworthy differences between Bumiputera and non-Bumiputera graduates within the same institutional category. We find that among graduates of local public institutes, Bumiputera are less likely than non-Bumiputera to attain management and professional positions, especially in the private sector. The racial gap among overseas graduates is smaller. Overall, then, the objective of facilitating occupational advancement through affirmative action in tertiary education is hindered or attenuated by deficiencies in the quality of and selection into public tertiary education. This conclusion is corroborated by employer or employee surveys, which appraise local public university graduates as relatively under-equipped in basic skills.

Our third section runs earnings regressions to compute the effects of tertiary education and upper-level occupations, while controlling for other determinants. The patterns outlined in Chapter 3 are sustained: premiums on degree-level education have declined, while premiums on managerial and professional employment have increased. However, these figures derived from regressions on the entire population do not account for structural breaks between different sub-groups. Hence, we run separate regressions on occupational and age sub-samples, which we find to be statistically prudent. The earnings regressions of managerial and highly-skilled workers, versus service and production workers, do not produce any notable trends in the returns to tertiary education. However, we find that the premium on holding a degree declines markedly among young employed persons (with no trend among older workers), consistent with the increase in unemployment among tertiary qualified and young workers reported in Chapter 3. While
our earnings regressions do not account for race, we may infer from our findings that younger Bumiputera beneficiaries of affirmative action are more likely to experience declining returns to tertiary education.

Our fourth and concluding segment summarizes findings and discusses implications on affirmative action. The evidence, compiled from various sources, paint a fairly consistent picture of young and tertiary-qualified working-age persons increasingly facing difficulties in labor market engagement. We deduce that Bumiputera are more affected by these developments, based on our analyses of occupational attainment and earnings, which control for a range of other determinants. Most importantly, we find that Bumiputera graduates of local public universities are less likely than other graduates to attain management and professional jobs in the private sector. Our analysis of inter-racial earnings disparity is minimal and tentative, but we obtain results suggesting that young Bumiputera workers, compared to young non-Bumiputera workers, are likely to have experienced more substantial decline in their earnings capacity.

A number of implications follow from our findings in Chapters 3 and 4, of which two stand out. First, slower Bumiputera entry into management and professional positions outside of the public sector seems to stem significantly from differences in quality, instead of quantity, of tertiary education. Second, affirmative action in employment and enterprise development, through the public sector, licensing and government procurement, may also be inappropriate or inadequate towards cultivating a self-sufficient professional and managerial class and eventually dismantling preferential treatment.
4. 2. Employment in targeted occupations

Tertiary education bolsters the prospect of being employed in managerial, professional and technical occupations. To assess the extent to which tertiary education increases opportunities for upward mobility, we conduct weighted logit regressions estimating the effects of various factors on the probability of attaining these upper level jobs\(^{114}\) (See Appendix Tables 4-1 to 4-3). We specify age, gender, education, occupation, area type (urban/rural), location (state), and industry as explanatory variables. Compared to other determinants, higher education exerts the most substantial effects on the probability of being employed at the upper rungs of the occupational ladder. Having a degree most substantially enhances the chances of attaining professional jobs, and makes a large but a lesser impact on managerial jobs, while it decreases the prospect of employment as a technician.

These results are not surprising, given the relatively higher reliance in professional work on formal knowledge and specific skills, and the wider range of characteristics we can expect of our broad category of managers, which spans working proprietors to business executives. A degree impacts negatively on the probability of employment in technical occupations, where that generally represents over-qualification. Diplomas raise the probability of employment in all three groups, most of all in technical occupations, in accordance with the suitability of qualification with job requirement, followed by managerial and professional occupations.

\(^{114}\) Choice of logit and probit models in this chapter is driven by practical considerations. In the Stata statistical program, we find that probability weights could only be applied to a logit model, while conversion of estimated coefficients into marginal effects – i.e. the effect of a change in the independent variable on the probability of the dependent variable occurring – was simpler and more efficient in an unweighted probit model.
More pertinent to this study is whether these figures display patterns of change over time. Figure 4-1 exhibits effects of having either a diploma or a degree on the probability of being employed in the three targeted occupation groups, relative to a person with complete secondary schooling.\(^{115}\) The most substantial and consistent change occurs in the relationship between degree qualification and professional employment. A degree holder was 14.5 percent more likely, relative to one with secondary schooling, to be employed as a professional in 1995, and 25.4 percent in 2002. This coefficient dips to 21.9 percent in 2004, but overall we may perceive an upward trend. Having a degree raises the probability of being employed in managerial occupations by 9.2 percent in 1995, rising to 21.9 percent in 2002, then falling to 15.0 percent in 2004. This decline between 2002 and 2004 is more substantial than that of professional employment, although, over 1995-2004 the net change again remains positive. Over 1995-2004, the coefficient on diploma increases moderately but steadily for all occupation groups. We take special note of technicians, given that pre-university tertiary education is most germane to technical jobs (we should also note that this category includes associate professional work such as primary school teaching). Diploma-holders see an increase in probability of being employed as a technician from 9.0 percent in 1995 to 12.4 percent in 2002, followed also by a slide to 10.7 percent in 2004.

\(^{115}\) We have assumed that the determinants of earnings also determine occupational attainment, hence we do not specify a selection model in these equations. The reasons for not adopting Heckman procedures are explained later in this chapter with regard to our earnings regressions, where such corrections for selection bias are conventionally applied.
Tertiary education is broadly becoming more consequential for accessing the upper regions of the labor market. The expansion of tertiary education in Malaysia would be expected to facilitate Bumiputera entry into occupations where they have been previously under-represented, provided degrees and diplomas are of comparable content and quality compared to non-Bumiputera graduates and no negative discrimination prevails against Bumiputera labor market participants. We recall from Chapter 3 that Malaysian higher education burgeoned after the mid-1990s, especially over 1995-2000 when enrollment in degree programs in public universities grew by 17.7 percent per year (See Table 3-1). This development occurred across racial groups, but at a slightly faster rate among Bumiputera. Between 1995 and 2004, the average annual growth of tertiary educated labor force participants was 9.3 percent for Bumiputera, 7.6 percent for Chinese, and 8.5 percent for Indians\textsuperscript{116}. However, official data indicate that the momentum of affirmative

\textsuperscript{116} Author’s calculations from \textit{Labor Force Survey Report}, various years.
action – in terms of Bumiputera entry into managerial and professional levels – waned since the mid-1990s. The share of Bumiputera among managers and professionals increased at a slower rate post-1995 compared to preceding periods, indeed, it remained static between 1995-2000 and 2000-2005, based on official statistics (See Tables 3-7 and 3-8). These findings suggest that qualitative variations in tertiary education may be an increasingly important factor in upward occupational mobility.

Our findings are corroborated by probit regressions on data from the 2000 Malaysian Population Census (Table 4-1). This dataset contains race variables, permitting us to test whether identifying with a racial group has any independent effect on the probability of attaining a job in the targeted occupation groups. Parallel to the above results from the HIS data, tertiary education exerts the largest impact on the prospects of employment in management, professional and technical jobs. The coefficients on our race variables, representing the change in probability compared to Bumiputera, are relatively small in magnitude, and in a few cases are not statistically significant. The most sizable coefficients pertain to the greater likelihood that Chinese will work in management and Indians in technical jobs – respectively, 2.3 percent and 1.6 percent.
Table 4-1. Malaysia: Probit regression for attaining a managerial or highly-skilled job, 2000.

<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th></th>
<th>Professional</th>
<th></th>
<th>Technician</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
</tr>
<tr>
<td>Age</td>
<td>0.53*</td>
<td>25.1</td>
<td>0.03**</td>
<td>2.2</td>
<td>0.48*</td>
<td>13.3</td>
</tr>
<tr>
<td>Age squared</td>
<td>-1.83*</td>
<td>-16.7</td>
<td>-0.19*</td>
<td>-3.5</td>
<td>-1.66*</td>
<td>-11.7</td>
</tr>
<tr>
<td>Female</td>
<td>-2.78*</td>
<td>-25.3</td>
<td>-1.30*</td>
<td>-14.8</td>
<td>-9.72*</td>
<td>-53.4</td>
</tr>
<tr>
<td>0-8 yrs schooling</td>
<td>-1.49*</td>
<td>-13.3</td>
<td>-0.94*</td>
<td>-11.8</td>
<td>-4.93*</td>
<td>-31.0</td>
</tr>
<tr>
<td>9-10 yrs schooling</td>
<td>2.89*</td>
<td>9.9</td>
<td>3.36*</td>
<td>17.8</td>
<td>6.49*</td>
<td>16.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>5.97*</td>
<td>23.6</td>
<td>9.95*</td>
<td>50.6</td>
<td>12.39*</td>
<td>37.8</td>
</tr>
<tr>
<td>Degree</td>
<td>13.18*</td>
<td>47.0</td>
<td>32.22*</td>
<td>101.4</td>
<td>-3.62*</td>
<td>-17.6</td>
</tr>
<tr>
<td>Urban</td>
<td>0.52*</td>
<td>4.4</td>
<td>0.27*</td>
<td>3.8</td>
<td>0.99*</td>
<td>5.8</td>
</tr>
<tr>
<td>Chinese</td>
<td>2.33*</td>
<td>21.5</td>
<td>0.51*</td>
<td>8.1</td>
<td>0.07</td>
<td>0.4</td>
</tr>
<tr>
<td>Indian</td>
<td>-0.12</td>
<td>-0.7</td>
<td>0.52*</td>
<td>4.8</td>
<td>1.59*</td>
<td>6.1</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.197</td>
<td></td>
<td>0.415</td>
<td></td>
<td>0.183</td>
<td></td>
</tr>
<tr>
<td>Obs.</td>
<td>159,589</td>
<td></td>
<td>159,589</td>
<td></td>
<td>159,589</td>
<td></td>
</tr>
</tbody>
</table>

Source: 2 percent tape of the 2000 Population Census.

Notes: Coefficients denote percentage point change in the probability of attaining the specified occupation;
*Statistically significant at 1% level, ** Statistically significant at 5% level; Reference groups: schooling: 11 years, race: Malay; Regressions control for state and industry.

These results indicate that, in the labor market as a whole, race only marginally accounts for differences in the prospect of getting employed in occupations targeted by affirmative action, after controlling for other factors. Bumiputera identity corresponds with only a slight disadvantage, when averaged over the national workforce. These findings impute much greater impact to tertiary education and relative unimportance to racial identity as determinants of attaining upper-level occupations. This result is not surprising, considering that racial representation is somewhat disproportionate among managers but fairly proportionate among professionals and technicians (See Table 3-8).

However, analysis of the job attainment process at this aggregated level inadequately captures the transition from tertiary education to the upper occupational strata in the private and public sectors. More relevant to our interest is an investigation of
occupational mobility specifically among tertiary educated workers. The next steps in our enquiry, therefore, consider whether tertiary graduates of different races vary in their capacity to attain management or professional positions, whether differences in tertiary education quality affect job attainment prospects, and whether these processes differ across private and public sectors.

4. 3. Occupational attainment among tertiary educated workers

4. 3. 1. Analysis of 2000 Population Census data

The 2000 Population Census affords the data to explore the impact of qualitative variation in tertiary education on occupational attainment. The available disaggregation of institutions – local public, local private, and overseas – is rudimentary, but captures some broad and important differences, chiefly the medium of instruction (Malay in local public institutions, mostly English in other institutions), locus of affirmative action (enrollment quotas and Bumiputera-exclusive programs in local public institutions, scholarships for overseas study), and, less tangibly, reputation (overseas institutions are generally more highly regarded).

Patterns of racial distribution in these three institutional categories are apparent. In 2000, 61 percent of tertiary educated workers obtained diplomas or degrees from local public institutes, 21 percent from local private institutes, and 18 percent from overseas institutes. Within the Bumiputera tertiary educated working population, 81 percent

---

117 As a check on this sub-sample of tertiary educated workers from our 2 percent tape of the 2000 Census, we compare its occupational composition against the corresponding sub-sample form the 1999 Household Income Survey. In the 2000 Census, tertiary educated workers comprised of 19 percent managers, 40 percent professional and 26 percent technicians. We observe similar proportions in the 1999 HIS: 23 percent managers, 37 percent professionals and 27 percent technicians.
attended local public institutes, 8 percent attended local private institutes, and 11 percent studied overseas. For Chinese, the local public / local private / overseas breakdown was 36 percent / 41 percent / 23 percent, and for Indians, 46 percent / 35 percent / 20 percent overseas. In general, smaller proportions of Chinese and Indian workers graduate from local public universities, and larger proportions carry degrees from overseas universities.

We conduct probit regressions on a sub-sample of the tertiary (diploma or degree) educated working population, to test if graduation from a local private institute or overseas institute affects the likelihood of employment in managerial or professional occupations\(^\text{118}\) (Table 4-2). We would most prefer to conduct this study only on degree-level graduates, since the vast majority of diploma graduates attend local institutes, but the resulting sample size is too small. We find that a person holding a diploma or degree from an overseas institute is 6.0 percent more likely than a graduate from a local public institute to be employed in management, and is 9.8 percent more likely to be a professional, \textit{ceteris paribus}. Notably, graduating from a local private institute is found to considerably reduce the chances of employment as a professional, with statistically insignificant results for the other occupations. The coefficients on race variables show the expected signs, with Chinese more likely than Bumiputera to be employed in management and professional positions. Indians, relative to Bumiputera, are substantially

\(^{118}\) We should note that about 20 percent of the Census sample of tertiary educated workers does not report the location of their institute, and have to be dropped. We find a larger proportion of managers and professionals in the sub-sample that that we use, which may generate a bias towards job attainment in these occupations. However, we find that this pattern holds across the three main race groups (Bumiputera, Chinese and Indian). We also find that the proportion with missing observations is consistent within race groups, with all falling within a 19-21 percent range. Non-response to the institute location question does not indicate a systematic pattern by race.
more likely to be employed in professional jobs, but less likely to be employed as managers.


<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>z-stat</td>
</tr>
<tr>
<td>Age</td>
<td>2.90*</td>
<td>12.5</td>
</tr>
<tr>
<td>Age squared</td>
<td>-0.03*</td>
<td>-9.3</td>
</tr>
<tr>
<td>Female</td>
<td>-5.22*</td>
<td>-7.6</td>
</tr>
<tr>
<td>Local private institute</td>
<td>2.58*</td>
<td>2.9</td>
</tr>
<tr>
<td>Overseas institute</td>
<td>5.98*</td>
<td>6.8</td>
</tr>
<tr>
<td>Urban</td>
<td>6.08*</td>
<td>5.4</td>
</tr>
<tr>
<td>Chinese</td>
<td>3.36*</td>
<td>4.4</td>
</tr>
<tr>
<td>Indian</td>
<td>-3.00**</td>
<td>-2.4</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.158</td>
<td>0.073</td>
</tr>
<tr>
<td>Obs.</td>
<td>13,741</td>
<td>13,741</td>
</tr>
</tbody>
</table>

Source: 2 percent tape of the 2000 Population Census.
Notes: Coefficients denote percentage point change in the probability of attaining the specified occupation;
*Statistically significant at 1% level, **Statistically significant at 5% level;
Reference groups: tertiary education institute: local public institute;
race: Bumiputera; Regressions control for state and industry.

Labor market structure and implementation of affirmative action differ between public and private sectors, warranting separate analyses of the occupational attainment process. In 2000, the public sector workforce consisted of 85 percent Bumiputera, but only 2 percent of public sector jobs were at managerial level, compared to 7 percent in the private sector. On the other hand, professional and technical positions made up 17 and 30 percent, respectively, of public sector jobs, against roughly 4 percent and 9 percent in the private sector. Bifurcating our dependent variable by sector, we obtain markedly different results (Table 4-3). Compared to a local public institution graduate, an overseas graduate is more likely to attain a managerial and a professional position in the private sector.

119 Author’s calculations from the 2000 Population Census.
sector by, respectively, 6.3 percent and 13.1 percent. Local public graduates are more likely to attain public sector jobs, especially in professional positions – presumably, mostly as teachers. Race figures prominently and broadly traces out similar patterns, with Chinese more likely than Bumiputera to be employed as managers and professionals in the private sector, and less likely in the public sector. The probability that an Indian attains a private sector professional job is substantially higher. Thus, in contrast to previous regressions on the entire workforce, where race is inconsequential, race exerts substantial effects on occupational attainment among tertiary educated workers.

Table 4-3. Malaysia: Tertiary educated workforce: Probit regression for attaining managerial or professional job, by sector (public/private), 2000.

<table>
<thead>
<tr>
<th></th>
<th>Manager Public sector</th>
<th>Manager Private sector</th>
<th>Professional Public sector</th>
<th>Professional Private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.16*</td>
<td>2.58*</td>
<td>1.43*</td>
<td>-1.22*</td>
</tr>
<tr>
<td>Age squared</td>
<td>0.00*</td>
<td>-0.03*</td>
<td>-0.02*</td>
<td>0.01*</td>
</tr>
<tr>
<td>Female</td>
<td>-0.26*</td>
<td>-4.30*</td>
<td>2.11*</td>
<td>-3.75*</td>
</tr>
<tr>
<td>Local private institute</td>
<td>-0.44*</td>
<td>2.88*</td>
<td>-7.74*</td>
<td>-1.41</td>
</tr>
<tr>
<td>Overseas institute</td>
<td>-0.15</td>
<td>6.29*</td>
<td>-1.98*</td>
<td>13.14*</td>
</tr>
<tr>
<td>Urban</td>
<td>0.00</td>
<td>6.86*</td>
<td>-0.18</td>
<td>10.01*</td>
</tr>
<tr>
<td>Chinese</td>
<td>-0.69*</td>
<td>4.54*</td>
<td>-4.12*</td>
<td>7.44*</td>
</tr>
<tr>
<td>Indian</td>
<td>-0.41*</td>
<td>-1.52</td>
<td>-1.99*</td>
<td>13.28*</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.225</td>
<td>0.177</td>
<td>0.323</td>
<td>0.089</td>
</tr>
<tr>
<td>Obs.</td>
<td>13,670</td>
<td>13,741</td>
<td>13,720</td>
<td>13,741</td>
</tr>
</tbody>
</table>

Source: 2 percent tape of the 2000 Population Census.
Notes: Coefficients denote percentage point change in the probability of attaining the specified occupation;
*Statistically significant at 1% level, **Statistically significant at 10% level;
Reference groups: tertiary education institute: local public institute;
race: Bumiputera; Regressions control for state and industry.

Taking our analysis further, to test whether the effect of location of tertiary education on job attainment prospects varies across race groups, we reformulate our regression on tertiary educated workers. We interact race – simplified to binary Bumiputera/non-
Bumiputera categorization – with the three institution location variables used above\textsuperscript{120}.

The relevant segment of the function appears as:

\[
probability(\text{target job}) = \beta_1 + \beta_2 \text{Bumiputera} + \beta_3 \text{localprivate} + \beta_4 \text{Bumiputera * localprivate} + \beta_5 \text{overseas} + \beta_6 \text{Bumiputera * overseas} + \ldots
\]

The reference group is non-Bumiputera graduates from a local public institution, with the associated coefficients arranged as follows:

- $\beta_2$ applies to Bumiputera graduates from a local public institution
- $\beta_3$ applies to non-Bumiputera graduates from a local private institution
- $\beta_5$ applies to non-Bumiputera graduates from an overseas institution
- $\beta_2 + \beta_3 + \beta_4$ applies to Bumiputera graduates from a local private institution
- $\beta_2 + \beta_5 + \beta_6$ applies to Bumiputera graduates from an overseas institution

Table 4-4 summarizes the joint effects of race and institute location on the probability of attaining a managerial or professional position, relative to non-Bumiputera graduates of local public institutes (See Appendix Table 4-4 for regression results). We observe that Bumiputera graduates of local public institutes are slightly less likely to be managers or professionals in the private sector, but more likely in the public sector (first row of Table 4-4). However, graduating from an overseas university raises the probability for Bumiputera of attaining a professional position in both sectors (third row)\textsuperscript{121}. Non-Bumiputera graduates from overseas institutes face relatively positive prospects of being

\textsuperscript{120} Ai and Norton (2003) point out some problems with this interpretation of interaction terms in logit or probit models, and recommend graphical analysis and presentation of findings. Further examination of interaction terms is thus warranted as an extension from this study.

\textsuperscript{121} Not much has been researched about Malaysian students abroad, but available reports indicate that they may obtain qualifications that make for smoother transitions into professional employment. For instance, Faridah (2003: 165) reports that among Malaysian students studying abroad in 1995, 39.5 percent were Bumiputera, majoring mostly in subjects such as science, engineering, medicine, economics, business and management.
employed in management or as professionals in the private sector (fifth row). Graduating from a local private institute, for both Bumiputera and non-Bumiputera, notably corresponds with a considerable negative probability of attaining professional positions, presumably due to the high concentration of diploma-level qualifications among local private graduates (second and fourth rows).

Table 4-4. Malaysia: Tertiary educated workforce: Probability of attaining a managerial or professional job, by sector (public/private), per non-Bumiputera graduate of a local public institute, 2000

<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public sector</td>
<td>Private sector</td>
</tr>
<tr>
<td>Bumiputera local public</td>
<td>0.73*</td>
<td>-4.10*</td>
</tr>
<tr>
<td>Bumiputera local private</td>
<td>0.07</td>
<td>-1.15</td>
</tr>
<tr>
<td>Bumiputera overseas</td>
<td>0.68</td>
<td>2.95</td>
</tr>
<tr>
<td>non-Bumiputera local private</td>
<td>-0.36</td>
<td>2.58*</td>
</tr>
<tr>
<td>non-Bumiputera overseas</td>
<td>-0.16</td>
<td>4.81*</td>
</tr>
</tbody>
</table>

Source: 2 percent tape of the 2000 Population Census.
Notes: Coefficients denote percentage point change in the probability of attaining the specified occupation;
*Statistically significant at 1% level

In addition to general disparities in quality of instruction and other factors distinguishing local and overseas tertiary education experiences, it is also plausible that selection processes and affirmative action programs impact on academic performance and subsequent labor market prospects of graduates. Many, if not most, of Bumiputera students abroad are funded by government scholarships and have thus been externally selected, while Bumiputera students in local public institutes may enter through a lower bar of academic requirements\textsuperscript{122}. This assessment is consistent with our result that

\textsuperscript{122} The causes of academic achievement in universities are undoubtedly manifold and complex, but some outcomes raise serious concern. In 1999, it was reported that Malay students comprised 1 out of 67 first-class honours graduates at the Science University (USM) and 10 out of 55 first-
Bumiputera graduates with overseas degrees are more effectively transitioned into private sector professional employment. Additionally, even among graduates of local institutes, Bumiputera are considerably less likely than non-Bumiputera graduates to attain managerial or professional positions in the private sector.

The question of tertiary education quality and its relation to affirmative action emphatically requires further research and richer data that differentiate graduates in more ways than available to this study. The extent to which our findings reflect disparities in quality, or norms and preferences – Bumiputera are inclined toward public sector employment, regardless of education attained – cannot be determined within these data. The following section adds further, albeit still limited, information. Nonetheless, the results are pertinent to affirmative action, in view of the policy’s objective of facilitating Bumiputera participation across sectors, which evidently remains an unfulfilled objective.

