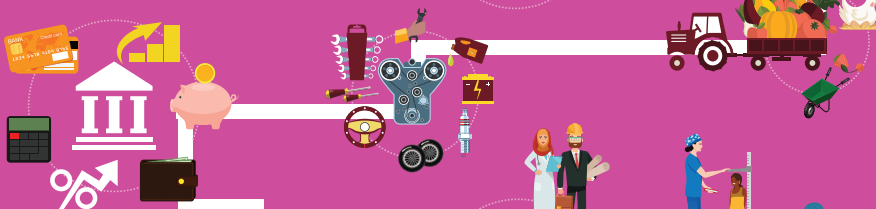
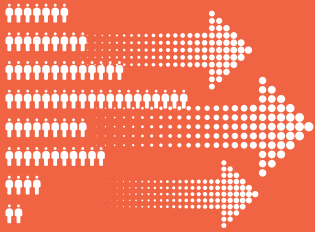




How Immigrants Contribute to South Africa's Economy



SOUTH AFRICA



How Immigrants Contribute to South Africa's Economy

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the member countries of the OECD, its Development Centre or of the ILO.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Please cite this publication as:

OECD/ILO (2018), *How Immigrants Contribute to South Africa's Economy*, OECD Publishing, Paris.
<http://dx.doi.org/10.1787/9789264085398-en>

ISBN 978-92-64-08539-8 (PDF)

ILO: ISBN 978-92-2-131528-5 (web pdf)

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Photo credits: Cover design by the OECD Development Centre.

Corrigenda to OECD publications may be found on line at: www.oecd.org/publishing/corrigenda.

© OECD/ILO 2018

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of the source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

Foreword

Immigration is intrinsically linked with South Africa's history, and migrant labour contributes significantly to the economy. Although some of the effects of immigration have been investigated in South Africa before, there is a need for more systematic empirical research into how immigrants contribute to the economy. Such research informs the debate on migration flows, which are increasing globally in particular outside the traditional high-income regions. Research also constitutes a basis to understand which policy responses should be instituted for the good of both immigrants and the destination countries.

The OECD Development Centre, the International Labour Organization (ILO) and the European Commission have worked together to tackle these challenging questions. Working across different contexts, the goal is to help countries design effective policies for leveraging immigration for positive development outcomes. This has included providing advice on the governance of comprehensive immigration systems and linking development strategies for policy coherence within a country and across countries.

This report, How Immigrants Contribute to South Africa's Economy, is a step forward in assessing the contribution of immigration to development and improving the design of migration and development strategies. It builds upon the joint OECD-ILO project, Assessing the Economic Contribution of Labour Migration in Developing Countries as Countries of Destination (ECLM). The project carried out comparable analyses for South Africa and nine other countries – Argentina, Costa Rica, Côte d'Ivoire, the Dominican Republic, Ghana, Kyrgyzstan, Nepal, Rwanda and Thailand – to present a greater understanding of immigration's economic impacts. Different key components of the economy are explored through a combination of quantitative and qualitative methodologies.

The report examines empirically how immigrants affect key segments of the economy. These segments include: the labour market in terms of labour force and human capital, economic growth, and public finance. It analyses the political and historical context of immigration and suggests ways to maximise the impact of immigrants in different contexts through appropriate policy responses. The report highlights the fact that the impact of immigration is not straightforward. It depends on the country context and economic conditions. However, any country can maximise the positive impact of immigration by improving policies to better manage and integrate immigrants so that they can invest and contribute to the economy where they work and live while staying safe and leading fulfilling lives. The report also provides a basis for dialogue and policy

guidance for development practitioners and policy makers who attempt to integrate immigrants into their economy and society for the benefit of both immigrants and native-born citizens.

The European Commission, the OECD Development Centre and the ILO look forward to continuing their co-operation with South Africa with a view to providing decent work for migrant workers and improving economic and development outcomes.