4.3.2. Employer and employee surveys

Beyond income and labor force surveys, other sources add insight to the under-researched area of graduate unemployment, and indicate that alumni of local public tertiary institutions, from which most Bumiputera graduates obtain degrees, experience greater difficulty in securing employment in occupations commensurate with their qualification. First, a 2002 World Bank investment climate survey of 902 manufacturing class degrees at the National University (UKM), while all 70 of University of Malaya’s 1998 engineering class were non-Malay (New Straits Times, 23 July 1999, cited in Zaid 2007). For instance, Ball and Razmi (2004) conduct an econometric exercise on the question of degree origin and language skills and their effects on income in the early years of employment. Interestingly, they find that location – whether an earner holds a degree from a local or foreign university – is not a statistically significant determinant of income, while gender, job duration, self-esteem, academic major and English proficiency, inter alia, exert significant effects. However, the small sample and usage of controversial stepwise regression, urge caution towards the findings.
and service firms in various Peninsular Malaysia regions asked employees to assess the most important skill that they lacked in conducting their job competently. By far, most respondents ranked English proficiency (47 percent), followed by professional and technical skills (14 percent). The problem of English deficiency was more acute on the demographically Malay-dominant East Coast. Asked to evaluate problems in the labor supply, 70 percent of managers responded that insufficient supply of capable university graduates is the most important cause of skills shortage, and 29 percent perceived professionals with Malaysian qualifications as less competent than professionals with foreign qualifications (World Bank 2005: 89-96). On the hiring process, a survey of managers conducted by Jobstreet in 2005 obtained a ranking of reasons for not recruiting fresh graduates. Of 3,800 respondents, the most widely cited factor, again, was poor command of English. This disadvantage is presumably more widespread among graduates of Malaysia’s Malay-medium public universities.

Quah et al. (2009) survey employer appraisals of their employees’ capacities on the job, principally to test for correlations with university location. They classify degrees threefold: conferred by a foreign university, local university, or twinning program. The latter refers to local private institutions that have not acquired university status but can confer degrees, under the aegis of a collaborating foreign institution or accreditation body. The programs burgeoned with the greater latitude for private education granted by the Private Higher Education Act of 1996, and in response to the 1997-98 crisis which made a full program abroad financially unviable for many families. By 2000, 24 percent of degrees and 63 percent of diplomas and certificate were granted by private institutions.

---

The pace of expansion slowed down thereafter. In 2005, private institutions accounted for 31 percent of degrees and 62 percent of diplomas.

Employers ranked communication capabilities and confidence as the most important skills, and reported that foreign graduates demonstrate superior levels. Interestingly, graduates of local universities and twinning programs do not differ much in these areas, although on other criteria the twinning program graduates fare somewhat better by the estimation of surveyed managers. One possible implication of this finding is that many non-Bumiputera graduates may also see declines in their wage bargaining power on the basis of educational certification. Indeed, while public universities draw much attention for declining employability of their graduates, the quality of private tertiary institutions may also be on a downtrend. As the authors caution, the study has a small sample size (56 companies) and is confined to Northwestern region of Peninsular Malaysia. Nonetheless, the parallels of these findings with others suggests that larger samples and broader coverage will produce differences more in magnitude than in the over-riding conclusion.

A question also looms concerning the extent to which university graduates absorbed into the ranks of teachers and nurses would, independent of expansive public sector employment, face difficulties finding work commensurate with their paper qualifications. The government has on occasion called for expedited recruitment of unemployed graduates, implicitly justifying the initiative on the grounds that the problem disproportionately affects Bumiputera. The evidence of lesser private sector employment prospects for local university graduates discussed above suggests that the function of the public sector has persisted and expanded as an employer of last resort, and

\[125\] The Star, July 12, 2006.
even as provider of permanent jobs to accommodate structural unemployment. This expansion of public sector employment has largely evaded questions over diminishing quality of local university graduates, and may perpetuate the negative ramifications of preferential selection and racially exclusive educational institutions.

4. 4. Earnings determinants

Earnings regressions inform the patterns of inequality outlined in Chapter 3. Few studies have been conducted along these lines, even fewer using the household income survey data encompassing the Malaysian working population. Previous econometric studies on household income data have applied different model specifications. Milanovic (2006) ran earnings regressions on 1984, 1989 and 1997 HIS datasets, with a framework to account for selection bias, using capital ownership as a determinant of labor market participation. His earnings regression controls for years of schooling, work experience, employment relationship (employee / employer / unpaid family worker), race (for 1997 only), state, and occupation.

This study differs from Milanovic (2006) on two main fronts. Methodologically, we do not incorporate Heckman or other techniques of accounting for selection bias, although convention prescribes their usage. The premise of reservation wage is problematic, and common usage of capital ownership and number of children as determinants of labor force participation is too simplistic. Additionally, labor force participation rates – for both men and women – have been remarkably consistent in Malaysia, despite large scale change in myriad social and economic variables, and household income data do not accurately identify unemployed labor force participants.
Second, in terms of our model specification, we use education certificate instead of years of education, in view of conceptual and policy shortcomings of framing education as a linear, year-by-year process of accumulating ‘human capital’, which omits its critical role as a credential system. We also omit controls for employment relationship, since the HIS data availed to this study do not differentiate employer from self-employed.

Importantly, Milanovic (2006) obtains rare access to race indicators for 1997, and reports some very important disparity statistics. He finds that, *ceteris paribus*, Chinese earn 23 percent more on average, relative to Bumiputera, while Indians earn 2 percent less, although this latter result is statistically insignificant. The addition of dummy variables denoting Chinese and Indian diminishes various parameter estimates, most substantially at the upper rungs of employment, with the managers’ premium dropping by 15 percentage points, professionals’ by 18 percentage points, and technicians’ by 14 percentage points. This is consistent with the disproportionately higher presence of Chinese in these occupation groups.

A few other studies incorporating earnings regressions warrant mention. On 1997 HIS data, Chung (2003) regresses log earnings against independent variables including age, education certificate, marital status, hours, gender, employment status (employer/employee), and area type (urban/rural) using heteroskedasticity-consistent OLS. Lucas and Verry (1999: 61-64) use 1988 Household Survey of Employment data on Peninsular Malaysia to test for the earnings returns of various individual characteristics in urban areas (5,717 observations). Their model controls for existence of a union at the work establishment, participation in training programs, plant size, part time status, schooling, age, race and public sector employment. Notably, Lucas and Verry (1999) find
a Chinese ‘premium’, similar to Milanovic (2006), of 23.2 percent, while Indians earn (statistically insignificant) 2.6 percent less.

We ran earnings regressions using weighted OLS, presented in Table 4-5. In key areas of interest – tertiary education and managerial and professional employment – the trends outlined in Chapter 3 are broadly sustained. The parameter estimates representing the adjusted effects of educational levels and occupational positions on earnings are illustrated in Figures 4-2 and 4-3. From 1995 to 2004, the earnings premium of degree-level education over secondary schooling (11 years), controlling for other determinants, falls from 70.6 percent to 50.5 percent. Over the same interval, premiums for occupying managerial and professional positions rise, respectively, from 66.7 percent to 77.5 percent and from 35.4 percent to 53.1 percent.
Table 4-5. Malaysia: Earnings regressions, 1995-2004

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.081  50.2</td>
<td>0.052  33.1</td>
<td>0.080  46.1</td>
<td>0.083  40.9</td>
<td>0.081  42.7</td>
</tr>
<tr>
<td>Age squared</td>
<td>-0.001  -46.1</td>
<td>-0.001  -29.9</td>
<td>-0.001  -41.6</td>
<td>-0.001  -38.0</td>
<td>-0.001  -37.6</td>
</tr>
<tr>
<td>Female</td>
<td>-0.411  -49.6</td>
<td>-0.230  -30.7</td>
<td>-0.397  -47.6</td>
<td>-0.383  -43.3</td>
<td>-0.368  -40.3</td>
</tr>
<tr>
<td>Urban</td>
<td>0.126   10.1</td>
<td>0.123   17.0</td>
<td>0.134   11.3</td>
<td>0.247   27.2</td>
<td>0.221   19.1</td>
</tr>
<tr>
<td>0-8 yrs sch.</td>
<td>-0.254  -26.4</td>
<td>-0.259  -27.2</td>
<td>-0.264  -25.9</td>
<td>-0.282  -13.4</td>
<td>-0.298  -31.2</td>
</tr>
<tr>
<td>9-10 yrs sch.</td>
<td>-0.116  -10.9</td>
<td>-0.135  -12.6</td>
<td>-0.116  -11.6</td>
<td>-0.003  -0.3</td>
<td>-0.147  -14.6</td>
</tr>
<tr>
<td>13 yrs sch.</td>
<td>0.098    6.4</td>
<td>0.086    4.8</td>
<td>0.111    7.0</td>
<td>0.165    8.4</td>
<td>0.087    4.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>0.299   15.6</td>
<td>0.246   15.4</td>
<td>0.308   21.0</td>
<td>0.341   19.9</td>
<td>0.235   17.2</td>
</tr>
<tr>
<td>Degree</td>
<td>0.706   33.0</td>
<td>0.505   22.4</td>
<td>0.692   31.8</td>
<td>0.628   24.0</td>
<td>0.505   25.1</td>
</tr>
<tr>
<td>Managers</td>
<td>0.667   39.5</td>
<td>0.374   20.9</td>
<td>0.634   33.5</td>
<td>0.694   34.3</td>
<td>0.775   41.4</td>
</tr>
<tr>
<td>Professionals</td>
<td>0.354   19.8</td>
<td>0.233   12.1</td>
<td>0.290   17.4</td>
<td>0.541   22.1</td>
<td>0.531   25.3</td>
</tr>
<tr>
<td>Technicians</td>
<td>0.299   22.7</td>
<td>0.192   13.4</td>
<td>0.251   19.1</td>
<td>0.389   24.0</td>
<td>0.352   25.2</td>
</tr>
<tr>
<td>Clerks</td>
<td>0.128   11.7</td>
<td>0.118   9.3</td>
<td>0.153   12.2</td>
<td>0.316   20.1</td>
<td>0.233   16.3</td>
</tr>
<tr>
<td>Crafts</td>
<td>-0.050  -4.0</td>
<td>-0.055  -4.2</td>
<td>-0.042  -3.1</td>
<td>-0.082  -4.5</td>
<td>-0.045  -3.1</td>
</tr>
<tr>
<td>Operators</td>
<td>0.007    0.6</td>
<td>-0.019  -1.6</td>
<td>-0.025  -2.0</td>
<td>0.056   3.6</td>
<td>0.058   4.3</td>
</tr>
<tr>
<td>Elementary</td>
<td>0.216   -14.0</td>
<td>-0.180  -12.6</td>
<td>-0.185  -10.4</td>
<td>-0.144  -9.0</td>
<td>-0.106  -7.8</td>
</tr>
<tr>
<td>Farmers</td>
<td>-0.242  -10.2</td>
<td>-0.115  -5.4</td>
<td>-0.304  -11.4</td>
<td>-0.453  -13.2</td>
<td>-0.302  -12.2</td>
</tr>
<tr>
<td>Constant</td>
<td>5.321   159.0</td>
<td>5.860   180.5</td>
<td>5.505   140.0</td>
<td>5.229   124.3</td>
<td>5.404   133.6</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.508</td>
<td>0.305</td>
<td>0.515</td>
<td>0.523</td>
<td>0.533</td>
</tr>
<tr>
<td>Obs.</td>
<td>62,608</td>
<td>60,069</td>
<td>59,991</td>
<td>64,455</td>
<td>62,713</td>
</tr>
</tbody>
</table>

Source: Household Income Survey.

Note: Regressions control for state and industry.

Figure 4-2. Malaysia: Effect of education attainment on earnings, per complete secondary schooling (11 years) (adjusted for other determinants)

Source: Household Income Survey.
The above earnings regressions were conducted on the entire employed population, assuming that parameter estimates do not differ across subgroups, except for the intercepts corresponding to the dummy variable denoting that subgroup. The returns to holding a degree, by implication, are the same for managers, highly-skilled workers and lesser skilled workers. This assumption of the absence of structural differences is questionable, given that tertiary qualifications are irrelevant to some occupations and that the returns to education can very plausibly differ across occupational groupings, and give us conceptual grounds for separating our population into meaningful samples. In particular, based on Chapter 3’s findings, we are interested in structural differences between occupational and age groups. Chow tests provide statistical grounds for running these regressions separately.

Our key regression results – the premiums on holding a degree or a diploma – are displayed in Figures 4-4 to 4-7. Notably, the earnings regressions on managers and
highly-skilled (i.e. professionals and technical) workers obtain a less clear pattern in the adjusted earnings differential of degree-qualified persons relative to those who only completed secondary school. While there is a net drop in the premium between 1995 and 2004, we do not observe a downward trend over time. For clerical and service workers, the degree premium also fails to indicate either an upward or downward motion. The premium on holding a diploma, which is the more appropriate level of certification, follows a downtrend over 1999-2004. Our investigation of labor market returns to tertiary education qualifications thus, on the whole, yields inconclusive results.

Figure 4-4. Malaysia: Managers and highly-skilled workers: Effect of educational attainment on earnings, per secondary schooling (adjusted for other determinants)

Source: Household Income Survey.
However, our separate regressions by age groups, with 30 years as a cutoff point, produce substantive results. Among employed persons 30 or younger, degree and diploma earnings premiums register a consistent and considerable decline (Figure 4-6). No trend holds in the older workforce (Figure 4-7). We may deduce that young labor market entrants with tertiary education are experiencing relatively greater decline in bargaining power, which recalls the issue of diminishing education quality and its differential impact across race groups. A large portion of the data we have been able to compile – unemployment rates, occupational attainment, and assessment of young graduates in the labor market – concur with our finding that the earnings capacity of young Malaysian graduates has declined more sharply than that of other young Malaysians. The evidence that Bumiputera graduates are encountering greater difficulty in employment and upward mobility suggests that Bumiputera may constitute a
disproportionately large portion of young graduates experiencing deteriorating earnings premiums.

Figure 4-6. Malaysia: 30 years-old or less: Effect of educational attainment on earnings, per secondary school (adjusted for other determinants)

Source: Household Income Survey.

Figure 4-7. Malaysia: Above 30 years-old: Effect of educational attainment on earnings, per secondary school (adjusted for other determinants)

Source: Household Income Survey.
4. 4. 1. Supplementary surveys

A major limitation of income data is that tertiary education variables are homogeneous, when in reality institutes vary widely in quality of instruction, reputation among employers, and other intangible characteristics that impact on an employee’s bargaining strength. Supplementary sources help disaggregate graduates by type of institution. Earlier, we discussed how graduates of local and foreign university graduates tend to face differing prospects of employment. These disparities appear to translate into earnings differentials as well. A 2008 survey by online recruitment company Jobstreet, of 100,000 members of with bachelor’s degree currently working in Malaysia, found that graduates of overseas universities on average earn 12 percent more than local graduates. The gap is greater among young workers, although over time local graduates catch up to some extent. A similar study of 20,000 members in Singapore reported no significant difference between salaries of domestic and foreign graduates.126

We have postulated that Bumiputra graduates, due to their high representation in local public universities, are disproportionately affected in this trend of diminishing earnings capacity – although local private institutions, where non-Bumiputera predominate, are not necessarily more reputable. The World Bank survey sheds some light on this matter. Employees were asked to evaluate the adequacy of their skills towards adapting to technical and labor market changes – which has implications on bargaining power and promotional prospects. The proportions of those indicating that their skills were inadequate vary by race and education level. The proportion of degree holders deeming themselves ill-equipped to handle change was 20 percent among Bumiputera, 11 percent among Chinese and 28 percent among Indians; the proportion of

diploma holders responding this way was 25 percent for Bumiputera, 22 percent of Chinese and 22 percent of Indians (World Bank 2005: 201). Significant differences obtain between Bumiputera, Indians and Chinese at the degree level – notably, a highest proportion of Indians express lack a sense of inadequacy. The figure is also markedly similar among diploma-holders of all race groups, a large section of whom presumably studied at private institutes. These findings are consistent with our contentions that tertiary educated Bumiputera encounter significantly greater decline in earnings capacity, although Indians are also considerably affected.
4.5. Key findings and implications on affirmative action

The evidence assembled in this chapter, as well as Chapter 3, points out the inadequacy of referring to inter-racial household income inequality, and underscores the importance of evaluating affirmative action beyond aggregated education outcomes and occupational representation. On the educational front, we observe quantitative increase in Bumiputera attainment, but we find that differences in quality of tertiary institution impact significantly on job attainment prospects. We note persistent disparities within the Bumiputera population, broadly between Malay and non-Malay Bumiputera, in the distribution of access to college or university. On the occupational front, we note that Bumiputera representation in management remains substantially lowest among occupation groups, and the Bumiputera share of professional and technical occupations has been sustained but not increased in recent years, and is continually reliant on the public sector, especially in teaching and nursing positions.

In terms of earnings inequality, we see that inter-racial disparities of average household income fail to inform the inequalities most directly relevant to affirmative action. Our analysis of earnings disparity reports declining returns to degree-level qualifications, although data restrictions deprive us of substantive insight into the racial dimension. Nonetheless, we postulate that the young, tertiary-qualified workers are likely to experience disproportionate diminishment in their earnings capacity, and that this trend is likely more pronounced among Bumiputera workers.

Our key findings warrant a concluding synthesis. First, rapid growth in the number of colleges and universities since the mid-1990s has increased access to tertiary education, but some differences between groups remain. Tertiary education attainment of the Malay
and Chinese labor forces consistently register comparable levels and exceed other groups. The Indians labor force lags slightly in this regard, while the non-Malay Bumiputera labor force trails substantially, especially at degree level. The increasing educational profile of the Bumiputera workforce can be attributed in large part to the burgeoning number of public tertiary institutions and affirmative action programs. However, these quantitative gains have not translated into increases in Bumiputera proportions in upper-tier occupations. This, we posit, is due to the shortcomings in education quality, which has become increasingly important in differentiating the tertiary qualified labor force.

Second, this chapter devotes substantial space to evaluating variations in tertiary education quality and determining whether there are differences in its effects across Malaysia’s race groups. We find a number of indications that Bumiputera tertiary educated workers are experiencing relatively greater difficulty in transitioning into the upper regions of the labor market. From the mid-1990s to the mid-2000s, the labor force participation rate of tertiary educated workers declined significantly more among Bumiputera than among other groups, while the unemployment rate of tertiary educated persons rose within the Bumiputera, as well as Indian, labor forces. Our analysis of occupational attainment of the employed population finds formal qualifications, over the period 1995-2004, to grow increasingly important to attaining managerial and professional positions. We compute the effect of race on occupational attainment for 2000, and find slight effects of racial identity on the likelihood of attaining managerial or highly-skilled occupations, while effects of tertiary-level formal qualifications predominate. However, a closer analysis restricted to tertiary educated workers indicates that, after controlling for a range of other determinants, Bumiputera are more likely to be
employed as managers or professionals in the public sector, while the converse holds in
the private sector.

To assess differences in quality of tertiary education, we designated degrees
according to the location of institute – local public, local private, or overseas – and
disaggregate occupational position into public and private sector. We find that
Bumiputera graduates of local public institutes are substantially less likely to attain a
management or professional position in the private sector, and slightly more likely to do
so in the public sector. However, Bumiputera graduates of overseas institutes, relative to
Bumiputera graduates of local public institutes, enjoy better prospects of attaining a
professional position – especially in the private sector. Moreover, Bumiputera overseas
graduates are only slightly less likely than non-Bumiputera overseas graduates to be
private sector professionals. We also observe that holding a local private tertiary-level
education certificate, relative to one from a local public institute, corresponds with a
higher probability of attaining a management job but a lesser probability of attaining a
professional job.

In sum, we find that, after controlling for other factors, Bumiputera local public
institute graduates are more predisposed to seek employment in the public sector, and are
less confident or less inclined to engage in the private sector, even compared to non-
Bumiputera local public institute graduates. Differences in the competitiveness of
selection into local university enrollment, partly deriving from the application of race
quotas in student admissions, are underlying factors warranting further investigation.
Bumiputera overseas graduates are more likely to be employed in the public sector, but
show considerably higher prospects than Bumiputera local graduates of attaining
professional positions in the private sector. These findings suggest that local public
degrees provide for a more tenuous transition into the labor market, especially for
Bumiputera graduates. Bumiputera who study abroad, many under government
sponsorship through affirmative action auspices, are better equipped for demands of
professional work.

Our results are consistent with a number of surveys of employers and employees that
evaluate the capacities of employees, which find a difference between graduates of local
and of overseas tertiary institutes. It is reported that basic skills, especially English
proficiency, are exceedingly important factors in securing a job and performing skilled
tasks. While these surveys do not identify respondents by race, the concentration of
Bumiputera students in local public universities, where the medium instruction is Malay,
makes them more likely to be under-equipped in these areas. Our findings on inter-racial
earnings disparity are more tentative, but we obtain results suggesting that young
Bumiputera workers, compared to young non-Bumiputera workers, are likely to have
experienced greater decline in their earnings capacity.

A few important implications on affirmative action follow from our key findings.
First, racial disparities in tertiary educational attainment warrant deeper analysis.
Segments of the non-Malay Bumiputera population are evidently marginalized from
opportunities that should formally be available to them, as Bumiputera. The Indian
population’s steady, albeit slightly lagging, progress in tertiary educational attainment,
coupled with their robust representation in professional occupations, indicate that the
forms of marginalization are manifest to a large extent in terms of basic schooling and
semi-skilled labor than in access to tertiary education and upper-level occupations.
However, much more research is needed in this area, recalling as well Milanovic’s (2006) finding that average Bumiputera and Indian earnings are virtually equal, in contrast to official household income data, which report that Indian households receive 25-40 percent more than Bumiputera households.

Second, our findings indicate that affirmative action in tertiary education has become less effective in recent years, specifically in its ultimate objective of cultivating a self-sufficient professional and managerial class. On the whole, slower Bumiputera entry into management and professional positions outside of the public sector seems to stem significantly from differences in quality of tertiary education. Malaysia’s parallel, racially exclusive education system, from secondary schooling onwards, including the recently expanded matriculation colleges, warrants a thorough review. While we have found that Bumiputera graduating from overseas universities face significant prospects of upward occupational mobility, the policy of sponsoring students to study abroad deprives local universities of highly capable students.

Third, the persistent under-representation of Bumiputera in management, and in professional positions broadly – i.e. beyond the public sector – continues to pose the severest challenge to affirmative action. Malaysia’s interventions in employment and enterprise development, through the public sector, licensing and government procurement, may be inappropriate and/or inadequate measures towards cultivating an independent, self-sufficient and diverse professional and managerial class, which is effectively a prerequisite for beginning the process of dismantling preferential treatment.
CHAPTER 5


5. 1. Overview

This chapter assesses developments in the racial composition of tertiary education and upper-tier occupations in South Africa, and outlines patterns of inter-racial earnings inequality pertinent to affirmative action. Having access to complete labor force survey datasets – in contrast to the strictures imposed in Malaysia – we are able to directly scrutinize the racial dimension of inequality. Intra-racial inequality is a weighty subject in affirmative action discourses; hence, we present some broad findings of inequality within the black and white populations. This chapter chiefly aims to:

1. Review the literature on income and earnings inequality in South Africa and locate this study in the context of this body of research;
2. Outline changes in black representation in tertiary education and upper-level occupations, and compute inter-racial and intra-racial earnings differentials corresponding with educational and occupational categories;
3. Assess the relative importance of the public and private sectors in facilitating upward mobility of blacks;
4. Summarize main findings and raise questions for further analysis in Chapter 6.