Mario Pezzini
Director of the OECD Development
Centre and Special Advisor to the
OECD Secretary-General on Development

Manuela Tomei
Director of the Conditions
of Work and Equality Department,
International Labour Organization

Acknowledgements

How Immigrants Contribute to South Africa's Economy is the fruit of the joint OECD-ILO project, Assessing the Economic Contribution of Labour Migration in Developing Countries as Countries of Destination (ECLM), carried-out in ten low- and middle-income countries. The project was managed by David Khoudour, Head of the Migration and Skills Unit of the OECD Development Centre, under the guidance of Mario Pezzini, Director of the OECD Development Centre and Special Advisor to the OECD Secretary-General on Development, Federico Bonaglia, Deputy Director of the OECD Development Centre, Manuela Tomei, Director of the ILO's Conditions of Work and Equality Department, and Michelle Leighton, Chief of the ILO's Labour Migration Branch. Shinyoung Jeon and Hyeslin Park, from the OECD Development Centre, co-ordinated the project, while Theo Sparreboom, Chief Technical Advisor in the Labour Migration Branch, led the ILO team. The OECD team included Maria Alejandra Betancourt, Bram Dekker, Fatoumata Diarrassouba and Sarah Kups. The ILO team was composed of Sandra Berger and Jesse Mertens.

Theodoor Sparreboom managed the overall co-ordination of the report and the following authors prepared draft chapters:

- Chapter 2: Aurelia Segatti, Theo Sparreboom and Sandra Berger
- Chapter 3: Jesse Mertens and Theo Sparreboom
- Chapter 4: Jesse Mertens
- Chapter 5: Theo Sparreboom and Conningarth Economists
- Chapter 6: Theo Sparreboom, Tendai Gwatidzo and Miracle Benhura

The rest of the ECLM project team provided significant contributions, including valuable comments, advice and feedback on previous versions of the report. Vararat Atisophon, OECD Development Centre, helped with statistical work, while Alexandra Le Cam and Patricia Cuber Galarreta, OECD Development Centre, and H el ene Lombard, ILO, provided administrative support for the project, including country missions and event organisation. Jill Gaston edited the report and the OECD Development Centre's publications team, led by Delphine Grandrieux and Henri-Bernard Solignac-Lecomte, turned the draft into a publication. The cover was designed by Aida Buend a.

The ECLM team is grateful for insightful comments provided by the ILO Decent Work Team for Eastern and Southern Africa and Country Office for South Africa, Botswana, Lesotho and Swaziland, and for the reviews by Mariya Aleksynska (ILO) and Tendai Gwatidzo (University of the Witwatersrand, Johannesburg).

The project has also benefited from the contribution from previous colleagues at the OECD Development Centre, especially Marcus Böhme and Ragini Chaurasia. Douglas Meade (Inforum, University of Maryland) reviewed the model that is used in Chapter 5 of the report.

This report is the result of close collaboration with several partner institutions. Support from Statistics South Africa, the Department of Labour in South Africa and the ILO DWT/CO–Pretoria is gratefully acknowledged. The project team would like in particular to thank Joni Musabayana (ILO), Aurelia Segatti (formerly ILO) and Monet Durieux (Statistics South Africa). The project team also thanks all the participants who attended the consultation seminar on 23 June 2015 and the validation workshop on 28 June 2018, both in Pretoria.

The OECD Development Centre and the ILO are particularly grateful to the European Commission for its financial support and close collaboration in carrying out this project. We would like to especially thank Stefano Signore, Camilla Hagström and Isabelle Wahedova. The same thanks go to the Delegation of the European Union in South Africa.

* This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of the OECD Development Centre and the ILO and can in no way be taken to reflect the views of the European Union.

Table of contents

List of abbreviations	13
Facts and figures of South Africa	14
Executive summary	15
<i>Chapter 1. Immigrants' contribution to South Africa's economy:</i>	
Overview and policy implications	19
Impact of immigration assessed by prior literature and contribution of the project	23
Immigration's significant economic contribution in South Africa . . .	24
Immigration has a limited but positive impact on labour markets . . .	31
Immigrant labour raises income per capita	32
Immigrants contribute positively to public finance	33
Conclusions	33
Notes	35
References	35
<i>Chapter 2. The immigration landscape in South Africa:</i>	
Patterns, drivers and policies	39
Economic context: Stable but slow economic growth and high levels of inequality	40
The two-gate policy: African migrant labour and European immigration	44
Immigration trends in the post-apartheid era	48
South African attitudes – a country of immigration?	54
Governance of migration	55
Economic restructuring and immigration	62
Conclusions	63
Notes	65
References	65
<i>Chapter 3. Immigrant integration in South Africa: Labour market outcomes and human capital</i>	69
Employment and unemployment: Striking differences between foreign-born and native-born workers	70
Nature and quality of jobs: More paid employment for immigrants . . .	76