This chapter proceeds as follows. First, we interact with the empirical literature on inequality in South Africa. It is widely reported that household income inequality has increased in the post-Apartheid era, and that inequality levels are highest within the black population. Studies tracking individual earnings distribution have also reported growing inequality in the early post-Apartheid era, with some stabilization in the
2000s. The bulk of the literature frames inequality in the broadest, national scope, and hence informs inter-racial inequalities across all earners, whether or not they are designated beneficiaries of affirmative action. Nonetheless, before branching away from the literature, we compute inequality indicators aggregated across the formal economy. We find that national earnings inequality declined from 1998 to 2000, then modestly increased until 2006. We observe a large, though slightly narrowing, gap sustained between black and white mean earnings. These findings underline the need to examine in greater depth the specific categories of persons targeted by affirmative action.

Second, we outline the expansion of tertiary education and patterns of earnings inequality corresponding with educational attainment. Black representation in public universities and in the tertiary educated workforce has steadily increased. We find that earnings disparities between workers with degrees and others grow on the whole, more substantially within the black population. We also observe a decline in the earnings gap between degree-qualified blacks and whites, while the disparity remains stable at other educational levels. These results indicate that degree holding blacks are well positioned to reap returns in the labor market, and are catching up with whites with commensurate formal qualifications.

Turning to occupation categories, we survey evidence on racial representation in the upper strata of the labor market, as targeted by affirmative action. Labor force survey data show the proportion of blacks to have increased significantly among professionals and marginally among technicians, while remaining constant in management. Data from employment equity reports, another reference point, indicate slow but steady progress in black representation in top and senior management, with implausibly fluctuating
proportions of blacks in professional positions. We observe narrowing, albeit rather inconsistent, trends in inter-racial inequality within these occupation groups. A pattern emerges parallel to our findings on educational attainment: blacks in the upper strata are pulling away from blacks in other occupations. At the same time, inter-racial disparity within occupation groups traces out a downward, although considerably fluctuating, pattern in the ratio of earnings between black managers and white managers, and between black professionals and white professionals.

Third, we evaluate the role of the public sector, encompassing the public services and state-owned enterprises, in facilitating black occupational advancement. The proportions of black degree holders, professionals and managers who work in the public sector declined over 2000-06, the period for which data are available. Correspondingly, the respective shares of blacks among private sector degree-holders and among private sector managers and professionals have increased. Inter-racial earnings gaps among degree qualified workers in the private sector also follow a downward trend. These patterns suggest that black entry into professional and managerial ranks is depending less on the public sector, and that employment equity is taking effect in the private sector.

Fourth, this chapter raises salient questions requiring further analysis. We witness growth among blacks in access to tertiary education and in movement into upper-level occupations. We next need to assess the independent effects of a set of determinants on the likelihood of attaining managerial and highly-skilled jobs, paying special attention to the joint effects of race and tertiary education. In particular, this study aims to focus on the prospects for tertiary educated blacks of attaining upper-level occupations. As much as possible, we should investigate differences in upward occupational mobility between
the public and private sectors. Other research that captures the effects of employment equity, especially unemployment and mobility, will supplement our analysis of occupational attainment. We also test for the independent effects of a set of individual characteristics on earnings, focusing on race, education and occupation, and interactions of these variables. Again, our chief purpose is to compare the labor market experience of degree-qualified blacks and whites.

5.2. Review of empirical literature

Empirical literature on inequality in post-Apartheid South Africa can be grouped by income variable: household income and individual earnings. One set of studies focuses on the distribution of income, including wages, property income and transfers, whether at the gross household or per capita household level. This research analyzes various data sources: the 1995 and 2000 Income and Expenditure Surveys (IES) (Hoogeveen and Özler 2005), the 1996 and 2001 Population Censuses (Leibbrandt et al. 2005), or a combination of data from the income surveys (for estimation of intra-group distribution) and national accounts (for inter-group distribution) (van der Berg and Louw 2004). These studies find, to varying magnitudes, a broad trend of rising inequality from the mid-1990s until 2000-2001. Subsequent trends are less well mapped, although preliminary findings from the 2005/06 IES show further increases in inequality (Table 5-1). These trends are widely considered to reflect structural changes in the labor market and in capital and property ownership that broaden the gap between the upper and lower regions of the income distribution, especially within the black population. However, the IES data are
deeply problematic; inconsistencies in methodology and sampling raise serious questions on the comparability of the 1995, 2000 and 2005/06 surveys.\(^{127}\)

Table 5-1. South Africa: Gini coefficient for household income, from Census and Income and Expenditure Survey data.

<table>
<thead>
<tr>
<th>Data source</th>
<th>Population Census(^1)</th>
<th>IES(^2)</th>
<th>IES(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household income</td>
<td>Per capita household income</td>
<td>Household income</td>
</tr>
<tr>
<td>African</td>
<td>0.62 0.66 0.72</td>
<td>0.56 0.61</td>
<td>0.50 0.49 0.63</td>
</tr>
<tr>
<td>Colored</td>
<td>0.52 0.56 0.64</td>
<td>0.44 0.46</td>
<td>0.46 0.48 0.59</td>
</tr>
<tr>
<td>Asian</td>
<td>0.49 0.52 0.60</td>
<td>0.50 0.55</td>
<td>0.43 0.41 0.57</td>
</tr>
<tr>
<td>White</td>
<td>0.46 0.50 0.60</td>
<td>0.47 0.50</td>
<td>0.44 0.45 0.56</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.68 0.69 0.77</td>
<td>0.65 0.70</td>
<td>0.56 0.57 0.72</td>
</tr>
</tbody>
</table>


A second set of studies observe individual earnings or personal income of the employed population (Leite, McKinley and Osorio 2006, Allanson, Atkins and Hinks 2002, Leibbrandt, Levinsohn and McCrary 2005). These studies consistently find inequality widening in the late 1990s. Leite, McKinley and Osorio (2006), who compute Gini and Theil-L indices over 1995-2004, report fairly stable inequality over 1995-98 followed by a sharp escalation in 1999, before leveling off from 2000 – albeit with some fluctuation – within a higher band (see Appendix Figure 5-1). The abruptness of the increase and its coincidence with the transition from OHS to LFS raises a caveat to take the findings with caution. The pattern is broadly similar between time plots of the Gini and GE(0) indices, although the increase between the 1990s and 2000s is greater for the

\(^{127}\) In particular, the 2000 IES has been found to over-sample low income households due to an incentive provided to low-income respondents to participate, which would overstate poverty. The 2000 IES contains an exceptionally high portion of employed persons indicating zero income or unspecified earnings (Yu 2007: 27). The 2005 IES adopted a wholly different methodology, based on households keeping a diary of incomes and expenditures.
GE(0), suggesting that relatively slower earnings growth among the poor constitutes a large part of distribution dynamics. The Leite, McKinley and Osorio (2006) findings concur with Hoogeveen and Özler (2005), and corroborate the argument that low-skill workers have borne disproportionately higher costs of low economic growth and high unemployment.

The inclusion of informal labor markets in these inequality estimates, however, exposes the findings to data inconsistencies, and encapsulates dimensions of inequality beyond the scope of affirmative action policies. Burger and Yu (2007: 8-9) maintain that the decline in real earnings in the late 1990s was largely driven by improved capture of low-paying informal activities in the OHS. The LFS marked a further improvement in consistency of definition and sample size, resulting from changes progressively introduced throughout the OHS years, including the vital clarification from 1997 of the formal/informal distinction and amendments in sampling design in the 1998 and 1999 surveys. In the interest of consistency, some studies, notably Woolard and Woolard (2005), limit the sample to just the formal sector, winnowing the dataset to 15,000-17,000 observations. Some studies have computed inter-racial earnings disparities while accounting for the formal/informal sector distinction. Notably, Rospabé (2002) finds a decline in the white-African earnings differential between 1993 and 1999, while controlling for the formal sector, and Burger and Jafta (2006) report a stable white-black formal sector wage gap at the mean, between 1995 and 2004, and declining gaps at the 75th and 90th percentiles over 2000-2004.

The All Media and Products Survey (AMPS), a regular survey of living standards and household consumption for marketing research purposes (conducted by the South African
Advertising Research Foundation), is another data source for computing inequality. These datasets comprise nationally representative samples and fairly large sample sizes (about 25,000 observations). However, all income is reported in brackets and hence must be transposed into point values, by assigning each observation an income amount. Based on the AMPS, van der Berg et al. (2005) maintain that blacks have increasingly joined middle and upper strata. Within the “higher middle class” category, defined as earning R3,333 per month in 2000 Rand (10 percent of the population), the black proportion doubled to almost a quarter between 1994 and 2004. In the “working and lower middle class” strata – earning between R2,083 per month and R3,333 per month – the share of blacks expanded from 21 percent to 33 percent. Other studies utilizing the AMPS have found parallel trends of increasing black presence in high income groups. Focusing on the upper middle class – the so-called ‘Black diamonds’ – identified as those earning beyond R12,000 per month, one study finds that the proportion of Africans to be 15 percent in 2006 (numbering 322,000). Between 2004 and 2006, there was a 91 percent increase in the number of black people with these income levels. While the lines demarcating income class vary by researcher, all studies find evidence of upward mobility and income growth in the black population.

Different methodologies have been used to analyze the estimated levels and changes in inequality. One set of research deploys decomposition techniques. Bhorat, Leibbrandt and Woolard (2000) disaggregate income components and compute their respective contributions to overall inequality. Allanson, Atkins and Hinks (2002), Burger and Jafta (2006) and Rospabé (2002) conduct variations of the Oaxaca-Blinder

---

decomposition, attributing wage disparities between groups to either differences in characteristics or in returns. Another approach utilizes non-parametric methods, such as Leibbrandt, Levinsohn and McCrary (2005), who explain inequality patterns based on endowments, returns and selection. A third method involves detailed and careful presentation of descriptive statistics (Woolard and Woolard 2005, Bhorat 2000). This approach follows a more inductive process of examining inequalities between individual traits of consequence to earnings distribution and economic policy, e.g. differentials by educational attainment or occupational position, or cross-tabulations of such characteristics.

This study’s focus on aspects of inequality related to affirmative action orients our empirical investigation around individual earnings, and locates our analysis in the formal economy labor market. Employment equity legislation and public sector employment policies operate only in the formal economy. We may also safely assume that beneficiaries of affirmative action in tertiary education preponderantly engage in formal employment. Profiles of average employed persons in the formal and informal economies encapsulate these structural differences. Perhaps most importantly, the racial composition of the informal economy is overwhelmingly – i.e. 96 percent – black. In view of these marked institutional and empirical differences, aggregating informal and formal employment obscures or biases the inequalities between blacks and whites, and within the black population, that correlate with affirmative legislation and policies.

\[129\] In 2006, 24 percent of employed persons in the formal economy had tertiary education; compared to just 4 percent in the informal economy. The proportion of the employed population working as managers and professionals was 16 percent in the formal economy and 4 percent in the informal economy.
Woolard and Woolard (2005) is highly germane to this study; a few of their main findings are worth reporting here. They observe a widening skills gap among men, in pair-wise comparisons of semi-skilled workers (i.e. service workers, craft workers, and operators), highly skilled workers (i.e. professionals), and managers, between 1995 and 2003, and find evidence suggesting inequality increased between semi-skilled and unskilled workers (i.e. elementary workers) over a shorter period (2001-2003). Among managers, the African-white and male-female gaps narrowed. African managers with tertiary education enjoy a jump in relative earnings after 1998, possibly attributable to employment equity policies. The inter-racial earnings gap is smaller among highly-skilled workers compared to skilled workers. However, there was little change in inter-racial earnings differentials among highly-skilled and skilled jobs.

5. 3. Findings from October Household Surveys and Labor Force Surveys

This chapter’s presentation of inequality patterns will follow the basic outline of Chapter 3 on Malaysia. The ability to account for race augments our scope for mapping and discussing inter-racial and intra-racial inequalities. First, we plot aggregate inequality, according to the Gini coefficient and percentile ratios. We survey changes in the representation of disadvantaged persons among the employed, using the OHS and LFS, and supplement these findings with information from other data sources on higher education and employment. This is followed by an examination of changes in relative earnings of the employed population according to the main channels of affirmative action – education and employment.
Inter-racial comparisons are generalized to averages between the black and white working populations, since the samples of Indian and Colored whittle down to unmanageably small numbers. Earnings patterns pertaining to Africans are arguably of interest to be studied independently. However, the African population, by its dominant numbers, in most cases drives earnings outcomes for the black population. Hence it is unnecessary to separate the two, and simpler to report only results for combined category of blacks.

5. 3. 1. Data considerations

The October Household Survey (OHS) and September Labor Force Survey (LFS) constitute nationally representative employment and income surveys, and thus serve as the best available datasets for this study. Nonetheless, two main problems need to be addressed in using these sources as an earnings series. First, substantial and non-random portions of the earnings data in the OHS and LFS are captured in income brackets instead of point values. Second, changes in questionnaire and sampling design raise concerns regarding consistency over time.

The questionnaire since 1996 has been designed to avert loss of information due to inability or unwillingness of respondents to state their income, which results in zero or missing values, by allowing them to select a bracket within which their income falls (Bhorat 2000, Posel and Casale 2004). The earnings of these observations need to be imputed, either by predicting or assigning a value. Posel and Casale’s (2004) methodical analysis on the 2002 LFS reveals that respondents who opt to report income in brackets
have a higher average number of schooling years and are predominantly urban. Less than half are self-reporting, and disproportionately high numbers are self-employed and white.

The occurrence of bracket reporting is clearly non-random. It is therefore inappropriate to use the randomly-sample reported point earnings as a pool for predicting incomes of those who report in brackets. Simpler options include assigning the mid-point of brackets, which Posel and Casale’s (2004) literature survey finds to be the most commonly used technique (e.g. Leite, McKinley and Osorio 2006). Alternatively, one can assign the mean of reported point value earnings that fall within brackets, or randomly generate an earnings value within brackets (Woolard and Woolard 2005). For simplicity, and given the proximity of the within-bracket calculated means to the mid-point, we employ the mid-point method. Unavoidably, however, this will produce density spikes at these midpoints, which will affect certain results.

A second caveat in using the OHS and LFS stems from amendments in questionnaire and sampling design. As discussed above, the surveys in the late 1990s progressively improved their accounting of informal sector employment and earnings. The decision to include only observations located in the formal economy, in addition to focusing on the labor markets that fall under the jurisdiction of affirmative action policy and related legislation, helps obviate the discrepancies resulting from the survey method and sampling. Burger and Yu (2007) demonstrate how the OHS and LFS can be used to construct a reasonably consistent earnings series. Yu (2007) addresses the comparability of the OHS and LFS through a detailed presentation of demographic, employment and income characteristics beyond the income variable which has been subjected to more intense scrutiny. He concludes that inconsistencies due to questionnaire design and
sampling processes have been reduced over time, especially in the LFS. These specific data concerns aside, it is also worth noting that data quality and reliability problems are endemic to surveys. The problems that arise in South African data are faced in national survey data in any setting (Leibbrandt, Levinsohn and McCrary 2005).

We analyze the 1998 and 1999 October Household Surveys and the 2000-2006 Labor Force Surveys. The formal/informal distinction for all employed persons begins in 1997; however, that dataset was not obtainable in time. In the 1995 and 1996 OHSes, only self-employed were asked about the registration status of their organization (Yu 2007: 19-20). It turns out that the data since 1998 also finds greater consistency when referenced to the Survey of Employment and Earnings, an independent data source. Burger and Yu (2007: 11-12) note that the post-1998 formal sector employee total earnings runs reasonably parallel to household survey findings, moreso than in preceding OHSes. While it would be preferable for our data series to span a substantial period prior to affirmative action legislation, the Employment Equity Act came into effect in 1999, allowing us to observe inequality one year before formal enforcement of employment equity.

5. 3. 2. Earnings levels and overall inequality

Figure 5-1 displays average earnings of various groups and of South Africa over the period 1998-2006. Real monthly earnings for South Africa declined slightly, from about R6,000 in 1998-99 to R5,500 in 2000, and hovered at that plateau for the following few years before rising back to R6,000. Within the black employed population, however, we can note that the earnings of Indians are consistently higher than coloreds and Africans,

130 We should note that Oosthuizen (2006: 8-9) critiques the SEE’s low coverage of small, medium and micro enterprises, and the omission of some sectors.
and register rapidest growth over the 2000-2006 period. Unfortunately, the samples of persons in the Indian and Colored categories, as noted above, are small and prone to outlier effects when sub-divided into socio-economic categories. Hence, we are unable to scrutinize with confidence earnings growth among the sub-groups subsumed under the category of blacks. Gains in real earnings to Africans and Coloreds are more modest, although they recover and by 2006 slightly exceed 1998-99 levels. Among whites, the decline in earnings from 1998 to 2000 is substantial, and not recovered by 2006. On the whole, the delineation of earnings levels in Figure 5-1 suggests that inter-racial earnings differentials did not change much over our timeline of enquiry, with a slight decline in the white: black average earnings ratio.

Figure 5-1. South Africa: Monthly earnings, by race (2008 Rand)

Sources: October Household Survey and Labor Force Survey.

Figure 5-2 displays the disparity ratios between the mean, median, and 95th percentile of the black and white employed populations. We find some indication that the differential between mean white earnings and mean black earnings declined over this
period, while the disparity at the median fluctuates, not outlining any pattern. The inter-racial gap at the 95th percentile is follows an uneven but somewhat downward pattern, consistent with the various studies surveyed above that report rapid growth in black income at the upper reaches of the distribution. These findings provide a preliminary glance at inequality, but do not yet inform disparities relevant to affirmative action.

Figure 5-2. White: Black earnings ratio at mean, median and 95th percentile

Sources: October Household Survey and Labor Force Survey.

National inequality traces out a significant decline in the Gini from 1998 and 1999 into 2000, then maintains a constant level until 2006 (Figure 5-3). Within the two main race groups, we find that inequality among blacks followed a downward trend from the late 1990s to 2001, then shifted upwards until 2006, while inequality among whites declined markedly over 1998-2000, then fluctuated considerably over 2000-2006. The decline in inequality that we find in the late 1990s stands in marked contrast to Leite, McKinley and Osorio (2006), who report an increase in inequality from 1997 to 2000, and a declining trend from 2000 to 2004. Their aggregation of both formal and informal
economies may account for part of this difference, given the changes in accounting for informal economic activities in the LFS. This study’s results for the LFS period are more concordant with Leite, McKinley and Osorio (2006), perhaps in line with the LFS’ consistency in designating formal and informal economies.

Figure 5-3. South Africa: Gini coefficient, within race groups

Sources: October Household Survey and Labor Force Survey.

5.3.3. Educational attainment

5.3.3.1. Inequality in representation

We first consider the educational profile of South Africa’s workforce in terms of years of schooling and other benchmarks. We find that the distribution is rather evenly dispersed, with similar percentages of workers with 3 to 11 years of schooling (Appendix Figure 5-2). This stands in contrast to the profile in Malaysia, where there are concentrations at years corresponding with primary school, middle secondary and complete secondary school examinations (see Appendix Figure 3-1), and possibly reflects the socio-political instability or economic sluggishness in Apartheid and post-Apartheid
South Africa and their disruptive effects on education, causing students to drop out before reaching certain schooling milestones. The correspondence between schooling years and earnings shows a virtually flat line between 0 and 9 years, followed by an increase at 10 years (mid-secondary school), then a drop at 11 years (Appendix Figure 5-3). Dropping out one year before completing secondary school – i.e. before attaining 12 years – evidently impacts negatively on earnings. However, earnings climbs steeply as years of education accumulate beyond secondary school. The trends therefore point to the greater relevance of attainment levels as indicators of education, which, as shown in Appendix Figure 5-4, increase steadily through the primary, secondary and tertiary benchmarks.

The employed population of South Africa saw a general increase in educational attainment, but a persisting wide gulf between whites and blacks. The main changes at the national level occur in terms of a declining proportion of those with primary schooling or less (28.0 percent in 1998, 15.9 percent in 2006), and an increasing proportion of those who completed secondary schooling (25.1 percent in 1998, 31.8 percent in 2006). The share of tertiary educated workers also increases, although less substantially according to our survey data, from 18.9 percent in 1998 to 22.9 percent in 2006 (Appendix Figure 5-5). Within the black employed population, the share of tertiary educated increased from 13.3 percent to 17.4 percent, with degree-holders constituting 3.2 percent and 5.2 percent. Those who attained complete secondary school education grew from 19.3 percent to 29.1 percent, while those with primary schooling or less shrank from 34.7 percent to 19.9 percent (Appendix Figure 5-6). The educational composition of the white employed population fluctuates considerably, evidently due to
the smaller number of observations. Nonetheless, the statistics derived here show an expected increase in the percentage of tertiary qualified workers (Appendix Figure 5-7).

These developments in educational provision, coupled with labor market entry, translate into increases in the proportion of blacks among employed persons at secondary school level and above (Figure 5-4). The most notable difference occurs among employed persons who complete secondary school, where black representation steadily increases from 58.7 percent in 1998 to 74.6 percent in 2006. Black representation among diploma holders increases over 2000-03, but remains stationary over 2003-06 at around 65.0 percent. At the degree level, the proportion of blacks increases from 39.5 percent of employed persons in 2000 to 51.0 percent in 2006.

Figure 5-4. South Africa: Proportion of blacks among employed, by highest education attained

![Graph showing percentage of blacks among employed by highest education attained from 1998 to 2006.](image)

Sources: October Household Survey and Labor Force Survey.

The entry of tertiary educated blacks into the labor force correlates with affirmative action programs in public education institutions. Public higher education enrollment figures in Table 5-2 reflect expansion of access to blacks. Indeed, gross and proportional
white enrollment both decline between 1995 and 1999. Private tertiary education has grown to absorb increasing demand from all race groups, and to accommodate the decreased enrollment of whites in historically white institutions. Total enrollment in public higher education shrank by 0.2 percent per year over 1995-99 – corresponding with the drop in gross white enrollment – but grew by 3.9 percent per year over 1999-2006. The number of enrolled blacks increased by 3.1 percent per year over 1995-99, then by 4.7 percent over 1999-2006. Within the black category, the proportion of Africans increased most substantially, from 50.3 percent in 1995 to 61.0 percent in 2006, although they remain under-represented.

Table 5-2. South Africa: Public higher education headcount enrollment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>287,000</td>
<td>332,000</td>
<td>404,000</td>
<td>451,100</td>
</tr>
<tr>
<td>Colored</td>
<td>33,000</td>
<td>31,000</td>
<td>39,000</td>
<td>48,500</td>
</tr>
<tr>
<td>Indian</td>
<td>37,000</td>
<td>40,000</td>
<td>49,000</td>
<td>54,900</td>
</tr>
<tr>
<td>White</td>
<td>214,000</td>
<td>163,000</td>
<td>182,000</td>
<td>184,700</td>
</tr>
<tr>
<td>Total</td>
<td>571,000</td>
<td>566,000</td>
<td>674,000</td>
<td>739,200</td>
</tr>
<tr>
<td>Percentage of total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>50.3</td>
<td>58.7</td>
<td>59.9</td>
<td>61.0</td>
</tr>
<tr>
<td>Colored</td>
<td>5.8</td>
<td>5.5</td>
<td>5.8</td>
<td>6.6</td>
</tr>
<tr>
<td>Indian</td>
<td>6.5</td>
<td>7.1</td>
<td>7.3</td>
<td>7.4</td>
</tr>
<tr>
<td>White</td>
<td>37.5</td>
<td>28.8</td>
<td>27.0</td>
<td>25.0</td>
</tr>
</tbody>
</table>


Participation rates, indeed, have not changed substantially for the African and colored populations. African enrollment in public higher education enrollment per 20-24 year-old population was 9 percent in 1993 and 11.5 in 2004, while that for coloreds was 13 percent in 1993 and 12.1 percent in 2004. The corresponding figures for whites were 70 percent in 1993 and 59.5 percent in 2004, and for Indians, 40 percent and 50.2 percent.
(Subotzky 2003: 361 and Breier and Mabizela 2008: 283). These figures do not reflect the overall levels of tertiary education attainment since they exclude private higher education, which has grown in recent years. Nevertheless, given the greater dependence of the black population on public education, the statistics indicate that, while tertiary education access has expanded, the number of Africans and coloreds who reach university remains a small fraction of the relevant age group.

The growth in enrollment, moreover, does not translate directly into increased numbers of diploma or degree qualified workers of equal standing. Systematic stratification of education required attention not only to increase access and make campuses representative of society, but also to remedy the Apartheid legacy of disparities in quality of education among formerly racially separated institutions. As discussed in Chapter 2, post-Apartheid education policy pursued twofold objectives of increasing black presence in historically white institutions (HWIs) and narrowing the quality gap – real, but also perceived or reputed – between HWIs and historically black institutions (HBIs). As purposed, a growing proportion of black students have enrolled in HWIs, and a declining proportion in HBIs. In 1993, 49 percent of black students were in HBIs and 13 percent in HWIs; by 1999, 33 percent were in HBIs and 39 percent in HWIs (with the remainder in distance learning). This trend continued, though at a slower pace, such that in 2003, 32 percent enrolled in HBIs and 42 percent in HWIs (National Higher Education Plan 2001 and Education Statistics at a Glance 2003).

The black population’s access to the more prestigious and better equipped HWIs has therefore expanded, although large numbers are enrolled HBIs. Since 2003, South Africa has phased out the HBI/HWI distinction and merged and reorganized various institutes.
Nonetheless, we may reasonably project that the trends above have continued, and stratification of the education system persists, and possibly intensifies, as racially diversifying urban middle and upper classes increasingly enjoy the advantages of being educated in previously white schools and HWIs (Morrow 2008: 282-283). Beyond entry into higher education, graduation rates – i.e. the number of graduates per headcount enrollment – and success rates are concerns related to the efficacy of education and capacity of students to engage academically. South Africa posted a 15 percent graduation rate over 1993-98, which is considered very low by relevant international standards (National Plan for Higher Education 2001). Among students enrolled in 2000, the proportion that dropped out by 2004 was 38 percent in universities, 58 percent in technikons and 71 percent in distance education (Kraak 2008). Much concern was expressed in 2001, but improvements have not transpired subsequently – graduation rates remained at 15 percent in 2002 and 2006 (Education Statistics at a Glance, 2002 and 2006).

While these data disaggregated by race are not available, we may deduce from enrollment and graduation differentials that black students contribute relatively more to the low graduation rate. Blacks constituted 62.5 percent of enrolled students (Table 5-2) and 50.4 percent of graduates in 1995 (Table 5-3), and 73.0 percent of enrolled students and 65.1 percent of graduates in 2002. These figures suggest the black students are more likely to not complete higher education, although this gap is narrowing. Correspondingly, improvements in the undergraduate success rate between 2002 and 2006 are gradual but positive (Table 5-4). Another point of note pertains to variations in the fields pursued, where again, racial disparities prevail. In 2000, Africans constituted 51 percent of all
graduates, but their proportion varies across fields, from 85 percent in education, 74 percent in public administration and 58 percent in social science, to 39 percent in business and commerce and 32 percent in science, engineering and technology (Subotzky 2003: 370).

Table 5-3. South Africa: Racial composition of tertiary graduates

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>1998</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>38.6</td>
<td>49.7</td>
<td>52.8</td>
</tr>
<tr>
<td>Colored</td>
<td>5.2</td>
<td>5.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Indian</td>
<td>6.6</td>
<td>4.7</td>
<td>7.0</td>
</tr>
<tr>
<td>White</td>
<td>49.6</td>
<td>40.5</td>
<td>34.9</td>
</tr>
<tr>
<td>Total number of graduates</td>
<td>81,764</td>
<td>79,725</td>
<td>101,410</td>
</tr>
</tbody>
</table>


Table 5-4. South Africa: Undergraduate success rate

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>African</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>Colored</td>
<td>74</td>
<td>76</td>
</tr>
<tr>
<td>Indian</td>
<td>80</td>
<td>79</td>
</tr>
<tr>
<td>White</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Overall</td>
<td>74</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: Education Statistics at a Glance, 2002 and 2006. Note: full-time equivalent passes per full-time equivalent enrollment

5. 3. 3. 2. Inequality in earnings

How do these developments in prospective labor market entrants’ educational attainments interact with earnings outcomes? From our OHS and LFS series, we consider the earnings differential by highest education attained relative to persons with complete secondary schooling. We find that the earnings ratio of degree holders to secondary school completers rose most rapidly, from 2.23 in 1998 to 3.17 in 2006 (Figure 5-5). Diploma holders also saw their relative earnings follow an upward trend, from 1.33 in
1998 to 1.70 in 2006. Within race groups, only the differential between degree holders can be said to follow an upward trend. The increase in this raw measure of returns to tertiary education is higher and growing for blacks. The relative earnings of degree-holders rise from 2.52 in 1998 to 3.53 in 2006 (Figure 5-6). The differential among whites is notably lower, and the increase is also smaller, from 1.76 in 1998 to 2.18 in 2006 (Figure 5-7).

Figure 5-5. South Africa: Earnings by highest education, per complete secondary schooling

Sources: October Household Survey and Labor Force Survey.
The dominant trend of an increasing effect of higher education translates, as expected, into declining inter-racial inequality among graduates. Figure 5-8 compares earnings of blacks and whites in the same category of educational attainment. The racial earnings gap between employed persons of similar education is being bridged at the upper end, among
degree holders, from a white-black ratio of 1.8 in 1998 to 1.4 in 2006, while lesser qualified blacks trail their white counterparts by larger margins that show little sign of narrowing.

Figure 5-8. White: Black earnings ratio, within educational attainment group

![Graph showing white-black earnings ratio over time by educational attainment level.]

Sources: October Household Survey and Labor Force Survey.

5. 3. 4. Occupational position

5. 3. 4. 1. Inequality in representation

Occupational profiles of the employed, similar to the educational attainment statistics above, plainly depict the persistent racial divisions in the labor market. The contrast between the occupational compositions of the black and white employed populations is especially striking at the upper and lower rungs (Appendix Figures 5-8 and 5-9). Whereas the black working population was comprised of about 8 percent managers and professionals and 40 percent production workers, these occupation groups respectively constitute 35 percent and 5 percent of the white working population. We do not observe
any major inter-temporal change, over 1998-2006, in the proportions of occupation categories for South Africa as a whole and within black and white populations.

The proportion of blacks within occupations increased in a few categories (Figure 5-9). In professional employment, blacks increased their proportion from around 50 percent over 1999-2001 to 58 percent over 2004-2006. However, the relative share of blacks in management positions did not suggest any perceivable trend. These trends are not surprising, given that entry into professional positions follows more sequentially from formal tertiary education, whereas experience, seniority and other factors influence entry into management.

Figure 5-9. South Africa: Proportion of blacks within occupation group

Sources: October Household Survey and Labor Force Survey.

Employment Equity Reports offer an alternate data source and reference point. The Employment Equity Commission’s Annual Report provides summary statistics from the reports it receives. Table 5-5 exhibits racial composition of management and professionals. The years coincide with the schedule of EE reports for large companies,
who are required to submit annually, and for medium-scale companies, which submit every two years. Black representation in top management and senior management increased from 2000 to 2006. Notably, the proportion of blacks in these high-level positions is substantially lower than in middle management and professional positions. These results are not surprising, and comparable with other firm-based surveys.\(^{131}\)

The figures for professionals and middle management, however, are too inconsistent to be relied upon as an indicator of change over time. Such improbable swings may be due to the breadth of interpreting which jobs qualify as professional and middle management, or more likely, as a result of variations in the sample of EE reports analyzed. Table 5-6 summarizes some key features of employment equity reports received by the Department of Labor. In particular, the considerably smaller average firm size in reports analyzed in 2002 and 2006 coincides with lower black representation at professional and middle management positions. As firm size increases, in most cases the number of professional and middle management positions would grow at a higher rate than the number of senior and top management positions. Smaller firms offer lesser opportunity for horizontal expansion of employment at these levels, and hence fewer positions in which preferential selection can be accorded to blacks.

---

\(^{131}\) Of note, the Breakwater Monitor survey computes proportions of blacks in management of 7.0 percent in 1994, 12.7 percent in 1998, and 20.3 percent in 2000. However, blacks constituted 35 percent of management recruits in 2000 (Horwitz and Bowmaker-Falconer 2003: 616-622). Two caveats are attached to this survey: first, participation is voluntary, and respondents are disproportionately large firms.
Table 5-5. South Africa Employment Equity Reports: Racial composition of managerial and professional positions

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2002</th>
<th>2004</th>
<th>2006'</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>6.2</td>
<td>10.0</td>
<td>11.8</td>
<td>11.3</td>
</tr>
<tr>
<td>Colored</td>
<td>2.7</td>
<td>3.4</td>
<td>3.7</td>
<td>4.7</td>
</tr>
<tr>
<td>Indian</td>
<td>3.8</td>
<td>5.0</td>
<td>5.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Black</td>
<td>12.7</td>
<td>18.4</td>
<td>21.1</td>
<td>22.2</td>
</tr>
<tr>
<td>White</td>
<td>87.5</td>
<td>81.5</td>
<td>78.9</td>
<td>74.9</td>
</tr>
<tr>
<td><strong>Senior management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>8.7</td>
<td>10.8</td>
<td>13.1</td>
<td>13.4</td>
</tr>
<tr>
<td>Colored</td>
<td>4.9</td>
<td>5.1</td>
<td>5.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Indian</td>
<td>4.9</td>
<td>6.3</td>
<td>7.2</td>
<td>7.7</td>
</tr>
<tr>
<td>Black</td>
<td>18.5</td>
<td>22.2</td>
<td>25.7</td>
<td>26.9</td>
</tr>
<tr>
<td>White</td>
<td>81.5</td>
<td>77.9</td>
<td>74.4</td>
<td>70.9</td>
</tr>
<tr>
<td><strong>Professionals and middle management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>32.8</td>
<td>16.2</td>
<td>38.8</td>
<td>20.2</td>
</tr>
<tr>
<td>Colored</td>
<td>5.5</td>
<td>8.2</td>
<td>6.5</td>
<td>8.0</td>
</tr>
<tr>
<td>Indian</td>
<td>5.8</td>
<td>7.0</td>
<td>5.9</td>
<td>8.3</td>
</tr>
<tr>
<td>Black</td>
<td>44.1</td>
<td>31.4</td>
<td>51.2</td>
<td>36.5</td>
</tr>
<tr>
<td>White</td>
<td>56.1</td>
<td>68.5</td>
<td>48.9</td>
<td>62.2</td>
</tr>
</tbody>
</table>

Source: *Employment Equity Report*, various years.

Note: 1Figures do not sum to 100 due to a fraction of non-South Africans.

These findings must be also handled cautiously, in view of the non-random sampling – contingent on submission of complete EE reports, in which compliance has declined – and questions over representativeness of the data. Nonetheless, the EE reports do find support in non-published surveys of market research firms that have found similar levels of African representation. Human resource consultancy P-E Corporate Services reports that, from 2004 to 2008, Africans comprised 25 percent of senior managers in its salary and working conditions survey, covering 850 companies that employ over 1.5 million people. This marks an increase from 5 percent in 1994, but also reflects a slowdown of the rate of black entry into such positions. No dataset is definitive, but information from the EE reports concurs with the expected difficulties in penetrating upper-level

management, both from the perspective of inadequate experience among blacks and disincentives among employers.

Table 5-6. South Africa: Employment Equity Report samples

<table>
<thead>
<tr>
<th>Year</th>
<th>Received</th>
<th>Analyzed</th>
<th>Number of employees covered</th>
<th>Average firm size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>12,980</td>
<td>8,250</td>
<td>3,336,784</td>
<td>n.a.</td>
</tr>
<tr>
<td>2002</td>
<td>6,990</td>
<td>6,990</td>
<td>2,605,729</td>
<td>373</td>
</tr>
<tr>
<td>2004</td>
<td>9,389</td>
<td>5,554</td>
<td>2,534,525</td>
<td>1,088</td>
</tr>
<tr>
<td>2006</td>
<td>6,876</td>
<td>4,394</td>
<td>1,641,179</td>
<td>374</td>
</tr>
</tbody>
</table>


The educational and industrial composition of managerial and high-skilled occupations is also relevant to our consideration. Figure 5-10 shows that South African managers, professionals and technicians are highly qualified. The proportions with tertiary education exceed the corresponding figures for Malaysia (see Figure 3-1). These numbers are similar within black and white working populations, for professionals and technicians, while the proportion of managers with degrees is higher among whites than blacks. However, we find improbable fluctuations, and no noticeable patterns of increasing percentages of tertiary educated personnel, reflecting the problems of small samples\(^{133}\). This cautions us against taking the findings of each year in isolation, and underscores the utility of placing emphasis more on observable trends over time, less on precise estimates in any particular year.

\(^{133}\) For instance, the number of observations of managers range between 800 and 1,000 in the OHS and LFS of South Africa, compared to 3,000-3,500 in the Malaysian Household Income Surveys.
We also observe the occupational profile of tertiary educated workers (Figures 5-11 and 5-12). Here we find considerable variance between race groups. Within the black tertiary educated workforce, the proportion working as technicians is highest, but declining (to 30 percent in 2006) as the proportion working in management rises, although by 2006 it is still substantially lower, at 12 percent. The proportion working as professionals lies in between, at 22 percent. Within the white workforce, the share of managers, professionals and technicians are each between 20 to 30 percent. These data suggest that tertiary education on average correlates with higher rate of entry into management for whites than for blacks, and the converse for entry into technical occupations. We are unable to compute these figures reliably for degree-holders and diploma-holders separately, due to insufficient sample size. However, we would expect that parallel differences between race groups to hold.
The industrial composition of management and highly-skilled personnel are worth briefly outlining. Although affirmative action targets group representation within occupations and not explicitly within industrial sectors, differences across sectors reflect
barriers to and shortcomings of the process of broad transformation. Over 1998-2006, based on the OHS and the LFS we find that 33 percent of black managers worked in trades, 18 percent in services, 14 percent in manufacturing, 12 percent in finance and 14 percent in transportation. Among white managers, 30 were in trades, 10 percent in services, 18 percent in manufacturing, 22 percent in finance and 6 percent in transportation. The two major differences are the higher proportions of black managers engaged in services and transportation, and higher share of white managers employed in finance. In professional occupations, blacks are more concentrated in services (73 percent, largely teachers) and less in finance (15 percent). In contrast, 48 percent of white professionals are in services, and 32 percent are in finance.

Data on registered professionals and trainees serve as useful reference points. In 2004, 90.3 percent of chartered accountants were white, 2.1 percent were African, 6.0 percent Indian and 1.4 percent colored. Among trainees, 15 percent were African, 4 percent colored, 14 percent Indian and 66 percent white. These figures reflect both persistent racial gaps and slight progress towards redressing disproportionalities (van Zyl 2008: 380). The data above highlight the importance of looking beyond aggregated occupational groups, and of controlling for industrial sector when assessing the effects of race on employment and earnings.
5. 3. 4. 2. Inequality in earnings

Turning now to inter-occupational earnings differentials, our findings draw attention to the managerial and professional levels (Figure 5-13). In the economy as a whole, the earnings of managers moved notably, with its ratio to service workers falling marginally from 4.0 in 1998 to 3.8 in 2000, then rising considerably to 5.0 in 2006. Relative earnings of professionals climbed upward from 1999 to 2003, but flattened thereafter. Technicians saw relative earnings slightly but steadily grow over 1998-2006. These trends are also manifest, with generally greater magnitude of change, within the black employed population. The earnings of managers relative to service workers increased from 2.4 in 1998 to 4.4 in 2006, and the relative earnings of professionals followed a fluctuating but upward movement from 2.4 in 1999 to 3.7 in 2006 (Figure 5-14). The earnings gap on upper level occupations is therefore widening within the black population, while inter-occupation inequality ratios within the white population do not suggest any patterns, except a relative increase in managerial earnings from 2002 (Figure 5-15).

Figure 5-13. South Africa: Earnings ratio by occupation, per service workers

![Graph showing earnings ratio by occupation from 1998 to 2006 for managers, professionals, technicians, clerks, craft, operators, and elementary workers.](image)

Sources: October Household Survey and Labor Force Survey.
Figure 5-14. Blacks: Earnings ratio by occupation, per service workers

Figure 5-15. Whites: Earnings ratio by occupation, per service workers

Sources: October Household Survey and Labor Force Survey.
The differentials of white to black earnings within occupation groups trace out few perceivable upward or downward trends (Figures 5-16 and 5-17). The gap between white and black is perhaps narrowing among professionals, from a peak of 1.96 in 1999 to 1.39 in 2006, although with substantial fluctuations between 1998 and 2003 – probably due to reporting of incomes in brackets. The ratio among managers indicates a precipitous drop between 1998 and 1999; however, this pattern is at odds with the rest of the series, over which we may not conclude any trend. In the technician category, we note a slight but steady decline from 1.89 in 2000 to 1.62 in 2006. In the next set of occupational rungs, we find a fairly constant inter-racial gap among clerks, and no clear pattern among service workers and craft workers.

Figure 5-16. White: Black earnings ratio, by occupation (managers, professionals and technicians)

Sources: October Household Survey and Labor Force Survey.
5.4. Public sector employment

The public sector has served as a major employer of disadvantaged persons and, importantly, as a facilitator of blacks into managerial/administrative, professional and technical jobs. Public employment data are available to check the representativeness of these sub-sample of public sector we extract from the Labor Force Surveys. Table 5-7 allows us to compare the racial compositions obtained in the LFS 2001 with public service employment based on payroll data. In terms of racial composition, the LFS is reasonably representative of the actual public service working population.134

---

134 We also find compatibility of racial composition in 2006. Naidoo (2008: 111-112), from public service payroll data, reports African shares of 57 percent at senior management and 73 percent overall, while according to the LFS, Africans constitute 57.3 percent of managers and 71.2 percent of government employees.
The discussion to follow considers employment and earnings statistics of the public sector – encompassing government departments and state-owned enterprises – from 2000 to 2006. Our timeline is reduced because the OHS did not reliably identify public and private sectors. We first explore the extent to which blacks of advanced qualification are employed in the public sector. Survey reports of graduates have found a high incidence of public sector employment among African graduates (Moleke 2005). We consider the proportions of blacks and of whites with tertiary education who are working in the public sector, followed by the corresponding proportions of persons occupying managerial or professional positions.

Our calculations reveal high proportions of degree-qualified, managerial and professional blacks working in the public sector, in concurrence with expectations and related studies\textsuperscript{135}. Over 2000-2006, 60-65 percent of blacks with degrees, and 40-50 percent of black managers and professionals, were employed in the public sector (Figure 5-18). Importantly, we also observe the share of the public sector among these categories diminishing over our time period. The corresponding figures for white employed persons are noticeably lower, and less clear in indicating any trend (Figure 5-19).

\textsuperscript{135} The survey reported by Moleke (2005) finds that 77 percent of black graduates work in the public sector. This is based on respondents who worked between 1990 and 1998.
The entry of highly educated and upwardly mobile blacks into private sector employment proceeded in the early- to mid-2000s. Black representation among degree holders and among managers and professionals increased across the board, but by greater margins in the private sector (Figure 5-20). The continual inclination of blacks toward
public sector employment is undoubtedly motivated by various factors, including the concentration of tertiary-qualified blacks in services, especially education, and the greater latitude for employment equity enforcement in government departments or government-owned entities. Nonetheless, the increasing proportion of blacks among private sector managers and professionals, rising from 35 percent in 2000 to 51 percent in 2006, and among private sector degree holders (24 percent to 36 percent) is possibly capturing effects of compliance with employment equity. The correspondence of race with selection into these occupations and sectors will therefore need to be isolated.

Figure 5-20. South Africa: Proportion of blacks among degree holders, managers and professionals, by sector

Turning now to inter-racial earnings disparities, we compute racial earnings disparities among degree-qualified workers and among managers and professionals, separately for public and private sectors (Figures 5-21 and 5-22). We obtain a declining white-black ratio for degree holders in the private sector, but no evident pattern for the
other categories. The increase in black representation among degree-qualified workers in the private sector thus corresponds with a decrease in racial earnings inequality.

Figure 5-21. White: Black earnings ratio of degree holders, by sector

![Graph showing earnings ratio](image1)

Sources: October Household Survey and Labor Force Survey.

Figure 5-22. White: Black earnings ratio of managers and professionals, by sector

![Graph showing earnings ratio](image2)

Sources: October Household Survey and Labor Force Survey.
5. 5. Main findings

Our analysis of inequality in this chapter started at the aggregated level, where we find that over 2000-2006 national earnings inequality remained quite stable, while intra-black inequality grew. The white to black earnings ratio perceivably declines at the mean and 95\textsuperscript{th} percentile. Declining inter-racial inequality at the upper regions of the distribution and growing inequality within the black population suggest possible effects of affirmative action, and set the stage for further exploration of educational and occupational dimensions of inequality.

Education statistics and labor force surveys indicate growth in tertiary educational attainment in the general working population, although the most salient development is the growth in secondary school completion among blacks. Tertiary educated workers still constitute a small section of the black employed population. Higher education is an increasingly important factor in earnings inequality among blacks; we find increasing disparity especially between degree-qualified workers and others. The white-black earnings gap has declined most sharply among the tertiary educated, again, most pronouncedly at the degree level.

South Africa’s labor market has witnessed substantial change in the upper echelons. We find that blacks are entering management and highly skilled jobs, especially professional positions, although different data sources provide varying estimates of the extent of progress. However, the small number of observations in these categories lends to high dispersion in earnings, causing exceptionally larger fluctuation in inter-racial disparities. Among professionals, we can trace out a downward trend in the white-black earnings ratio, but among managers we observe no narrowing pattern. The low
representation of blacks in senior and top management may contribute to the continual white-black gap under the aggregated category of ‘managers’. In terms of intra-racial inequality, high earnings growth of black managers and professionals has widened the divide between these occupational rungs and the rest, while within the white employed population, the disparity grew between managers’ earnings and the rest.

Public sector employment has been central to the absorption of highly qualified and upwardly mobile blacks. We find that the majority of tertiary educated blacks, and black professionals and technicians are employed in the public sector. However, we also observe a growing trend in black representation among professionals and tertiary qualified workers in the private sector, and note that inter-racial earnings have declined notably more within these groups. In sum, we find some indication that the dependence on the public sector for employment of highly qualified and upwardly mobile blacks may be declining, which is in line with the enforcement of employment equity across all sectors.

This chapter’s findings project a few directions for further study. In terms of job attainment, the effects of various simultaneous developments need to be controlled for to obtain more precise estimates of the relationships between race, education and occupation that are central to this study. The continuing disparities between blacks and whites in educational attainment, industry, geographic location, and other characteristics underscore the need for testing the correspondence of race with occupying a high-level job while controlling for other determinants. We want to focus specifically on the prospects for tertiary educated blacks of attaining managerial and professional jobs. We
also consider some corollaries of employment equity, specifically unemployment and mobility, to supplement our analysis of occupational attainment.