Conclusions	88
Notes	89
References	89
Annex 3.A1. Data, methodologies and additional tables.	91
Chapter 4. How immigrants affect the labour market in South Africa	99
Income differences between native-born and immigrant workers.	100
Effects of immigration on native-born employment and wages.	103
Conclusions	111
Notes	112
References	112
Annex 4.A1. Methodology of labour market impact assessment.	115
Annex 4.A2. Regression results.	117
Chapter 5. Immigration and economic growth in South Africa	119
Growing importance of services.	120
Broad assessments of the contribution of migrant workers to economic growth	125
Modelling the contribution of immigrant workers to economic growth	129
Conclusions	130
Notes	131
References	131
Annex 5.A1. Methodological information	133
Chapter 6. Immigrants' contribution to public finance in South Africa	137
Fiscal revenues and expenditures in South Africa.	138
Revenue estimates of native-born individuals and immigrants	139
Expenditure estimates of native-born individuals and immigrants	143
Net fiscal impact of immigrants and native-born individuals.	145
Conclusions	147
Notes	148
References	148
Annex 6.A1. Additional tables.	149
Tables	
1.1. Understanding the difference between immigrants and foreigners	25
1.2. Foreign-born workers do not have an impact on South African-born workers, but new immigrants do	32
2.1. The black foreign-born population has grown steadily over the past century.	47
2.2. The number of new work permits issued is on an upward trend	49

2.3.	Countries of origin have become more geographically balanced	49
2.4.	Most work permits are still issued to overseas migrants.	50
2.5.	The immigrant share of mineworkers peaked in 1997 and has fallen steadily since	51
2.6.	The share of migrant mineworkers continues to drop.	52
2.7.	Repatriation of illegal aliens has become more spread out over countries of origin	59
3.1.	Women's participation in the labour market has grown considerably	71
3.2.	Among immigrants, young workers constitute a smaller share of the unemployed than among native-born workers.	75
3.A1.1.	Definition of components for the demographic accounting decomposition	92
3.A1.2.	Employment-to-population ratio, by sex and age group	93
3.A1.3a.	Unemployment (expanded definition), by sex.	94
3.A1.3b.	Unemployment (official definition), by sex	95
3.A1.4.	Youth unemployment indicators, by sex	95
3.A1.5.	Employment-to-population ratio, by race, sex and age group	96
4.1.	Foreign-born workers' incomes are higher than those of South African-born workers	101
4.2.	Foreign-born workers tend to have lower incomes than comparable South African-born workers	102
4.3.	Foreign-born workers do not have an impact on South African-born workers, but new immigrants do	110
4.A2.1.	Estimates of effects of foreign-born share on labour market outcomes of South African-born workers, education*experience cells	117
6.1.	Over a ten year period, total government expenditures increased more than total tax revenue.	139
6.2.	The income tax payment share of foreign-born individuals exceed their population share	140
6.3.	All foreign-born contributions to income tax rose, except those of European origin.	141
6.4.	Contribution to value added tax rose for all foreign-born individuals with the exception of European-born individuals.	142
6.5.	The expenditure on public goods only marginally changes between the two scenarios.	144
6.6.	Expenditure on local government, housing and community amenities increased in importance from 2001/02 to 2011/12	144
6.7.	Of tertiary educated individuals in 2011, one in every twelve was born abroad.	145

6.8.	While the estimated revenue per-capita increased for both native- and foreign-born individuals, the latter still contribute 83% more to the public coffer	145
6.9.	Public expenditure is higher for native-born individuals in both 2001 and 2011, irrespective of the cost scenario used . . .	146
6.10.	The net fiscal contribution of foreign-born individuals is more positive than that of native-born individuals	147
6.A1.1.	Personal income tax rate and brackets, 2001/12	149

Figures

1.1.	Immigration: Contributing to host countries' economies	22
1.2.	Income inequality remains high, while poverty has declined . . .	27
1.3.	Declared emigrants have outnumbered permanent immigrants since 1994	27
1.4.	Immigrant workers are most overrepresented in the construction, trade, hospitality and professional sectors . . .	30
1.5.	Immigrants are overrepresented in the two fastest growing occupations.	31
2.1.	Stable but slow economic growth compared to neighbouring countries	41
2.2.	Income inequality remains high, while poverty has declined in the past ten years	42
2.3.	Services contribute most to gross domestic product	43
2.4.	Declared emigrants have outnumbered permanent immigrants since 1994	46
2.5.	Legal immigrants from Europe, Africa and Asia each accounted for around one-third of immigration in the course of the 1990s.	47
3.1.	Immigrant workers perform better than native-born workers in terms of several key labour market indicators on the volume of employment.	71
3.2.	Differences in participation, employment and unemployment between native- and foreign-born workers are larger for men, but changed more for women	72
3.3.	Black native-born workers are less often employed and more often unemployed than both black foreign-born workers and all other native-born workers	73
3.4.	The majority of immigrants in the labour force are less than 35 years old.	74
3.5.	Shares of immigrants and native-born workers in wage work are converging	77
3.6.	Many immigrants are in growing occupations	78