In terms of earnings inequality, the narrowing of racial inequality among degree-qualified workers and among managers and professionals warrants further analysis. We will therefore estimate the independent effects of a set of individual characteristics on earnings, focusing on race, education and occupation, and interactions of these variables. Again, our chief purpose is to compare the labor market experience of degree-qualified blacks and whites.
CHAPTER 6
SOUTH AFRICA: DETERMINANTS OF RACIAL INEQUALITY AND IMPLICATIONS ON AFFIRMATIVE ACTION

6. 1. Overview

This chapter evaluates the causes of inequality in racial representation and earnings in South Africa, further investigating the patterns of racial representation and earnings inequality outlined in Chapter 5. We focus on the main beneficiaries of affirmative action, blacks with tertiary education or in management or highly skilled occupations, subject to sample size constraints. This chapter, along the lines of Chapter 4’s analysis of Malaysia, ventures to:

1. Estimate the independent and joint effects of race and educational attainment on attaining upper-level occupations;
2. Evaluate earnings determinants, with particular attention to the joint effects of race and educational attainment or occupational position;
3. Estimate the independent effects of tertiary education and occupation on earnings inequality within race groups;
4. Discuss implications of our findings on affirmative action programs.

This chapter proceeds as follows. First, we briefly survey the relevant literature, largely comprised of research based on decomposition exercises that quantify the proportionate contributions to inequality from ‘productivity’ and ‘discrimination’. This body of research, while informative, evaluates inequality and discrimination between entire working populations of race groups, which is too broad for our purposes. We lay out the approach adopted in this study, which draws partly on some studies that
incorporate occupational attainment and earnings functions but mostly formulates functions that specifically evaluate labor market returns to blacks with tertiary education and blacks in upper-tier occupations.

Second, we present findings from logit regressions for occupational attainment, where we estimate the effects of a set of determinants on the probability of occupying a management or professional job. Focusing on the dimensions of inequality most directly relevant to affirmative action, we interact race with education variables to separately test for the impact of educational qualifications on whites and blacks. We find that degree-qualified blacks are more likely than degree-qualified whites to attain managerial or professional jobs, *ceteris paribus*. We obtain different results between sectors, with degree-qualified blacks are more likely than degree-qualified whites to attain managerial or professional jobs in the public sector, but the converse for the private sector. We also consider the transition from tertiary education to labor market participation and job mobility, two developments inter-related with affirmative action. The unemployment rate among degree-qualified blacks has declined substantially. At the same time, employee surveys find that tertiary institute type and command over language and basic skills differentiate the employment prospects of graduates, and that blacks are disproportionately adversely affected.

Third, we run earnings regressions to estimate the independent effects of educational attainment, occupational position and race on earnings. In our regressions on the entire population, we find rising returns to degree qualifications and managerial and professional premiums, as observed in Chapter 5. The overall black earnings penalty fluctuates, but registers a slight net decrease, over our time period. However, when we
interact race with education, we find the earnings of degree-qualified blacks are gaining ground more substantially than less qualified blacks. The inter-racial earnings gap in upper-tier occupations yields sporadic results, hence we are less confident in deducing that black-white earnings disparities among managers and professionals have declined.

To account for structural differences between different occupational strata, we run separate regressions on two occupational groupings, i.e. managers and highly skilled workers, and service and production workers. We find increasing earnings premiums on degree qualification in both sub-groups, but a marginally more significant narrowing of the black earnings penalty among managers and highly-skilled workers. These findings corroborate our earlier observation that the effect of race on earnings is declining at the upper occupational rungs, even after controlling for other factors.

Fourth, we analyze earnings inequality within the black and white populations, by running separate earnings regressions on both race groups. We find that the gulf between the black and white population in terms of disparities associated with educational attainment and occupational position, as reported in Chapter 5, is reduced once we control for other determinants. Variations across geography and industry account for a large portion of inequality within the black population, which has higher proportions in provinces and industries registering lower average earnings. The education and occupation categories with concentration of AA beneficiaries have enjoyed relatively rapid earnings growth, but the higher and increasing inequality within the black population is also substantially explained by structural factors unrelated to AA policies.

Finally, we summarize our findings and discuss implications on affirmative action. Results indicate that degree-qualified blacks reap some advantage in attaining managerial
and professional positions, and substantiate the view that preferential policies are implemented more vigorously in the public sector. Based on our analysis of labor force surveys and evidence compiled from other sources, we arrive at the broad conclusion that the earnings of black degree holders are catching up with that of white degree holders. Our analysis of intra-racial inequality obtains rising disparities between degree qualified workers and others, and between managers and professionals and others, within both the black and white population. Inequality within the black population remains higher, but the contribution of higher education and occupational premiums is considerably reduced after we control for other determinants.

A few implications are salient. First, while affirmative action appears to have realized some of its objectives, questions have arisen regarding its breadth and sustainability. The evidence we obtain, of preferential selection favoring degree-qualified blacks and narrowing inter-racial disparities between black degree-holders and white degree-holders, in combination with indications that tertiary education among blacks remains lagging in terms of the quantity supplied and quality of training received, suggest that the emphasis of affirmative action should shift away from escalating employment equity mandates, towards broadening and improving education institutions. Second, the slower entry of blacks into managerial positions and relative dependence on the public sector for employment of blacks in upper-level positions, underscore the difficulties, also faced in Malaysia, of cultivating an independent and self-sufficient managerial and professional class. These areas warrant further analysis and policy focus.
6. 2. Existing studies and methods

A large segment of studies on inequality in South Africa deploy Oaxaca-Blinder decomposition techniques to obtain some measure of ‘discrimination’. Those that situate analysis in the context of affirmative action contend that progress in AA corresponds with decline in the discrimination portion – i.e. unexplained differences in returns to the same productive characteristics – of inter-racial occupational or wage disparities.

Rospabé (2002) estimates occupation functions, estimating the effects of a set of explanatory variables on the probability of attaining a high-skill job. The study uses an aggregated outcome variable, encompassing management, professionals and technicians, due to the small sample size of Africans in these occupational groups. After running regressions separately for African males and white males, the study decomposes the gap between the two groups, with one group as reference point.

The basic framework is applied to estimate racial discrimination in earnings as well. Rospabé (2002) finds that, although the gap between groups decreased, the share of the ‘discrimination’ component increased. Occupational and earnings discrimination increased between 1993 and 1999, respectively, from 32 percent to 37 percent, and from 23 percent to 27 percent. Using a similar basic framework, but referencing all race groups against a non-discriminatory wage obtained from the pooled sample, Allanson, Atkins and Hinks (2002), find that the discrimination factor eroded over the long term, between 1980 and 1997. In 1997, the average white worker benefited from a discrimination premium of 47 percent while blacks on average bear a discrimination penalty of 12 percent.
Burger and Jafta (2006) conduct decompositions every year over 1995-2004, and akin to Allanson, Atkins and Hinks (2002), incorporate both white advantage and black disadvantage into their framework, referenced to the overall mean. Their decompositions of inter-racial differences in highly-skilled employment and in wages find that the discrimination portion was not steadily and sizably reduced. The results of decompositions are thus varied, and Burger and Jafta (2006: 20) are cautious in concluding that the lack of a decline in the unexplained portion of inequality reflects persistent racial discrimination, since they are unable to control for variation in education quality.

There are grounds to believe that differences in quality of education are increasingly important in determining employment in high-level occupations and influencing bargaining power over wages. In general, expansion of access to secondary and tertiary education widens the scope for differentiating between persons with similar paper qualifications. Specific to South Africa, disparities between urban and rural schools, and between schools inside and outside urban gentrified areas and between historically black institutions and historically white institutions, may have become even more pronounced in recent years. The available income data, unfortunately, do not provide the means to measure or proxy for education quality. Chamberlain and van der Berg (2006) uniquely contribute to this lacunae, using test scores from the 1993 PSLSD dataset\textsuperscript{136} to predict education quality in 1995 OHS. Their decomposition exercise finds increases in the contribution of observable characteristics to the racial wage gap once education quality is

\textsuperscript{136} The Project for Statistics on Living Standards and Development survey was conducted in 1993, prior to the democratic transition, and sampled the entire country except for the former Bantustans.
accounted for. However, the technique has not been replicable on subsequent OHSes or LFSes.

Few studies have applied earnings functions as a principal tool for analyzing inequality. Bhorat, Lundall and Rospabé (2002: 20-22) run earnings regressions on the 1995 and 1999 OHSes. Their findings for 1999 are worth a brief mention. Relative to whites, Africans on average earn 63 percent less, coloreds 46 percent less, and Indians 31 percent less. The average earnings of a worker possessing higher education are 1.33 times those of a worker with secondary schooling. These estimates are similar to our findings, as reported in the course of this chapter. Hlekiso and Mahlo (2006) run earnings regressions for 2001 and 2005, finding evidence of declining racial disparity, growing tertiary education premiums, and widening occupational gaps, particularly between managers and professionals vis-à-vis service workers. Again, the findings are consistent with ours, and hence serve as basic reference points. However, the earnings functions specified of these studies do not venture beyond standard earnings regressions and do not account for interactions between variables.

This study opts for employment and earnings regressions that incorporate interaction terms for race and education, and for race and occupation. The continuing scarcity of tertiary qualified blacks and persisting barriers to upward mobility for the vast majority of blacks renders comparisons of overall black and white averages less appropriate than the relative occupational and earnings attainment of similarly qualified blacks and whites. Additionally, we want to focus our empirical enquiry on the main categories targeted by affirmative action – black graduates, managers, and professionals.
Our primary interest rests in particular disparities, less in notional and aggregated measures of discrimination as obtained through decomposition procedures. For our purposes it will be more instructive to estimate interacted effects of race and tertiary education on employment and on earnings, and interacted effects of race and occupation on earnings. Moreover, affirmative action centers on tertiary education, and this study emphasizes the effect of diplomas and degrees as a credential in labor market participation, in contrast to the model specification of education as a continuous variable (years of schooling) in occupation and earnings functions that form the basis for decomposition. These specific aspects of inequality cannot be distinguished in aggregated, Oaxaca-Blinder-based decomposition exercises.

6. 3. Attainment of managerial or professional positions

6. 3. 1. Effects of race and education

This section follows on observations noted in Chapter 5 of racial and educational composition of targeted occupations. We recall that black representation increased significantly in professional positions, and slightly in managerial positions. We also found that the workforce in these occupations is highly educated. This section estimates the independent effects of education and race on the probability of attaining jobs targeted by affirmative action.

We construct our function with a binary variable for holding a management or professional job as the outcome variable. We specify age, gender, education, race, occupation, location (province), and industry as explanatory variables. From our baseline equations we obtain estimates for the independent effect of our key variables – race and
education – on the probability of attaining the targeted occupations. We extend the model to include interaction terms for race and education, in which there are two categories for race (black and white) and three categories for education (degree, diploma, and without tertiary education). We therefore obtain five interaction terms for six categories, and designate ‘white without tertiary education’ as the reference group. The relevant segment of the function appears as:

\[
\text{probability}(\text{target job}) = \beta_1 + \beta_2 \text{black} + \beta_3 \text{degree} + \beta_4 \text{black} \times \text{degree} \\
+ \beta_5 \text{diploma} + \beta_6 \text{black} \times \text{diploma} + \ldots
\]

The reference group is white without tertiary education, with the associated coefficients arranged as follows:

- \( \beta_2 \) applies black without tertiary education
- \( \beta_3 \) applies to white with degree
- \( \beta_5 \) applies to white with diploma
- \( \beta_2 + \beta_3 + \beta_4 \) applies to black with degree
- \( \beta_2 + \beta_5 + \beta_6 \) applies to black with diploma

For ease of reading and to focus on changes over time in particular variables, we present the results in graphic instead of tabular format. Missing points denote statistically insignificant results. We first ran the occupation regressions separately for management and professional positions. However, this produces a high incidence of statistically insignificant or implausibly dispersed results, due to the small number of observations, leading us to combine the occupation groups into one category, roughly corresponding with “highly skilled” workers as delineated in other studies (e.g. Rospabé 2002). We obtain more stable and statistically significant findings, although we lose some important differentiation between managerial and professional/technical employment.
In the baseline regressions, we observe no clear pattern over time in the effects of race on attaining a management or professional job, after controlling for other determinants (Figure 6-1). Over 1998-2006, among workers who are identical in all other relevant characteristics for which data are available, blacks are on average 7-9 percent less likely than whites to be managers or professionals (with 2000 apparently an outlier). We find no trend towards eliminating this gap. Significant change takes place in the educational dimension. Degree qualification raises the probability of attaining a management or professional position, relative to secondary school completion, by 42 percent in 1998 and by 53 percent in 2006 (Figure 6-2). We conduct this regression restricted to the tertiary educated employed population, as we did in Chapter 4. The resulting small sample yields dispersed results, but on the whole, tertiary educated blacks are less likely than tertiary educated whites to attain a position in management or as a professional (Figure 6-3).

Figure 6-1. South Africa: Effect of race on the probability of attaining a management or professional position

Source: October Household Survey and Labor Force Survey.
Figure 6-2. South Africa: Effect of educational attainment on the probability of attaining a management or professional position, per complete secondary school

Sources: October Household Survey and Labor Force Survey.

Figure 6-3. Tertiary educated workers: Probability of blacks (per whites) attaining a managerial job or a professional job

Sources: October Household Survey and Labor Force Survey.

A question that follows is whether this effect varies for black graduates against their white counterparts. Figure 6-4 presents results of regressions incorporating the race and education interaction terms. We find that a degree-holding black on average has a higher
likelihood of being a manager or professional compared to a degree-holding white. This finding suggests that blacks with degree-level education are conferred some preference in hiring or promotion decisions in the upper occupational rungs, and are thus benefiting from employment equity considerations. We noted in Chapter 5 that the majority of degree-qualified blacks work in the public sector. To test if the effect of joint effect of race and tertiary education differs between public and private sectors, we bifurcate the dependent variable. We find that degree-holding blacks are more likely than degree-holding whites to attaining a management or professional position in the public sector (Figure 6-5). However, we find the converse to hold in the private sector (Figure 6-6).

Figure 6-4. South Africa: Joint effect of race and educational attainment on the probability of attaining a management or professional position, per white without tertiary education

Sources: October Household Survey and Labor Force Survey.
These results are consistent with the view that employment equity is thus more enforceable in the public sector. We also refer back to the observation in Chapter 5 that increasing proportions of degree-qualified, managerial and professional blacks are
working in the private sector. This chapter’s findings imply that the increasing proportion of blacks among private sector managers and professionals is due more to the growing supply of skilled persons than to selection processes favoring blacks. However, the generality of our findings omits important dimensions, especially the possible effect of qualitative differentiation in tertiary education. The better prospects for degree-qualified whites to attain private sector management and professional jobs may derive from differences in the quality of education not captured in the data. We are also unable to account for differences within the tertiary-educated black population, such as between HWI and HBI graduates.

6. 3. 2. Graduate unemployment and lateral mobility

We have found that degree qualifications enhance the prospects of attaining highly skilled occupations, and have taken this finding as an indication that affirmative action is making an impact on selection, particularly in the public sector. It is also important to consider the transition from tertiary education to labor market participation in a more general sense. The issues of graduate unemployment, and of qualitative differences between graduates that impact on ‘employability’, are integral to discussions surrounding affirmative action. Another related matter concerns the debate over lateral mobility of black skilled workers, purportedly due to the employment equity mandate which induces job-hopping and inflates bargaining power, especially in areas with skills scarcity. Data on unemployment and lateral mobility merit a specific discussion at this juncture.

South Africa’s unemployment rate is markedly differentiated by race and education level. As shown in Figure 6-7, the broad unemployment rate for the black labor force as a
whole is exceedingly high, although steadily declining from about 45 percent in the early 2000s to 40 percent by 2006. Unemployment in the white population was sustained in the 6-9 percent range, with slight variance between the diploma- and degree-qualified labor force. White degree holders register exceptionally low unemployment rates, of generally 2-3 percent, with an increase to 5 percent in 2006. Among diploma-holding blacks, unemployment is unusually high, persisting above 20 percent, although it drops between 2001 and 2004. Degree-holding blacks enjoy the most substantial decline in unemployment, from 15 percent in 2001 to 5 percent in 2006, which corresponds with a lower rate than the overall white unemployment rate from 2004 to 2006.

Figure 6-7. South Africa: Unemployment rate (broad), by education attained and race, and overall

Sources: October Household Survey and Labor Force Survey.

Clearly, degree-level graduates experience lower unemployment rates, and black degree-level graduates have realized the most gains in employment prospects in recent years. It is plausible, and generally posited, that qualitative differences between graduates
increasingly matter, particularly within the black population. The OHS and LFS datasets are unequipped to inform these matters; hence, we refer to studies that differentiate graduates by type of institution. Moleke (2005) reports on a survey of 2672 graduates regarding their employment experiences between 1990 and 1998. At a basic level, the occupational profile of graduates varies by race. Among whites, 22.6 percent were managers, 57.2 percent professionals, 4.4 percent supervisors, and 10.4 percent in administrative positions. Among Africans, 10.8 percent were managers, 59.9 percent professionals, 7.7 percent supervisors, and 13.1 percent administrators. A considerably larger proportion of white graduates are in managerial positions, and moderately larger proportions of black graduates hold supervisory and administrative jobs. However, a much higher share of African graduates secured their first job in the public sector – 76.7 percent, compared to 39.0 percent of white graduates. The survey also found major differences between graduates of historically white institutions (HWIs) and historically black institutions (HBIs) in the length of time taken to secure a job after graduation and in the share of unemployed (across all study disciplines), with HBI graduates registering slower transitions into employment.

As discussed in Chapter 5, black tertiary students in general, and African students in particular, record lower graduation rates and are over-represented in education, public administration, and humanities fields, while being under-represented in engineering and sciences. Differences in progress in these latter disciplines are even more acute, and must affect to some extent the suitability of graduates for labor market participation, particularly in specialized skilled occupations. The inter-racial gap is substantial in completion rates, but even greater in terms of length of time taken, which may partly
reflect disparities in aptitude. For example, Kraak (2004: 19) reports on engineering student progress rates, from a six-year longitudinal study conducted over 1995-2000. African and white students registered completion rates of, respectively, 55 percent and 75 percent. However, the percentage graduating within the minimal period was just 6 percent among Africans, compared to 51 percent among whites. The proportion graduating within six years was 41 percent for Africans and 72 percent for whites.

Employers’ assessments of graduates provide a window into the compatibility of tertiary education with the skills and capacities demanded of them. Griesel and Parker (2009) outline the findings of a survey of employers spanning the public sector and large companies in the private sector. The study was framed with the objective of evaluating the alignment of graduates’ capabilities against employers’ expectations. The pilot status and small sample (99 respondents) of the study are stressed; however, these preliminary findings are instructive and unsurprising. English proficiency and basic skills (technical abilities and computer literacy) are conspicuous areas of shortfall, in which African students are, presumably, more disadvantaged.

Scarcity of black graduates with in-demand skills, coupled with employment equity imperatives, has given rise to perceptions that job-hopping is more prevalent among black workers, who concomitantly command high wage premiums to be recruited or retained (e.g. SAIRR 2007a). Three studies shed some light, but the matter remains under-researched. First, Moleke (2005), drawing on the survey discussed above, finds a higher percentage of Africans still in their first job compared to whites. This outcome is significantly due to a higher proportion of Africans in the public sector, mostly teachers, who tend to retain their jobs over the long term. Nonetheless, the results do not support
generalized assessments about the incidence of job-hopping in the African labor force, while leaving open the possibility that highly-qualified Africans are exceptionally mobile. The survey, it should also be noted, was conducted before passage of employment equity legislation.

Second, and more recently, Khanyile and Maponga (2007) conduct a survey of professionals to investigate the contention of higher turnover among blacks. The sample comprises 2,000 respondents, the majority of which earn above R10,000 a month. They found that 52 percent of African respondents remained in the same company since starting their career, compared to 25 percent of white respondents. However, black professionals are more inclined to move, with 41 percent looking for another job, against 16 percent of whites. This survey also enquires, through discussions with groups of black professionals, the sources of job satisfaction and reasons for wanting to change jobs, finding that push factors – being denied responsibilities or appraised unequally – play a prominent role.

A third source of information addresses questions over staff turnover in the public sector. Computing public service payroll data, Naidoo (2008) reports high mobility rates in public services over 1998-2002, specifically at the senior management level. The high vacancy rate on average (22.3 percent in 2004-05) stems more from mobility than from creation of new posts, and most of the turnover involves internal movement – between departments within the public service\textsuperscript{137}. This lends support to the view that job-switching derives from competition between government departments to meet employment equity targets amidst a scarcity of qualified and experienced candidates.

\textsuperscript{137} For example, between 1998 and 2002, 91 percent of mobility of senior managers in national government occurred within the public services (Author’s calculation from Naidoo 2008: 120).
(Chipkin 2008). However, mobility of white managers is also high. Over 1998-2002, among senior management that changed job within national government, 46 percent were African and 40 percent white, both of which are close to the groups’ shares of employed senior management (Naidoo 2008: 120-121). High turnover in public sector employment correlates with employment equity and skills shortages, but, as the above surveys also suggest, appears to be part of more systemic and under-researched problems of workplace relations and combinations of push and pull factors.

6. 3. 3. Firm-level factors

The efficacy of South Africa’s employment equity regime largely hinges on the extent to which firms undertake affirmative action in their hiring, training and promotion decisions. Firm-level analysis can add some insight here. One set of studies worth reporting here survey black economic empowerment, of which employment equity and executive representation are elements relevant to this study. Schreuder, van Heerden and Khanya (2007), surveying compliance along the lines of the BEE codes and the seven BEE objectives, offers some useful information. The study finds generally low levels of engagement in BEE, with 39 percent of respondents reporting that they have neither made progress, or have not even formulated a plan for transformation. Small firms face greater difficulty or show more reluctance in pursuing BEE. The study also reports skills shortages, the existence of a small black elite, and high turnover as the most cited perceived impediments to BEE.

The survey evaluates firm performance relative to the BEE Code targets. Respondents fall short least of all in the ownership element of the BEE scorecard (60.3 percent of the
target level), ahead of skills development (43.8 percent) and employment equity (36.7 percent), demonstrating the primacy of equity transfers in practice and concentration of wealth under the auspices of BEE, but also some degree of involvement in preferential training, hiring and promotion of disadvantaged persons. At the same time, respondents on average performed poorly in the categories of preferential procurement and enterprise development, which pertain more to broadening of black ownership and participation in business. Other studies (e.g. Sanchez 2008) confirm the conspicuously slow progress of blacks in establishing and operating small and medium scale enterprises.

Mohamad and Roberts (2008) paint a sobering picture of BEE in their sector-specific survey. They sample 25 firms in metals and engineering industries, evaluating progress in three main areas of BEE: procurement, employment equity and skills training. They find limited or absent progress, with blacks continually excluded from decision-making positions, and concentrated in human resource or public relations departments. There is even a decline in black representation in top management in the sample. In addition, surveyed firms procured minimal technical or material products from BEE firms, and a number of transactions involved ambiguous or misleading classification of BEE status. On the whole, firm-level studies find progress of BEE in the private sector to be slow, and constrained by a range of factors.

6. 4. Inter-racial earnings inequality

Our baseline earnings regression consists of log earnings as the outcome, with age, gender, education, race, occupation, union membership, province, and industry as explanatory variables. We apply interaction terms of education and race, as we did in the
occupational attainment regressions (with whites without tertiary education as the reference group), as well as occupation and race (with white service workers as the reference group). We also estimate separate baseline regressions for black and white employed populations to observe dynamics of inequality within race groups.