3.7.	Black foreign-born workers are overrepresented among all but two growing occupational groups	79
3.8.	Growth is largely driven by new entrants	81
3.9.	New immigrants enter disproportionately into craft and elementary occupations	82
3.10.	New immigrants are slightly more likely to enter into low-skilled occupations.	83
3.11.	Continuing polarisation of foreign-born employment by level of education	84
3.12.	Educational achievement of black workers has increased dramatically	85
3.13.	Educational attainment grew mostly due to new entrants in secondary education.	86
3.14.	Primary educated older workers are largely being replaced by secondary educated new immigrants and entrants	87
3.15.	Overqualification increased while underqualification decreased	88
4.1.	Employment rates increase with levels of education and with moderate experience	105
4.2.	Migrants are overrepresented among the extremes of the skill spectrum	106
4.3.	Unemployment is highest among workers with little experience.	107
4.4.	Paid employment rates decrease slightly among more experienced workers	108
4.5.	Income of South African-born workers increases with education and experience.	109
5.1.	The service sector has become more important as a source of employment.	121
5.2.	Immigrant workers are most overrepresented in the construction, trade, hospitality and professional sectors . . .	122
5.3.	Sectoral distributions have become more equal mostly due to changes in mining and domestic work	124
5.4.	Immigrants' contribution to growth is lower than would be expected from their employment share	125
5.5.	Foreign-born workers are slightly better educated than native-born workers, but not in all sectors	126
5.6.	Both high- and low-skilled foreign-born workers contribute to the economy	128
5.7.	Both high- and low-skilled foreign-born workers tend to raise native-born income per capita.	130
5.A1.1.	Structure of the South African Inforum Model (SAFRIM).	134

Boxes

1.1.	What is the added value of the project?	21
1.2.	Definitions of immigrants.	24
5.1.	Downscaling of immigrant employment in mining and continuing immigrant employment in agriculture	122

Follow OECD Publications on:



http://twitter.com/OECD_Pubs



<http://www.facebook.com/OECDPublications>



<http://www.linkedin.com/groups/OECD-Publications-4645871>



<http://www.youtube.com/oecdilibrary>



<http://www.oecd.org/oecddirect/>

List of abbreviations

ECLM	Assessing the Economic Contribution of Labour Migration in Developing Countries as Countries of Destination
EU	European Union
GDP	Gross domestic product
ILO	International Labour Organization
LFPR	Labour force participation rate
NDP	National Development Plan
NEET	Youth not in education, employment or training
OECD	Organisation for Economic Co-operation and Development
SADC	Southern African Development Community
TEBA	The Employment Bureau of Africa
USD	United States dollar
VAT	Value added tax
ZAR	South African rand

Facts and figures of South Africa

(Numbers in parentheses refer to the OECD average)

The land, people and electoral cycle

Population (million) ^e	55.9	Land area (thousand km ²) ^e	1 213
Under 15 (%) ^e	29 (18)	Form of government	Parliamentary republic
Population density (per km ²) ^e	46 (37)	Last election	7 May 2014

The economy

GDP, current prices (billion USD) ^e	294.8	Exports of goods and services (% of GDP) ^e	30.4 (27.8)
GDP growth ^e	0.3 (1.7)	Imports of goods and services (% of GDP) ^e	31.5 (27.2)
GDP per capita, PPP (thousands, current international USD) ^e	13.2 (41.9)	GDP shares by sector (%) ^d	
Inflation rate ^e	6.3 (0.4)	Agriculture, forestry and fishing	2.3 (1.5)
General government total expenditure (% of GDP) ^e	28.9	Industry, including construction	29.2 (24.3)
General government revenue (% of GDP) ^e	33.5	Services	68.5 (74.2)