From the baseline regression, we find that the rising trend in returns to degree-level qualification to be generally sustained, after controlling for other determinants. The increase in the adjusted earnings ratio of degree-holders to secondary school completers, which we observed in Chapter 5, holds, although the premium is flat over 1998-2004 before rising towards 2006, in contrast to the steadier rise in the raw, unadjusted ratio (Figure 6-8; see Figure 5-5). We obtain a slight narrowing of the adjusted racial earnings gap; on average, the black earnings “penalty” has declined across the labor market (Figure 6-9). We also test for structural difference in our earnings regression, and find grounds to run separate regressions for occupation groupings. The results, however, do not demonstrate any major difference in trends over time (See Appendix Figures 6-1 and 6-2).
The extent to which the above outcomes derive from affirmative action requires a closer observation of the policy’s target groups – blacks with degrees, blacks in management and professional positions. Interacting race and tertiary education on the full sample, we find substantial gains among degree-qualified blacks and degree-qualified
whites, relative to whites without tertiary education (Figure 6-10). By 2005 and 2006, degree-holding blacks were narrowing the gap with degree-holding whites, and earning more than or as much as whites with diploma, all else equal. The portion of earnings of diploma-qualified blacks that is explained by race and education, however, continues to trail that of diploma-qualified whites.

Figure 6-10. South Africa: Joint effect of race and education attainment on earnings, per white without tertiary education (adjusted for other determinants)

[Graph showing earnings over time for different education levels and races]

Sources: October Household Survey and Labor Force Survey.

In terms of inequality attributable to occupation, we observe a clear rising trend in the earnings premium for managers, holding all else constant (Figure 6-11). Professionals and technicians on average also see their relative earnings boosted, especially if we interpret the drop in 2006 as an anomaly, which is reasonable given the preceding upward trend. As we consider the joint effects of race and occupation, parameter estimates decline in statistical significance (Figure 6-12). We obtain a sporadic series showing that the earnings gap between white and black manager remains high, although it is possibly narrowing if we compare the large difference in 1998 with a smaller margin in 2004. The
differential between white and black professionals is high in the late 1990s and early 2000s, but narrows substantially by the mid 2000s, although this is very tentative given that the series, with three points, is even less complete.

Figure 6-11. South Africa: Effect of occupational position on earnings, per service worker (adjusted for other determinants)

Sources: October Household Survey and Labor Force Survey.

Figure 6-12. South Africa: Joint effect of race and occupational position on earnings, per white service worker (adjusted for other determinants)

Sources: October Household Survey and Labor Force Survey.
6. 5. Intra-racial earnings inequality

We noted in Chapter 5 the growing stratification within race groups, especially among blacks, along educational and occupational lines. After controlling for other determinants, earnings disparities based on education remain higher within the black workforce (Figures 6-13 and 6-14). The degree premium climbs from the early 2000s to the mid-2000s for blacks, and over a shorter interval (2004-2006) for whites. The difference between the raw, unadjusted earnings ratio and these regression coefficients is larger within the black population. In 2006, the raw degree-holder per secondary school ratio is 3.5 among blacks and 2.2 among whites (see Figures 5-6 and 5-7), whereas the adjusted ratio is about 1.8 for blacks and 1.6 for whites. Evidently, the large earnings differential within the black population is explained by other factors correlated with tertiary education, especially location and industry.

Figure 6-13. Blacks: Effect of educational attainment on earnings, per complete secondary school (adjusted for other determinants)

Sources: October Household Survey and Labor Force Survey.
We obtain similar results on inequalities due to occupational position. Within the black workforce, the adjusted earnings premium for managers rises steeply and reaches a higher level by the mid-2000s. The premium also increases within the white workforce, but by a smaller margin and at lower levels overall (Figures 6-15 and 6-16). The earnings premiums for occupying a professional position within both black and white populations rest between 1.4 and 1.6 relative to service workers, and indicate a possible upward trend between 2000 and 2005. As in the case of inequality by educational attainment, the raw earnings differentials between occupation groups are much higher within the black population, due to absence of controls for other determinants correlated with occupation, including unionization, industry and location. The unadjusted earnings ratio of managers to service workers in 2006 was 4.4 for blacks and 3.2 for whites, while that of professional per service worker was 3.7 for blacks and 2.5 for whites (See Figures 5-11 and 5-12). It is also worth noting that the adjusted relative earnings of white managers
chart an upward trend, in contrast to the fluctuating pattern observed in the raw manager to service worker ratio (Figure 5-15). Thus, the growing management premium is a trend that prevails within the employed populations of both race groups.

Figure 6-15. Blacks: Effect of occupational position on earnings, per service worker (adjusted for other determinants)

Figure 6-16. Whites: Effect of occupational position on earnings, per service worker (adjusted for other determinants)

Sources: October Household Survey and Labor Force Survey.
In sum, the black working population has become more stratified by education and occupation levels, and sustains larger disparities between these categories, compared to the white working population. However, and importantly, the premiums on higher education and upper occupations are much reduced once we control for other determinants, due in large part to differences between provinces, in which blacks are dispersed while the white population is concentrated in urban areas and major cities. We also note that over time, the premiums on degree qualification and managerial position have increased within both black and white employed populations.
6. Key findings and implications on affirmative action

Chapters 5 and 6 have presented assessments of the over-arching objectives of increasing black representation in tertiary education and upper-level occupations, and analyses of the determinants of these outcomes. First, we noted the expansion of access to tertiary education and entry into upper-level occupations for South Africans in general, and specifically for the black population. Public universities, in particular, have increased enrollment of blacks, and the proportion of the black employed population with tertiary-level qualifications rose steadily. Notwithstanding the gains, tertiary educated persons remain a much smaller proportion of the black workforce than the white workforce, and disparities persist in terms of inferior facilities, instruction and reputation of historically black institutions (HBIs), and in lower graduation rates among blacks, especially Africans. Black representation increased in professional positions but remained fairly constant in management. Blacks with tertiary-level qualifications, and blacks in management or professional positions, are more dependent, although perhaps decreasingly, on public sector employment. Affirmative action therefore appears to be progressing at a moderate but steady pace, while facing challenges in sustaining tertiary education quality and facilitating entry into upper-level occupations in the private sector.

Second, we evaluated the transition from tertiary education to employment. We found that degree-qualified blacks experience positive prospects of attaining managerial or professional jobs. Black degree-holders are more likely than white degree-holders to attain managerial or professional positions, ceteris paribus. These results differ between the public and private sectors, with degree-qualified blacks maintaining higher probability of being a manager or professional in the public sector, and the converse in
the private sector. These results concur with the view that the public sector remains the main locus of employment equity. Blacks constitute an increasing proportion of graduates and professionals in the private sector. Nonetheless, white graduates continue to face better prospects of attaining private sector management or professional jobs, which can partly be attributed to differences in quality of tertiary qualifications.

Another aspect of employment equity concerns the lateral mobility of highly qualified blacks, whose turnover is arguably augmented by the mandate to increase black representation amidst scarcity of highly skilled blacks. Available literature observes that job-hopping is more systemic than specific to black graduates or professionals, and that turnover in managerial ranks in the public sector is high for both blacks and whites. At the same time, it is plausible that qualified blacks in specific industries are highly sought out and may tend to change jobs more frequently. Data on this subject are sparse and the results tentative, but the widely documented problems of skills shortages (e.g. Kraak 2003 and 2008, SAIRR 2007b) underscore the assessment that, while employment equity has made an impact on black representation, it is facing supply constraints – and perhaps generating productive losses in terms of unfilled vacancies, high turnover, and other problems.

Third, this study computed inter-racial and intra-racial earnings gaps. We found that the overall white-black earnings ratio traced out a slight net decline over our time period. We observed more consistent and sizable decreases in inter-racial inequality among degree-holders and professionals. We followed up on these findings from Chapter 5 by estimating earnings regressions, in which the above patterns are sustained. The black earnings ‘penalty’ declines, after controlling for other determinants. More pertinent to
this study, we find that degree-qualified blacks close the racial earnings gap more substantially. Earnings regressions on separate racial populations compute the earnings premiums on holding a degree or on occupying a managerial or professional position, within black and white populations. We observe that premiums corresponding with degree-level education and upper-level occupations are higher and more substantially rising among blacks. Higher inequality within the black population is partly associated with gains accruing to affirmative action beneficiaries. However, a large portion of intra-black inequality corresponds with geography, industry and other sets of variables not related to affirmative action.

Our findings feed back into affirmative action in a few ways, of which four are salient. First, the amount and quality of tertiary education are both lacking, and these constraints may be augmented in the labor market by employment equity mandates. The supply of capable graduates has been lagging in general but more acutely in the black population, especially in technical and professional fields, while deficits in tertiary education quality and student performance disproportionately affect blacks, particularly Africans. The reputable standing of historically white institutions (HWIs) provides a base for uplifting black students through existing tertiary institutions, although challenges persist in terms of maintaining academic standards – especially in the context of implementation of employment equity in university staff – and in narrowing racial differentials in academic performance. For affirmative action to progress further, disparities between institutes and between students representing different race groups must be more rapidly redressed. It is becoming increasingly apparent that the emphasis of affirmative action should shift away
from escalating employment equity mandates, towards broadening access and improving the quality of education institutions.

Second, while we have found evidence of the efficacy of employment equity in raising the educational and occupational profile of the black population, this study has also surmised the significant risks and pitfalls of overly accelerating proportional group representation. Employment equity has been institutionalized in South Africa, on reasonable grounds. However, within its parameters, there is room for maneuver and discretion in policy implementation. The targeted result of increasing black representation in positions previously denied to them must be tempered by recognition of negative concomitants or misleading outcomes, including the promotion of persons to positions of responsibility they are under-equipped to handle, inflated premiums paid on account of scarce skilled blacks, as well as grievance of suitably qualified whites denied employment or promotion opportunities. Nonetheless, the net result stands, that the interracial earnings gap has narrowed consistently and substantially among the strata targeted by affirmative action – degree-qualified workers and professionals.

Third, the slower entry of blacks into managerial positions and relative dependence on the public sector for employment of blacks in upper-level positions, underscore the difficulties of cultivating an independent, self-sufficient and diverse managerial and professional class. Slow progress in raising black representation in management stems from an undoubtedly complex set of factors, including shortage of qualified and experienced black candidates, lukewarm commitment and structural impediments to transformation within firms, inadequate access to credit and lacking support for small to
medium enterprise, most of which are not directly deducible from our data. Nonetheless, these implications are important, and will be discussed in our concluding chapter.

Fourth, inequality has increased in South Africa, and within the black population, but the role of affirmative action policies in these outcomes is not clearcut. The raw earnings differentials between degree-qualified and less educated workers, and between managers and professionals and rest of the labor hierarchy, have widened considerably in South Africa, and by wider margins in the black employed population. The concentration of affirmative action beneficiaries in these categories enjoying faster earnings growth stirs criticism that the policy exacerbates the already high inequalities in South Africa. Our findings draw attention to the fact that black workers are more dispersed geographically, which entails that relatively larger proportions of the black population are located in provinces and industries offering lower average earnings. The beneficiaries of affirmative action are undeniably more likely than most workers to reap labor market rewards, but after controlling for these locational effects, the adjusted premiums paid on holding a degree or occupying a managerial or professional position cease to be exceedingly higher in the black population, and show parallel widening trends in the white population as well. In sum, affirmative action has coincided, and is to a significant extent correlated, with higher earnings inequality, but the causal relationship is more moderate than aggregated descriptive statistics suggest.
CHAPTER 7
CONCLUSION

This study grew from the premises that systemic disadvantage of a majority population group poses a profound national problem, and that efforts to redress such conditions are politically imperative. Colonialism in Malaysia and Apartheid in South Africa systemically excluded a majority race from the economic mainstream. In these countries’ respective post-colonial and post-Apartheid eras, persistent under-representation of the Bumiputera of Malaysia and blacks of South Africa in positions of social significance and economic influence induced Constitutional provisions and established policy platforms for affirmative action, buttressed by the political dominance of these groups. The majority-favoring, expansive and intensive character of affirmative action regimes in Malaysia and South Africa markedly distinguish them from the majority of countries implementing some form of AA.

We ventured to contextualize, compare and contrast the experience of these countries in their formulation and implementation of affirmative action. We have highlighted commonalities between both countries, but also recognize and appreciate their singular circumstances and the bounds to comparison. Accordingly, this study has sought to outline affirmative action programs and political economic contexts and to assess affirmative action outcomes of both countries independently as well as comparatively. This concluding chapter summarizes the major concepts and policies of affirmative action outlined in Chapter 2. We then condense, compare and contrast the main findings presented in Chapters 3 to 6. Finally, we discuss in comparative perspective the implications of our findings on affirmative action policies.
7.1. Summary of framework and country context

Chapter 2 set out our theoretical underpinnings and conceptual parameters, and surveyed the policy framework and political economic context of affirmative action in Malaysia and South Africa. We began with emphasis on the centrality of racial disparity and its roots in historical exclusion and discrimination, which fundamentally shape socio-economic conditions and policy priorities. Orthodox theoretical approaches, which assume market tendencies to eliminate discrimination and stress individual choice in accumulating human capital, are deeply flawed in their omission of deep-seated, structural disparities between population groups’ human development and their access to resources for socio-economic advancement. Inter-racial inequalities, and barriers to one group’s upward mobility, can perpetuate or fail to progress with sufficient pace and visibility under market self-regulation, particularly where the disadvantaged constitute a majority.

This study surveyed conceptions of affirmative action and discussed major contentious issues. Upon consideration of a sample of the literature, we arrived at a definition of affirmative action that accounts for both historical and continuing forms of group disadvantage and balances the broad scope with a specific justification. To reiterate, affirmative action in this study refers to “preferential measures to redress systemic disadvantages faced by a population group that is under-represented in socially esteemed and economically influential positions”. Affirmative action negotiates complex and contested issues, which we collated around three themes: market versus state solutions, race-based versus class-based policies, and the questions of merit, effort, efficiency, and dependency. After considering the conceptual debates and pragmatic constraints, we
found that race-based affirmative action, complemented by class- or need-based
distribution of benefits within the beneficiary group, offers a reasonably consistent and
practicable framework for coordinating a state-sponsored effort at redressing disparities
in group representation. Indubitably, racial preference comes with some pitfalls, chiefly
its potential to curtail effort, generate dependency on state protection and sponsorship,
and detract from equal opportunity to non-beneficiaries. Affirmative action, like any
developmental program involving a period of preference and protection, must balance the
positives against negatives and attain substantial progress that it may be scaled back or
reconstituted, and perhaps be dismantled.

We proceeded with an overview of affirmative action in Malaysia (See Table 2-4). The Constitution provides for reservation or quotas for Bumiputera, on the basis of their special position, in education, public sector employment and licensing. Bumiputera political dominance and preference has been institutionalized from Independence in 1957, underscored by the group’s stark under-development, and lack of geographical and social mobility. Affirmative action would momentously burgeon in scale and intensity from 1971, under the New Economic Policy. Concomitantly, the executive branch of government also expanded its discretionary authority. To increase Bumiputera access to education and upper-level occupations, Bumiputera-exclusive secondary and tertiary academies were established and enrollment quotas were introduced in public universities, while public sector employment was rapidly increased and inclined to hiring Bumiputera.

Toward the cultivation of a Bumiputera managerial and entrepreneurial class, Malaysia promoted state-owned enterprises and heavy industries, followed by massive privatization of state assets. The collapse of many privatized entities led to their
renationalization and reconfiguration as government-linked companies from the late-1990s, through which the government exerts influence through holding majority stakes. Licensing, contracting and public procurement have been continuously utilized to promote Bumiputera business. As noted above, most of these programs have operated on a discretionary basis.

In South Africa, the transition away from Apartheid posed exceedingly complex challenges, most pertinently, democratization, white dominance in every economic sphere, and the legacies of systemic discrimination and repression of the majority black population (See Table 2-5). The 1996 Constitution provides for measures that promote equality for persons disadvantaged by unfair discrimination. However, the magnitude of racial disparity and mass poverty, compounded by the concurrent demands to formulate a democratic constitution, to unify and restructure government, and to negotiate the tensions between equality and racial redress, placed constraints on affirmative action. In tertiary education, the racial redress mandate applied to increasing enrollment of black students in historically white institutions (HWIs) and narrowing the gap between HWIs and historically black institutions (HBIs).

On the employment and enterprise development fronts, a range of interventions unfolded. Landmark employment equity legislation was passed in 1998, encompassing both public and private sectors (except small firms), to spur growth in the proportions of suitably qualified blacks, women and disabled persons in positions where they are under-represented. Black economic empowerment (BEE) was formally initiated in the late 1990s, and gained momentum from 2003, with the passage of the Broad-based BEE Act. This provided a framework for leveraging government procurement, contracting and
licensing to induce firms to attain benchmarks in promoting blacks in ownership, managerial control, employment equity, skills development, and vendor/subsidiary development.

Chapter 2 concluded by discussing affirmative action policies and contexts in comparative perspective (See Tables 2-6 and 2-7). Malaysia’s institutional framework is characterized by the exercise of discretionary authority and *ad hoc* policies, consonant with the underlying assertion of Malay political power and consolidation of the executive branch of government. In contrast, South Africa followed a more formalized and statutory route anchored on laws, codes, and formal procedures, in line with the precedent set by the negotiated democratic transition and the new black-led government’s strategy of assuming a more conciliatory posture toward white interests, given their dominance across all economic sectors. These marked contrasts must be integrated into discussion on the mutual lessons of Malaysia’s and South Africa’s respective experiences with affirmative action.

Malaysia and South Africa adopted differing approaches to increasing Bumiputera and black tertiary education attainment. Malaysia rapidly expanded tertiary education provision and implemented enrollment quotas in public universities, while also creating a parallel system of secondary and tertiary institutions exclusive to Bumiputera. A substantial proportion of degree-level students, mostly non-Bumiputera, obtain degrees from private and overseas institutions. South Africa intervened to increase enrollment of blacks in historically white institutions (HWIs) and to bridge the gap between HWIs and systemically inferior historically black institutions (HWIs). Access to tertiary education has demonstrably increased. However, the disproportionate number of Bumiputera and
blacks in less well-regarded institutions, and the possible adverse consequences of their preferential selection into public universities, raise questions about long-term ramifications of affirmative action in tertiary education.

Measures for raising the occupational profile of affirmative action beneficiaries also differ between our two countries. Malaysia facilitated Bumiputera entry into managerial and professional positions principally through public sector employment, and did not institute any general regulation or policy impacting on composition of workforces in the private sector. South Africa legislated employment equity to compel affirmative action considerations across all sectors in hiring, training and promotion decisions. The public sector, falling directly under government oversight, expectedly executes employment equity to greater effect. However, the program faces the pitfalls of advancing the beneficiary group too rapidly or placing undue weight on racial representation, which can trigger a host of complications, including the hiring of under-qualified persons, as well as the grievance of overlooked candidates outside the designated group. Also, long-term dependence on this affirmative action instrument detracts from the original objective of developing self-sufficient professionals and managers.

The steepest challenge to affirmative action in Malaysia and South Africa resides in the quest to develop Bumiputera and black managerial and entrepreneurial involvement in the production of goods and services. Malaysia’s measures in this regard have been more aggressive, but the context has also been more conducive, given the large presence of foreign ownership, the established government influence over finance, and the availability of administrators trained in the civil service. Nonetheless, Malaysia has fallen short in its objective of cultivating a self-sufficient Bumiputera managerial and
entrepreneurial class. The challenges faced by South Africa were exceedingly greater, including high industrial concentration and powerful white-owned conglomerates, a hitherto white-dominated bureaucracy, lack of access to capital and severe shortage of administrative experience. These constraints notwithstanding, efforts to develop black enterprise have not met expectations. The checkered track record of both countries, pose serious questions on the feasibility and utility of this arm of affirmative action.

We also discussed cross-country empirical research of AA in Malaysia and South Africa. This study finds very little in the literature to draw on. Appraisals of Malaysia’s experience with redressing racial inequality are sparse, and tend to conflate affirmative action – programs specifically involving racial preference – with all redistributive institutions or the New Economic Policy. The generality partly stems from lack of access to education and labor market data and the consequent inability to observe outcomes directly associated with affirmative action. The vast bulk of research has inferred the role of affirmative action from household income data, the only available inter-temporal income series. Racial inequality in South Africa has been more widely studied; data access is unhindered. However, most research observes inter-racial inequality in highly aggregated terms, or focuses on measuring notional discrimination through decomposition exercises. This study thus aims to contribute to the field by informing the
dimensions of inequality directly relevant to affirmative action – racial representation and racial earnings disparities among tertiary educated workers and in the upper occupational rungs.

7. 2. Findings in comparative perspective

Chapters 3 to 6 reported our findings of racial inequality pertaining to affirmative action. Table 7-1 condenses the key points and places them in comparative perspective. Variations in data availability and quality restrict the comparability of findings between Malaysia, which tightly controls access, and South Africa, which allows freer informational flow.

Table 7-1. Malaysia and South Africa: Key findings in comparative perspective

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary education</td>
<td>•Rapid expansion of enrollment; Malay attainment on par with Chinese, but non-Malay Bumiputera lagging</td>
<td>•Steady expansion of enrollment; black – especially African – attainment lag remains considerably large, but closing</td>
</tr>
<tr>
<td></td>
<td>•Bumiputera mostly in local public institutions, substantially enrolled in Bumiputera-exclusive programs</td>
<td>•Increase in black representation in historical white institutions (HWIs)</td>
</tr>
<tr>
<td>Facilitation of graduates into upper-level occupations</td>
<td>•Increase in unemployment rate among degree-qualified and young Bumiputera</td>
<td>•Decline in unemployment rate among degree-qualified blacks</td>
</tr>
<tr>
<td></td>
<td>•Bumiputera graduates are more dependent on public sector employment</td>
<td>•Black graduates are more dependent on public sector employment</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------------------</td>
<td>---------------------------</td>
</tr>
</tbody>
</table>
| **Facilitation of graduates into upper-level occupations** | ▪ Differences in quality of degree-level qualifications are consequential  
▪ Bumiputera public university graduates face lesser prospects of attaining managerial or professional positions in private sector; Bumiputera overseas graduates face good prospects of attaining a professional position in the private sector | ▪ Differences in quality of degree-level qualifications are consequential  
▪ Blacks with degrees face slightly better prospects of attaining managerial or professional jobs in the public sector, lesser prospects in the private sector  
▪ Disparities between graduates of HWIs and HBIs |
| **Tertiary education earnings premium**      | ▪ Decline in premium on degree-level qualifications  
▪ Larger decline for young workers overall, Bumiputera and Indian workers possibly affected worse | ▪ Increase in premium on degree-level qualifications, especially within black population  
▪ Declining black-white earnings disparity among degree-holders |
| **Representation in upper-level positions**  | ▪ Almost no change in Bumiputera representation at management and professional levels | ▪ Increasing black representation among professionals, unclear patterns at managerial level |
| **Managerial/professional earnings premium** | ▪ Increasing premiums, but racial aspect is indeterminate | ▪ Increasing premiums, especially within black population  
▪ Possibly declining black-white disparity |
| **Enterprise development**                  | ▪ Substantial Bumiputera participation in operating government-linked companies  
▪ Shortage of Bumiputera participation across industries and in SMEs | ▪ Substantial black participation in operating public enterprises  
▪ Shortage of broad black participation across industries and in SMEs |
7. 2. 1. Tertiary education attainment and racial earnings inequality

Bumiputera in Malaysia and blacks in South Africa have made substantial progress in expanding tertiary education access and in raising the proportion of their workforces that have attained tertiary, especially degree-level, certification. However, disparities persist within the beneficiary group; the attainments of non-Malay Bumiputera in Malaysia and Africans in South Africa are lagging.

We note a contrast in the inter-temporal unemployment rate of the tertiary educated labor force, which increased from the mid-1990s to the mid-2000s among Bumiputera in Malaysia, but decreased among degree-qualified blacks in South Africa. For Malaysia, we deduce that declining quality of graduates significantly accounts for the increase in the unemployment rate of the tertiary educated Bumiputera labor force. In South Africa, expansion of access for blacks to tertiary institutions, especially reputable HWIs, coupled with employment equity legislation, correspond with the decreasing unemployment rate of the black degree-qualified workforce. These processes are, of course, more complex, as discussed in the next section.

The earnings premium for holding a degree, over the time period of this study, declines in Malaysia but rises in South Africa. We are unable to directly evaluate the correspondence of race with this trend in Malaysia. However, we find that the decrease in the degree premium is consistent and substantial among young workers (below 30 years). The relatively higher unemployment rate of tertiary educated Bumiputera, especially non-Malay Bumiputera, as well as reported deficiencies in the capabilities of local public university graduates, suggest that young Bumiputera graduate-qualified workers may have experienced a relatively greater decline in their earnings capacity. In marked
contrast, degree-qualified blacks in South Africa have seen a steady increase in their earnings premium, and a narrowing of their earnings gap relative to white degree holders. Growing black representation thus corresponds with declining inter-racial inequality among graduates in the employed population.

7. 2. 2. Racial representation and earnings differentials in upper-level positions

Malaysia and South Africa have raised representation of the designated group in targeted occupation groups, more sizably in professional positions than in management. Unsurprisingly, the challenge of cultivating a managerial class proves most difficult. In Malaysia, Bumiputera representation in professional and technical occupations increased considerably over the 1970s and 1980s, but slowed down in the 1990s and registered little change between the mid-1990s and mid-2000s. In managerial positions, the Bumiputera share has consistently been lowest compared to other occupation groups, and only marginally increased between the mid-1990s and mid-2000s. In South Africa, black representation in professional occupations rose steadily from the late-1990s to the mid-2000s. Statistics on the proportion of blacks among managers vary by source, but on the whole indicate little progress in increasing black representation. Both countries have also relied on the public sector to increase Bumiputera and black proportions at managerial and professional levels. Although South Africa’s employment equity law encompasses all sectors, it has expectedly been enforced more extensively in the public sector.

A crucial element in affirmative action, where education and employment policies merge, is the facilitation of graduates into upper-level occupations. We find that in both countries, holding a degree on average increasingly augments the likelihood of attaining a
managerial or professional job. The racial aspect is more complex. We are able to account for race in Malaysia using census data only for the year 2000. We find that, across the employed population, Bumiputera in Malaysia are slightly less likely to be employed as a manager or professional. Being black in South Africa corresponds with a considerable negative probability of attaining these positions. These differences partly reflect the further progress of affirmative action in Malaysia – with over 30 years of implementation – compared to its relative incipience in South Africa.

However, it is more germane and important to compute these job attainment probabilities with race and education interacted, specifically to compare degree-qualified AA beneficiaries against degree-qualified non-beneficiaries, and with the outcome bifurcated into public and private sector, given the differences in operation of AA across sectors. Where possible, we also pursue ways to observe the effects of qualitative differences in education received. In Malaysia, we observe variations in occupational prospects between Bumiputera and non-Bumiputera graduates of institutions differentiated by location. Bumiputera graduates of local public institutions are more dependent on the public sector for attaining managerial or professional jobs. Non-Bumiputera graduates of overseas institutes face significantly better prospects of being a manager or professional in the private sector. Notably, Bumiputera graduates of overseas institutions are more likely than Bumiputera graduates of local institutions to attain private sector professional jobs. In South Africa, we find that black degree-holders are more likely than white degree-holders to attain managerial or professional positions in the public sector, and the converse for the private sector. Thus, dependence on the public sector for occupational advancement of the beneficiary group holds in both countries.
These findings imply that selection processes and institutional quality have an effect on occupational outcomes. Bumiputera studying abroad – largely on publicly funded scholarships – are presumably assessed more stringently, while many enter domestic universities and colleges through programs exclusive to, or accessible predominantly to, Bumiputera. Along these lines, we note that Bumiputera graduates of public university are substantially less likely than non-Bumiputera graduates of public university to attain management or professional positions in the private sector. In South Africa, labor force data do not provide any means for qualitatively disaggregating graduates. Nonetheless, other surveys have found differences between graduates of HWIs and HBIs, with the latter generally faring poorer in the labor market.

Management and professional earnings premiums have risen in both countries. We lack data to make any inferences on racial inequality within these occupation groups in Malaysia. In South Africa, we find some indication that the black-white earnings gap declines within these occupations, albeit with considerable fluctuation attributable to small samples, while in other occupations we observe the inter-racial gap to increase or indicate no particular trend. Employment equity likely magnifies the bargaining power of black managers and professionals.

One likely corollary of this phenomenon is higher lateral mobility among black managers and professionals, whose labor demand is amplified by the scarcity of skilled and capable graduates, especially in specialized fields. We considered available surveys and studies addressing the argument that black professionals are more mobile due to employment equity. While relatively rapid turnover and inflated premiums surely occur to some extent, existing – albeit limited – empirical research finds mobility to be high
across all race groups, in both private and public sectors. The bargaining power of highly qualified blacks may be augmented in specific sectors where the scarcity is especially acute, although available research has not provided this level of detail. The problems surrounding high mobility are also more complex and heterogeneous, encompassing both pull factors (e.g. better job offers) and push factors (e.g. workplace relations).

7. 2. 3. Managerial and enterprise development

Our investigation of this branch of affirmative action – i.e. increasing the participation of the disadvantaged group in managerial and executive positions involving production of goods and services – is less substantive and more indirect, due to this study’s omission of the ownership dimension of affirmative action. Nonetheless, this subject is relevant to our assessment of racial representation in management on the whole. We find that Bumiputera and black representation, in Malaysia and South Africa respectively, are lowest at the managerial level, and that a large proportion of these are working in government-linked companies (in Malaysia) and public enterprises (in South Africa), and presumably in large, foreign-owned corporations as well. However, participation remains low on the whole, and especially in small and medium-scale enterprises (SMEs).

7. 3. Implications on affirmative action in comparative perspective

7. 3. 1. Constitutional foundation and conception of affirmative action

An exceptionally distinguishing feature of affirmative action in our two countries is the fact that their respective founding Constitutions set out the justification and scope of
affirmative action. These provisions manifest the political imperative of redressing racial economic disparities, while at the same time delimiting the concept of affirmative action. Malaysia and South Africa differ in their constitutional foundations for affirmative action. Malaysia’s Constitution stipulates safeguarding Bumiputera “special position”, while South Africa’s Constitution premises its provision for measures to protect or advance persons on their disadvantaged position due to unfair discrimination.

These Constitutional provisions present two weighty implications. First, affirmative action is often seen as permanent and inexorable, although the scope and duration are, literally, not unlimited in both Constitutions. In Malaysia, measures to safeguard Bumiputera special position are issued not as a mandate in absolute terms, but as something to be prosecuted “as may be necessary”. South Africa’s legal basis for AA is judiciously worded to incorporate the incidence of disadvantage, which, if it is being redressed, must be waning. Thus, in both countries, the Constitution authorizes the pursuit of AA, but not necessarily its perpetuity. Of course, political interest and societal inertia will resist efforts to scale back preferential measures. Emphatically, the second major implication of constitutional provisions for affirmative action is the paramount role of political leadership and societal change in shifting away from viewing such policies as permanent and unbounded, and to initiate processes of reduction and reform.

The manner in which beneficiaries are designated is also problematic in two important ways. First, the specification of one group excludes or supercedes other groups. This applies saliently to the Indian population in Malaysia, who have historically been marginalized and continue to lag in access to opportunities for advancement. Although South Africa’s classification of persons disadvantaged through unfair discrimination
subsumes blacks, women and disabled persons, race effectively supersedes the other categories. Second, the institutionalization of preference can breed a sense of entitlement, and can be distorted to disproportionately benefit particular ethnic or other sub-groups within the designated group. Unequal distribution of benefits among those equally classified as beneficiaries is documented in Malaysia, between Malay and non-Malay Bumiputera, and is perceived to occur in South Africa within the composite classification of black persons, i.e. between Africans, Coloreds, and Indians, and between ethnic groups that fall under the African category. These inequalities underscore the importance of incorporating progressive and egalitarian elements into the distribution of benefits. Again, political will is pivotal to engender changes that ultimately make affirmative action constructive, equitable and impermanent.

7. 3. 2. Affirmative action regime: Discretionary versus statutory authority, centralized versus decentralized political structure

This study’s outline of overarching political economic regimes for affirmative action – and for economic policy overall – has drawn attention to some generalized institutional contrasts: Malaysia’s exercise of discretionary and centralized authority, against South Africa’s deployment of statutes and codes in a more decentralized political structure. These differences impact on the suitability and feasibility of mutually deriving lessons from the other’s experience. The relative degree of centralization and emphases on modes of state authority are products of political moments and precedents that maintain their trajectories, specifically, the consolidation of state power from the early 1970s, in the wake of the 1969 political crisis in Malaysia, and the negotiated transition to a
democratic and neoliberalism-oriented South Africa that started in the 1980s and solidified in the mid-1990s.

The differences in overarching political economic regimes circumscribe the compatibility of policies with country-specific contexts. Malaysia preceded South Africa chronologically and advanced further in redressing racial disparity. Research on these countries has typically positioned Malaysia as a case study for South Africa to emulate or avert, with no consideration of the converse. We will discuss affirmative action designs and outcomes in the following section. The point to be stressed here is that South Africa’s affirmative action regime, being embedded in a democratic system with more balanced legislative and executive influence, offers pointers for Malaysia to draw on, in light of shortfalls in policy attainments arising from the latter’s executive-dominant system.

Of course, these generalized implications differ across socio-economic spheres. In the education sphere, Malaysia intervened more aggressively to expand Bumiputera access, through centrally administered public university quotas and creation of racially exclusive institutions – i.e. mechanisms incompatible with conditions in South Africa. However, university autonomy in South Africa, which devolves oversight of AA to institutes, offers valuable insights to Malaysia, in light of the problems with the transition of public university graduates to the labor market. To cultivate a managerial and entrepreneurial class, Malaysia also intervened more extensively, with takeovers of some large foreign companies, massive establishment of state-owned enterprises and heavy industries, to privatization and public enterprises. The clash between the state-centricity of these programs and South Africa’s safeguards on private capital primacy and mobility render the policies institutionally incompatible. Malaysia, having implemented its system of
procurement, licensing and contracting without clear and transparent guidelines on the
terms of engagement and monitoring, can potentially benefit from some form of
codification of incentives and rules. At the same time, the processes of formalization and
codification may be insufficient to generate and coordinate productive activities, which
historical experience has shown to depend to some extent on an active “developmental
state” – a concept that characterizes Malaysia more than South Africa.

In the employment sphere, South Africa might by virtue of its broad statutory
framework for employment equity be perceived as presenting options for Malaysia,
which lacks such legislation. However, various conditions in Malaysia arguably preclude
employment equity laws, including the tremendous quantitative gains in Bumiputera
occupational mobility, lack of past systemic discrimination against Bumiputera, and
longstanding Bumiputera dominance in the public sector. Nonetheless, a policy of
reversing non-Bumiputera under-representation in the public sector might set a precedent
for policies that pursue equitable representation, perhaps by leveraging public sector
procurement, contracts and licensing to induce multi-racial participation and
collaboration.

7. 3. 3. Potential, limits, and pitfalls of affirmative action

7. 3. 3. 1. Tertiary education

In the education realm, we document substantial quantitative gains made under
affirmative action programs in Malaysia and South Africa. We also find indications that
qualitative aspects of tertiary education differentiate graduates’ prospects of upward
mobility, and that affirmative action may have adverse side-effect on its beneficiaries in
this regard. The scope for expansion of tertiary enrollment and mechanisms for redistributing opportunities are broader and simpler, and hence potentially more quantitatively attainable, as evidenced by the increases in the proportion of graduates in the Bumiputera and black workforces.

However, while affirmative action programs can increase numerical growth in the degree-qualified labor force, it does not necessarily improve – and may well compromise – education standards. The experience of Malaysia demonstrates the possible adverse effects of preferential treatment on academic outcomes, although the extent this is due to quality of instruction, selection procedures, or student effort remains to be determined. The lesser employment prospects of Bumiputera public university graduates and dependence on the public sector arguably derive from the effects of enrollment quotas and racially exclusive programs, coupled with extensive scholarships to study abroad, on buffering AA beneficiaries from more competitive settings and depriving local public institutions of capable students.

Malaysia needs to seek out solutions to the problems of its public universities, while South Africa should take note to avoid the pitfalls perceptible in the Malaysian education system, especially the perpetuation of a parallel system for AA beneficiaries. South Africa has indeed reconfigured the tiered structured inherited from Apartheid and formally phased out the HWI/HBI distinction. However, many institutions are overwhelmingly black, and should their quality gap vis-à-vis the leading and more integrated institutions persist or widen, it will be continually difficult to attain the further objective of cultivating self-sufficient black professionals, managers and enterprises.
Unquestionably, disparities among graduates are substantially carried forth from the preceding stages of education. Deficiencies in primary and secondary schooling feed into tertiary institutions, which may raise contentions that countries should close these gaps in schooling standards and eliminate any policies that strive for an equitable racial representation in universities. This study maintains that narrowing disparities in schooling is a pre-requisite for redress, whether or not there is affirmative action, and hence serves as a complement, not a substitute, to affirmative action in tertiary institutes. Technically, universities can apply simple procedures to make entry contingent on meeting qualifying thresholds. Of course, resistance to such policy, which moderates the pace of promotion of the disadvantaged group, can be immense and politically motivated. Nonetheless, the importance of integrating school-leaving cohorts with university entrants is highly important, especially in South Africa, which has recorded some exceedingly low basic competency among secondary school leavers.

A number of other considerations are worth a brief mention. As mentioned in the previous section, Malaysia and South Africa operate contrasting mechanisms for affirmative action. In light of the higher standing of South African universities, its setup of autonomous universities and devolved affirmative action seems to offer constructive insights into managing the dual objective of facilitating equitable representation while maintaining academic standards. Another confluence of objectives – targeting the neediest within the designated race group – finds its most potent instrument in tertiary education. The assessment of entry into university can take family background into consideration much more than we can expect of hiring or promotion decisions. The extent to which tertiary education serves to bridge both racial and class divides, of course,
depends on the distribution of benefits. The more progressive it is, the more it facilitates vertical mobility. Scholarship and financial aid data, however, indicate that this aspect of redress is not performing as well as desired. A further challenge concerns the lack of Bumiputera and black enrollment in specialized technical and professional fields. These outcomes demonstrate the need for the affirmative action policy process to assess specific shortcomings, besides tracking group representation on the whole.

7. 3. 3. 2. Employment in upper-level occupations

On affirmative action in the labor market, this study finds, as expected, that the public sector plays a prominent role. In Malaysia, this follows directly from the confinement of affirmative action in employment to the public sector. In South Africa, although employment equity mandates apply to both the public sector and private sector, upward occupational mobility for blacks has proceeded further in the former. Malaysia’s policy has engendered Bumiputera over-representation, exceedingly little interest in government jobs among non-Bumiputera, and continual dependence on government to absorb Bumiputera graduates into technical and professional positions. The case can be made for

138 In Malaysia, available, albeit dated, research shows a disproportionately small segment of scholars coming from poor families (Mehmet and Yip 1985). South African tuition fees increased 93 percent between 2000 and 2004, while National Student Financial Aid Scheme (NSFAS) allocations increased by just 48 percent. This lag in financial aid attenuates tertiary education opportunities disproportionately for students of low-income families (Breier and Mabuzela 2008: 290).

139 In South Africa, among accounting majors, 2.2 percent were African, 1.1 percent colored, 5.6 percent Indian, and 88.8 percent white in 1991. By 2001, these shares were 9.0 percent African, 2.7 percent colored, 9.7 percent Indian, and 76.5 percent white. Private sector programs have been initiated to address these racial disparities, but their impact is necessarily limited, while shortfalls in the public higher education and training system persist (van Zyl 2008: 379-383).

140 Applications for jobs by non-Bumiputera have dwindled over time to miniscule proportions; in 2006, 1.8 percent of applications were from Chinese, and 2.5 percent from Indians (Public services department Director-General, cited in The Star December 25, 2007).
reorienting public sector employment policy towards a more balanced racial composition, through inducing more interest and hiring of non-Bumiputera and aligning upper-level occupations and administrative positions closer to proportional representation. This can also lay foundations for initiatives to increase Bumiputera representation outside the public sector. Although hiring mandates on a national scale are difficult to envisage in Malaysia, as noted in the previous section, variations of employment equity may be adopted into public procurement and other public-private sector transactions.

The implications of affirmative action in the labor market along the lines of South Africa’s employment equity laws warrant critical evaluation. Employment equity is fraught with many difficulties, yet it is harder to pose the counterfactual and to envisage markets more vigorously redressing systemic disadvantage. At a fundamental level, this endeavor to obligate profit-seeking firms to comply with a social purpose entails real costs, and will be met with some reluctance or indifference. In the late Apartheid period, some companies increased hiring of blacks in supervisory and managerial capacities, due in part to scarcity of white skilled workers and to political pressures, but this amounted to a rising color bar that rarely breached middle management. Given the precedent, it is doubtful that black upward mobility would advance robustly, even under the increased scrutiny and moral suasion of the post-Apartheid milieu.

However, execution of employment equity through a monitoring and punitive system has its limits. Alongside the statistical objective of increasing representation of disadvantaged groups, the program strives for workplace transformation and cross-racial interactions. The law cannot intervene to force meaningful racial integration, and compelling firms to hire more blacks may soften or harden racial perceptions and
stereotypes. These dilemmas cannot be resolved simply, but must be acknowledged as part of the package of potential and limits of employment equity.

Employment equity also faces immense practical challenges. Credibility and efficacy of government oversight hinges on informational, monitoring and enforcement capacity. However, the relevant government departments lack substantive data and analysis to inform target-setting, to adjudicate compliance and to punish non-compliant firms. Information is most acutely lacking on the crucial issues of labor market discrimination and scarcity of skills and suitable qualifications. South Africa’s law stipulates preferential selection of blacks, women and the disabled, contingent on the availability of ‘suitably qualified’ persons of those designated groups. Much debate surrounds the interpretation of this term, specifically over employers’ claims that formal certification does not suffice to reflect actual capabilities and hence to merit being ‘suitably qualified’. The evidence we have compiled showing the importance of tertiary education quality substantiates the insufficiency of looking solely at paper qualifications in assessing the availability of persons from the disadvantaged group for entry into upper occupational echelons.

The capacity to increase representation of disadvantaged persons in upper-level occupations hinges on the availability of capable tertiary educated workers, particularly in specialized fields. In the same way that affirmative action in tertiary education is constrained by the breadth and capacity school-leaving cohorts, affirmative action in employment can only effectively proceed apace with the growth of suitably qualified
persons of the designated group. In both our countries, many of the technical and professional fields with severe under-representation are highly specialized\textsuperscript{141}.

The above challenges and dilemmas notwithstanding, affirmative action has coincided with increased black entry into positions previously denied to them, and has discernibly played an important part in compelling employers to hire or promote blacks who would otherwise be overlooked, as well as to absorb some training and other transitory costs that would otherwise be avoided. Its implementation, however, can be fine-tuned. As a salient example, the official targets for black representation, notably in public sector management, have been exceedingly ambitious, and often detached from objective assessment of the supply of suitably qualified black candidates. Employment equity targets tend to outpace the supply of capable graduates, leading to hiring or promotion of formally credentialed but practically under-qualified personnel. Pressures to accelerate transformation in South Africa must therefore be tempered with the realities of lagging supply of skilled and experienced labor, and with the realization that effectual and sustainable occupational mobility takes time.

In sum, our findings demonstrate that the potential for increasing the proportion of blacks where they are under-represented, especially outside the public sector, rests more with developments in education than with employment equity legislation. Both countries stand to benefit from shifting the emphasis of affirmative action from representation in occupations and ownership, towards broadening participation and improving the quality of education institutions. Moreover, the racial earnings disparity in South Africa narrows

\textsuperscript{141} In Malaysia, Bumiputera representation was markedly low in 2005 among professionally registered accountants (20.8 percent), doctors (36.7 percent) and lawyers (38.0 percent). For corresponding data on South Africa, see footnote 2 above.
more consistently and substantially among degree-holders than among managers or professionals.

7. 3. 3. 3. Managerial and enterprise development

The development of a managerial and entrepreneurial class has proven most difficult among affirmative action efforts in both Malaysia and South Africa. Government-linked companies in Malaysia and public enterprises in South Africa continue to be assigned the tasks of employing and training managers and professionals, and of applying racial preference to procurement and contracting decisions. Due to their limited scale and concentration in public monopolies, the capacity for state-owned entities to cultivate an independent and broad entrepreneurial class is quite circumscribed.142

Allocation of government procurement, licensing and contracting constitutes another instrument for developing entrepreneurial capacity. Malaysia’s procurement scheme has operated within an opaque scheme with ownership as the decisive criterion, while South Africa’s formalized BEE regime technically provides incentives for firms to compete, with greater transparency, in terms of advancing black interests on a range of fronts. The pitfalls in these schemes can be immense, especially where lucrative contracts and fast windfall profits are at stake, and are compounded by corruption and dearth of regulatory oversight that have come to the fore in both countries. Fronting, rentier behavior, political patronage and graft, which are documented or perceived to be rife, demonstrate

142 The capacity for South Africa to emulate Malaysia in developing a managerial class through state-owned or state-affiliated companies is also constrained by certain factors, notably the existence of a bureaucratic elite in Malaysia that transferred skills acquired in public administration to management in the corporate sector in the 1980s and 1990s, notably in plantation companies, banking, and privatized entities (Southall 1997: 23).
the checkered track record of these schemes and highlight the imperative of transparency and integrity in governance.

This branch of affirmative action remains a vast and largely under-studied field, one that is also inextricable from the issue of capital and wealth ownership that this study has not empirically investigated. Much more information and analyses is required to formulate substantive policy considerations. However, it is patent enough that affirmative action in cultivating enterprise must be pursued with caution and restraint, especially to avert being vitiated by unproductive wealth accumulation and political patronage (Jomo 2004, Southall 2005). The principle of proportional representation is also highly problematic. The adverse consequences of executing preferential policies until the designated group owns a share of wealth proportionate to its share of the population are conceivably more severe than the pursuit of group representation in education and employment. In this light, a case can be made for rolling back preferential policies upon attaining a sufficient level of representation of the disadvantaged group – a benchmark subject to debate and compromise – instead of strictly proportionate ownership.

7. 3. 3. 4. Overall regime of affirmative action

It is worth reemphasizing that historical and country-specific contexts of deep-seated and self-perpetuating inequalities gave rise to the political imperatives driving affirmative action. The initial and continual problems are far more vast and complex than we have managed to address in this study. The list of such contentious yet under-researched subjects is long, but most saliently includes labor market discrimination, impacts of affirmative action on quality of education, effects of employment equity on migration and
alienation of whites and on devaluation of achievements of blacks, benefits of racial diversity in workplaces, multiplicity of barriers to Bumiputera/black enterprise (access to capital, skills shortage, inadequate experience, etc.). More empirical scrutiny of these topics will broaden and enrich our understanding of affirmative action and its potential, limits and pitfalls.

All in all, however, this study’s conception and findings are adequate to lay out a few principles for undertaking affirmative action, particularly where it favors a majority group:

1. Affirmative action foundations and policies must be precisely conceptualized and formalized, to avoid being conflated with general problems of inequality and redistributive policies.

2. Schedules for advancing representation of the beneficiary group must be gradual and prudent, balancing political imperatives for rapid change against the limits set by prevailing levels of socio-economic development. Allocation or target-setting of positions in tertiary education and upper-level occupations should correspond with the availability of candidates with appropriate qualification or capacity to progress.

3. Distribution of affirmative action benefits must be conducted in an equitable manner, to facilitate inter-generational class mobility and to expand beyond middle- and upper-class households who are best positioned to reap the opportunities.

4. While affirmative action makes quantitative progress, tendencies for declining standards must be mitigated so that differences in capability do not become a source of disadvantage to beneficiaries, notably the potential adverse effects of preferential
selection through stifling tertiary education performance or hiring effectively under-
qualified persons.

5. Affirmative action must be implemented with a timeline or benchmarks for it to be
scaled back, perhaps to be reduced and reconstituted as programs promoting racial,
gender and other forms of diversity\textsuperscript{143}.

The fifth and final principle is undoubtedly the most difficult, yet it is crucial and
perhaps decisive. Institutionalized policies favoring a majority group are seemingly
immutable, as demonstrated by Malaysia’s near four decades of implementation and
continued ambivalence towards dismantling racial preference. However, the perpetuation
of programs that this study finds to have lost momentum also underscores the imperative
of executing affirmative action effectively and of laying out plans for eventual
reconstitution or removal. This process requires transformations in the political
imperatives – and vested interests – driving affirmative action that lie beyond the scope
of this study. More pertinent to our consideration, and to the present context of Malaysia
and South Africa, is the onus on affirmative action to sufficiently consolidate the
economic security of the disadvantaged group, which is imperative for future political
settlements around fundamental change or elimination of programs.

\footnote{The orientation and overarching purpose of affirmative action has generally not occupied a prominent space in public and academic discourses, although it can affect the design of policies and their effects on social relations. One noteworthy approach distinguishes between affirmative action that is primarily concerned with compensation for past discrimination (backward looking), correction of ongoing discrimination (present looking), or diversification and multiculturalism (future looking) (Tierney 1997, Dupper 2005).}
APPENDIX 1

CONSTITUTIONAL PROVISIONS FOR AFFIRMATIVE ACTION

Federal Constitution of Malaysia

Article 153.

Reservation of quotas in respect of services, permits, etc., for Malays and natives of any of the States of Sabah and Sarawak.

1. It shall be the responsibility of the Yang di-Pertuan Agong to safeguard the special position of the Malays and natives of any of the States of Sabah and Sarawak and the legitimate interests of other communities in accordance with the provisions of this Article.

2. Notwithstanding anything in this Constitution, but subject to the provisions of Article 40 and of this Article, the Yang di-Pertuan Agong shall exercise his functions under this Constitution and federal law in such manner as may be necessary to safeguard the special position of the Malays and natives of any of the States of Sabah and Sarawak and to ensure the reservation for Malays and natives of any of the States of Sabah and Sarawak of such proportion as he may deem reasonable of positions in the public service (other than the public service of a State) and of scholarships, exhibitions and other similar educational or training privileges or special facilities given or accorded by the Federal Government and, when any permit or license for the operation of any trade or business is required by federal law, then, subject to the provisions of that law and this Article, of such permits and licenses.
Constitution of South Africa

Article 9. Equality

1. Everyone is equal before the law and has the right to equal protection and benefit of the law.

2. Equality includes the full and equal enjoyment of all rights and freedoms. To promote the achievement of equality, legislative and other measures designed to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination may be taken.

3. The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth.

4. No person may unfairly discriminate directly or indirectly against anyone on one or more grounds in terms of subsection (3). National legislation must be enacted to prevent or prohibit unfair discrimination.

5. Discrimination on one or more of the grounds listed in subsection (3) is unfair unless it is established that the discrimination is fair.
APPENDIX 2

TERMINOLOGY OF AFFIRMATIVE ACTION IN SOUTH AFRICA

South Africa’s affirmative action discourse is not only complex in the problems and inequities needing redress, but also in the varieties of definitions and institutions. The most common approach restricts AA to interventions that redress past unfair discrimination in employment, perhaps stemming from the intensity of discriminatory laws in the labor market, the routine incidence of white-black hierarchy and conflict in the workplace, and the immediate availability at the transition of qualified blacks previously denied advancement. Early- and mid-1990s discourses on affirmative action were heavily focused on past discrimination in labor market relations (Nzimande and Sikhosana 1996). Chapter 3 of the Employment Equity Act, which carries the heading ‘Affirmative Action’, outlines the hiring regulations designed to increase access of historically disadvantaged persons to positions in which they are under-represented. Employment equity is indisputably an AA program. However, AA as conceptualized in this study is not confined to employment equity.

Black Economic Empowerment, as a program for redressing systemic disadvantage, also fits within our rubric of AA. However, BEE is often differentiated from AA/employment equity, whether due to ideological connotations of the term, or to dissociate BEE from AA as practiced in other countries, or to distinguish BEE as a larger program than employment equity. While these distinctions are valid, they do not detract from the relevance and sufficiency of subsuming BEE as a broad AA program dealing with historical inequalities, especially in capital ownership and executive control, which employment equity does not directly impact on. In this regard we are in agreement with
Constitutional Court justice Sachs (2007), who maintains BEE as a subset of affirmative action.

Transformation and redress are broader terms denoting the processes of correcting inequalities and injustices of the past, including but not limited to measures to attain racial and gender proportionality in education, employment, management and ownership. To the extent that transformation or redress programs aim to increase the representation of disadvantaged groups, they will fall under our umbrella of affirmative action. This point is most pertinent to the education sector, where AA is conspicuously absent in policy discourse, although the mandate to transform historically white universities and uplift historically black universities has been made clear. Absence of the term, of course, implies neither absence of positive discrimination nor its presence by another name. Indeed, the point is precisely that we must examine policies with affirmative action intent and that involve some form of preferential selection premised on historical disadvantage, even if South African convention applies different classifications.

As with many aspects of the South Africa’s multiple transitions, affirmative action appeared with a spread of meanings in a range of forums. We focus on documents most closely associated with the ANC-led transitional bodies. Affirmative action first appeared in ANC lexicon its 1998 Constitutional guidelines (Mandaza 1996: 31). The ANC’s Department of Economic (DEP) Ready to Govern (1992) delineated an expansive approach to AA, stating that, “[w]hile taking on a variety of forms, affirmative action means special measures to enable persons discriminated against on grounds of colour, gender and disability to break into fields from which they have been excluded by past
discrimination.”\footnote{The document continues: “The ANC proposes affirmative action with a view to establishing a law-governed, progressive and equitable way of ensuring advancement without on the one hand freezing present privileges or on the other going over to arbitrary compulsion. The issue has to be handled with both firmness and sensitivity”. It underscored that “unless special interventions are made, the patterns of structured advantage and disadvantage created by Apartheid and patriarchy replicate themselves from generation to generation”.} In terms of specific proposals, in the short to medium term, “the ANC is committed to the active implementation of affirmative action strategies as part of a code of employment practice, to redress historically disadvantaged groups and regions”. \textit{Ready to Govern} also expressed a commitment to “vigorous affirmative action and restructuring programme for the public service to reflect the national composition of our population in order to meet the needs of all South Africans”. The \textit{Reconstruction and Development Program} (1994), prepared soon before the April 1994 elections and carried as a manifesto, referred to affirmative action in rather sweeping and ambiguous terms, subsuming all measures in education and employment for redressing racial, gender, and regional discrimination\footnote{The RDP was in substance and tenor more a manifesto than policy blueprint. Marais (2001: 239) writes: “In the context of the transition, the RDP has become a form of shorthand for the values and principles that animated the anti-Apartheid struggle, thereby signifying continuity. The fact that government references to it have grown rarer and more selective only highlights this function.” Nevertheless, its orientation and vision are reflective of political priorities, not unlike Malaysia’s NEP.}. However, the \textit{White Paper on Reconstruction and Development} of November 1994, ostensibly translating the RDP into a government program of action, circumscribed affirmative action to the public service, which would be “broadly representative of the South African community”.

\footnote{The document continues: “The ANC proposes affirmative action with a view to establishing a law-governed, progressive and equitable way of ensuring advancement without on the one hand freezing present privileges or on the other going over to arbitrary compulsion. The issue has to be handled with both firmness and sensitivity”. It underscored that “unless special interventions are made, the patterns of structured advantage and disadvantage created by Apartheid and patriarchy replicate themselves from generation to generation”.}
Appendix Table 3-1. Malaysia: Public sector employment, number and percentage of total (public and private sectors), by occupation group.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management and professionals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector ('000)</td>
<td>130.4</td>
<td>218.4</td>
</tr>
<tr>
<td>Total employed ('000)</td>
<td>1,150.6</td>
<td>1,287.3</td>
</tr>
<tr>
<td><strong>Public sector per total (%)</strong></td>
<td>11.3</td>
<td>17.0</td>
</tr>
<tr>
<td><strong>Other occupations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector ('000)</td>
<td>760.3</td>
<td>813.5</td>
</tr>
<tr>
<td>Total employed ('000)</td>
<td>7,373.4</td>
<td>7,829.8</td>
</tr>
<tr>
<td><strong>Public sector per total (%)</strong></td>
<td>10.3</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>All occupations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector ('000)</td>
<td>890.7</td>
<td>1,031.9</td>
</tr>
<tr>
<td>Total employed ('000)</td>
<td>8,524.0</td>
<td>9,117.1</td>
</tr>
<tr>
<td><strong>Public sector per total (%)</strong></td>
<td>10.4</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Sources: Author’s calculations from the Personnel List of Government Ministries and Departments in the Federal Budget Estimate and Annual Statistical Yearbook.

Appendix Figure 3-1. Malaysia: Education profile of employed population by number of years schooling, 1995 and 2004

Source: Household Income Survey.
Appendix Figure 3-2. Malaysia: Education profile of employed population by education certificate, 1995 and 2004

Source: Household Income Survey.

Appendix Figure 3-3. Malaysia: Mean earnings (Ringgit per month), by years of schooling, 1995, 1999, and 2004

Source: Household Income Survey.
Appendix Figure 3-4 Malaysia: Mean earnings (Ringgit per month), by education certificate, 1995, 1999, and 2004

Source: Household Income Survey.

Appendix Table 4-1. Malaysia: Weighted logit regression for attaining management job, 1995-2004

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2002</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
</tr>
<tr>
<td>Age</td>
<td>0.48</td>
<td>16.1</td>
<td>0.53</td>
<td>18.8</td>
<td>0.57</td>
</tr>
<tr>
<td>Age squared</td>
<td>0.00</td>
<td>-12.9</td>
<td>0.00</td>
<td>-14.6</td>
<td>-0.01</td>
</tr>
<tr>
<td>Female</td>
<td>-0.99</td>
<td>-10.5</td>
<td>-1.69</td>
<td>-16.9</td>
<td>-1.61</td>
</tr>
<tr>
<td>0-8 yrs sch.</td>
<td>-1.80</td>
<td>-15.5</td>
<td>-2.50</td>
<td>-20.9</td>
<td>-1.98</td>
</tr>
<tr>
<td>9-10 yrs sch.</td>
<td>-0.89</td>
<td>-8.1</td>
<td>-1.11</td>
<td>-10.0</td>
<td>-1.19</td>
</tr>
<tr>
<td>13 yrs sch.</td>
<td>4.05</td>
<td>8.4</td>
<td>4.44</td>
<td>8.8</td>
<td>4.59</td>
</tr>
<tr>
<td>Diploma</td>
<td>5.81</td>
<td>9.0</td>
<td>7.75</td>
<td>12.9</td>
<td>8.17</td>
</tr>
<tr>
<td>Degree</td>
<td>9.23</td>
<td>9.9</td>
<td>12.53</td>
<td>15.0</td>
<td>12.31</td>
</tr>
<tr>
<td>Urban</td>
<td>0.67</td>
<td>6.2</td>
<td>0.83</td>
<td>7.8</td>
<td>0.71</td>
</tr>
<tr>
<td>F-stat.</td>
<td>90.9</td>
<td></td>
<td>165.7</td>
<td></td>
<td>142.1</td>
</tr>
<tr>
<td>Obs.</td>
<td>66,471</td>
<td></td>
<td>65,343</td>
<td></td>
<td>63,647</td>
</tr>
</tbody>
</table>

Notes: Coefficients denote percentage point change in the probability of being a manager;
Reference for schooling: 11 years; all regressions control for state and industry.
Source: Household Income Survey.
Appendix Table 4-2. Malaysia: Weighted logit regression for attaining professional job, 1995-2004

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th></th>
<th>1997</th>
<th></th>
<th>1999</th>
<th></th>
<th>2002</th>
<th></th>
<th>2004</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
</tr>
<tr>
<td>Age</td>
<td>0.04</td>
<td>3.2</td>
<td>0.01</td>
<td>0.5</td>
<td>0.01</td>
<td>0.5</td>
<td>0.01</td>
<td>0.6</td>
<td>0.03</td>
<td>1.3</td>
</tr>
<tr>
<td>Age squared</td>
<td>0.00</td>
<td>-1.6</td>
<td>0.00</td>
<td>0.8</td>
<td>0.00</td>
<td>0.8</td>
<td>0.00</td>
<td>-0.7</td>
<td>0.00</td>
<td>-1.0</td>
</tr>
<tr>
<td>Female</td>
<td>0.20</td>
<td>3.4</td>
<td>0.14</td>
<td>2.5</td>
<td>0.30</td>
<td>4.6</td>
<td>-0.07</td>
<td>-1.4</td>
<td>-0.12</td>
<td>-1.8</td>
</tr>
<tr>
<td>0-8 yrs sch.</td>
<td>-1.49</td>
<td>-14.0</td>
<td>-1.56</td>
<td>-14.8</td>
<td>-1.32</td>
<td>-13.0</td>
<td>-0.85</td>
<td>-7.7</td>
<td>-1.10</td>
<td>-9.8</td>
</tr>
<tr>
<td>9-10 yrs sch.</td>
<td>-0.61</td>
<td>-9.5</td>
<td>-0.77</td>
<td>-11.4</td>
<td>-0.75</td>
<td>-10.2</td>
<td>-0.54</td>
<td>-5.7</td>
<td>-0.69</td>
<td>-6.3</td>
</tr>
<tr>
<td>13 yrs sch.</td>
<td>1.20</td>
<td>5.6</td>
<td>1.37</td>
<td>6.5</td>
<td>1.61</td>
<td>6.7</td>
<td>1.82</td>
<td>4.3</td>
<td>2.18</td>
<td>5.0</td>
</tr>
<tr>
<td>Diploma</td>
<td>2.04</td>
<td>7.3</td>
<td>2.51</td>
<td>9.1</td>
<td>2.22</td>
<td>7.4</td>
<td>5.31</td>
<td>8.2</td>
<td>4.77</td>
<td>9.5</td>
</tr>
<tr>
<td>Degree</td>
<td>14.53</td>
<td>12.6</td>
<td>15.31</td>
<td>13.7</td>
<td>16.12</td>
<td>14.2</td>
<td>23.59</td>
<td>11.9</td>
<td>20.60</td>
<td>13.3</td>
</tr>
<tr>
<td>Urban</td>
<td>0.04</td>
<td>2.7</td>
<td>0.01</td>
<td>3.0</td>
<td>0.01</td>
<td>0.6</td>
<td>0.02</td>
<td>3.2</td>
<td>0.03</td>
<td>4.2</td>
</tr>
<tr>
<td>F-stat</td>
<td>177.0</td>
<td></td>
<td>218.5</td>
<td></td>
<td>153.7</td>
<td></td>
<td>122.1</td>
<td></td>
<td>125.0</td>
<td></td>
</tr>
<tr>
<td>Obs.</td>
<td>66,471</td>
<td></td>
<td>65,343</td>
<td></td>
<td>63,647</td>
<td></td>
<td>67,484</td>
<td></td>
<td>65,228</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Coefficients denote percentage point change in the probability of being a professional; Reference for schooling: 11 years; all regressions control for state and industry.
Source: Household Income Survey.

Appendix Table 4-3. Malaysia: Weighted logit regression for attaining technical job, 1995-2004

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th></th>
<th>1997</th>
<th></th>
<th>1999</th>
<th></th>
<th>2002</th>
<th></th>
<th>2004</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
<td>Coeff.</td>
<td>z-stat</td>
</tr>
<tr>
<td>Age</td>
<td>0.70</td>
<td>13.0</td>
<td>0.62</td>
<td>13.0</td>
<td>0.66</td>
<td>12.7</td>
<td>0.56</td>
<td>7.8</td>
<td>0.54</td>
<td>8.6</td>
</tr>
<tr>
<td>Age squared</td>
<td>-0.01</td>
<td>-12.9</td>
<td>-0.01</td>
<td>-12.7</td>
<td>-0.01</td>
<td>-12.2</td>
<td>-0.01</td>
<td>-7.3</td>
<td>-0.01</td>
<td>-7.9</td>
</tr>
<tr>
<td>Female</td>
<td>-2.01</td>
<td>-11.5</td>
<td>-2.32</td>
<td>-14.7</td>
<td>-2.02</td>
<td>-11.2</td>
<td>-2.71</td>
<td>-11.0</td>
<td>-2.45</td>
<td>-10.0</td>
</tr>
<tr>
<td>0-8 yrs sch.</td>
<td>-6.46</td>
<td>-25.3</td>
<td>-6.87</td>
<td>-29.1</td>
<td>-6.09</td>
<td>-25.3</td>
<td>-7.79</td>
<td>-26.3</td>
<td>-7.74</td>
<td>-27.5</td>
</tr>
<tr>
<td>9-10 yrs sch.</td>
<td>-2.59</td>
<td>-16.0</td>
<td>-2.99</td>
<td>-17.4</td>
<td>-2.73</td>
<td>-14.5</td>
<td>-4.14</td>
<td>-16.2</td>
<td>-4.45</td>
<td>-17.9</td>
</tr>
<tr>
<td>13 yrs sch.</td>
<td>2.65</td>
<td>5.9</td>
<td>1.47</td>
<td>3.7</td>
<td>3.35</td>
<td>7.0</td>
<td>6.47</td>
<td>7.8</td>
<td>3.82</td>
<td>6.6</td>
</tr>
<tr>
<td>Diploma</td>
<td>9.04</td>
<td>12.0</td>
<td>8.28</td>
<td>14.8</td>
<td>10.03</td>
<td>14.0</td>
<td>12.48</td>
<td>15.1</td>
<td>10.70</td>
<td>14.4</td>
</tr>
<tr>
<td>Degree</td>
<td>-2.59</td>
<td>-12.0</td>
<td>-3.49</td>
<td>-17.7</td>
<td>-2.32</td>
<td>-9.3</td>
<td>-4.36</td>
<td>-15.3</td>
<td>-3.60</td>
<td>-10.7</td>
</tr>
<tr>
<td>Urban</td>
<td>0.70</td>
<td>3.2</td>
<td>0.62</td>
<td>3.2</td>
<td>0.66</td>
<td>2.9</td>
<td>1.14</td>
<td>4.6</td>
<td>1.44</td>
<td>5.3</td>
</tr>
<tr>
<td>F-stat</td>
<td>106.6</td>
<td></td>
<td>141.0</td>
<td></td>
<td>115.1</td>
<td></td>
<td>144.1</td>
<td></td>
<td>125.9</td>
<td></td>
</tr>
<tr>
<td>Obs.</td>
<td>66,471</td>
<td></td>
<td>65,343</td>
<td></td>
<td>63,647</td>
<td></td>
<td>67,484</td>
<td></td>
<td>65,228</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Coefficients denote percentage point change in the probability of being a technician; Reference for schooling: 11 years; all regressions control for state and industry.
Source: Household Income Survey.
Appendix Table 4-4. Tertiary educated workforce: Probit regression for attaining managerial or professional job (with education and race interaction), 2000

<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public sector</td>
<td>Private sector</td>
</tr>
<tr>
<td>Age</td>
<td>0.16*</td>
<td>2.57*</td>
</tr>
<tr>
<td>Age squared</td>
<td>0.00**</td>
<td>-0.03*</td>
</tr>
<tr>
<td>Female</td>
<td>-0.28*</td>
<td>-4.17*</td>
</tr>
<tr>
<td>Bumiputera</td>
<td>0.73*</td>
<td>-4.10*</td>
</tr>
<tr>
<td>Local private</td>
<td>-0.36</td>
<td>2.58*</td>
</tr>
<tr>
<td>Bumiputera*local private</td>
<td>-0.29</td>
<td>0.38</td>
</tr>
<tr>
<td>Overseas</td>
<td>-0.16</td>
<td>4.81*</td>
</tr>
<tr>
<td>Bumiputera*overseas</td>
<td>0.11</td>
<td>2.24</td>
</tr>
<tr>
<td>Urban</td>
<td>0.00</td>
<td>6.88*</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.223</td>
<td>0.175</td>
</tr>
<tr>
<td>Obs.</td>
<td>13,670</td>
<td>13,741</td>
</tr>
</tbody>
</table>

Source: 2 percent tape of the 2000 Population Census.
Notes: *Statistically significant at 1% level, **Statistically significant at 10% level;
Reference groups: tertiary education institute: local public institute;
race: Bumiputera; Regressions control for state and industry.

Appendix Figure 5-1. South Africa: Gini and GE(0): Earnings of total employed (formal and informal)

Source: Leite, McKinley and Osorio (2006)
Appendix Figure 5-2. South Africa: Distribution of employed by years of schooling

Sources: October Household Survey and Labor Force Survey.

Appendix Figure 5-3. South Africa: Average earnings by years of education (Rand per month)

Sources: October Household Survey and Labor Force Survey.
Appendix Figure 5-4. South Africa: Average earnings by educational attainment (Rand per month)

Sources: October Household Survey and Labor Force Survey.

Appendix Figure 5-5. South Africa: Composition of employed by highest education

Sources: October Household Survey and Labor Force Survey.
Appendix Figure 5-6. Blacks: Composition of employed by highest education

Sources: October Household Survey and Labor Force Survey.

Appendix Figure 5-7. Whites: Composition of employed by highest education

Sources: October Household Survey and Labor Force Survey.
Appendix Figure 5-8. Blacks: Composition of employed by occupation

Sources: October Household Survey and Labor Force Survey.

Appendix Figure 5-9. Whites: Composition of employed by occupation

Sources: October Household Survey and Labor Force Survey.
Appendix Figure 6-1. South Africa: Managers and highly-skilled workers: Effects of tertiary education and of race on earnings (adjusted for other determinants)

Sources: October Household Survey and Labor Force Survey.

Appendix Figure 6-2. South Africa: Service and production workers: Effects of tertiary education and of race on earnings (adjusted for other determinants)

Sources: October Household Survey and Labor Force Survey.
BIBLIOGRAPHY

MALAYSIAN OFFICIAL DOCUMENTS


ARTICLES AND BOOKS