Well-being

Life satisfaction (average on 1-10 scale) ^e	4.8 (6.5)	Population with access to improved sanitation facilities (%) ^d	66 (98)
Life expectancy ^d	62 (80)	Mean years of schooling ^d	10.3
Income inequality (Gini coefficient) ^b	63.4	Proportion of population under national minimum income standard (%) ^c	55.5
Gender inequality (SIGI index) ^c	0.06 (0.02)	Unemployment rate (%) ^f	27.3 (6.1)
Labour force participation (% of population ages 15+) ^b		Youth unemployment rate (ages 15 to 24, %) ^f	54.2 (13.2)
Native-born	61.2	Satisfaction with the availability of affordable housing (% satisfied) ^e	37 (54)
Foreign-born	78.8	Enrolment rates	
Employment-to-population ratio (% of population ages 15+) ^b		Primary (Net) ^a	83 (96)
Native-born	36.0	Secondary (Net) ^a	67 (87)
Foreign-born	60.8	Tertiary (Gross) ^c	19 (70)

Note: Data from a) 2005; b) 2011; c) 2014; d) 2015; e) 2016; f) 2017.

Source: Central Intelligence Agency, *The World Factbook* 2017. Washington, DC <https://www.cia.gov/library/publications/the-world-factbook/index.html>; Gallup (2015), *Gallup World Poll* (database), Gallup Organisation; IMF, *World Economic Outlook Database*, International Monetary Fund, October 2017 edition, Washington DC; Minnesota Population Center, *Integrated Public Use Microdata Series*, International: Version 6.5. Minneapolis: University of Minnesota, 2017. <http://doi.org/10.18128/D020.V6.5>; Statistics South Africa (2012), "Census 2011", Statistical Release P0301/4 and Census 2011 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3839; OECD, *SIGI Social Institutions and Gender index*, <http://www.genderindex.org/>; UNESCO Institute for Statistics, Data Centre, <http://data.uis.unesco.org/>; World Bank, *World Development Indicators* (database), <http://data.worldbank.org/>, Washington DC.

Executive summary

Immigration has been part and parcel of South Africa's history, and for much of the 20th century, migration policy was shaped by the “two-gate policy”. The front gate welcomed people who met the requirements of the apartheid state, while the back gate was used to facilitate a steady flow of cheap labour on a temporary basis. In the post-apartheid era, the pressure to provide jobs for native-born South Africans increased, while managing migration flows from neighbouring countries and further afield became more challenging.

South Africa is one of the few middle-income countries where the impact of immigration has been widely analysed. The current report contributes and adds to the existing literature by assessing the economic impact of immigrants based on common methodologies that are applied across ten partner countries. This report is innovative in that nationally representative population census data are used to assess the contribution of immigrants to labour markets, economic growth and public finance.

The methodology was developed in the context of a project, Assessing the Economic Contribution of Labour Migration in Developing Countries as Countries of Destination (ECLM). The project was co-financed by the European Union's Thematic Programme on Migration and Asylum and implemented jointly by the OECD Development Centre and the ILO, from August 2014 to July 2018. The project analysed several economic impacts – on the labour market, economic growth and public finance – of immigration in ten partner countries. The empirical evidence stems from a combination of quantitative analyses of primary and secondary data sources with qualitative analyses.

A national consultation seminar on 23 June 2015 launched the project's activities in South Africa. It was organised in collaboration with Statistics South Africa, the Department of Labour, the Delegation of the European Union to South Africa, and the ILO Decent Work Team for Eastern and Southern Africa and Country Office for South Africa, Botswana, Lesotho and Swaziland.

The considerable contribution of immigration to South Africa's economy

The analysis in this report demonstrates the contribution of immigrant workers to South Africa's economy, and focuses on three dimensions of this contribution: labour markets, economic growth and public finance.

- **Labour market impact on native-born workers**

Immigrants are well-integrated into the labour market in terms of employment and unemployment rates, and in general do not seem to displace native-born workers. Immigrant workers are more likely to be employed than native-born South Africans, which is consistent with the country's very low employment rate. Immigration seems to be, at least in part, demand-driven, and immigrant workers are frequently found in occupations with high growth rates. Levels of education are more polarised at the lower and higher ends of the educational spectrum for immigrant workers than for native-born South Africans, and the high share of immigrant workers with tertiary education seemed to be in line with the growth of high skill jobs. This advantage has however become less pronounced over time, as education and skills levels of the native-born population have increased.

The labour market impact analysis demonstrates no significant effects of the presence of immigrant workers on native-born employment at the national level. However, at the sub-national level, the presence of immigrant workers has both negative effects (lower employment rates) and positive effects (higher incomes) for the native-born population. In addition, the presence of new immigrants, who have been in South Africa for less than ten years, appears to increase both the employment rate and the incomes of South African-born workers.

- **Economic growth**

The impact of immigration on gross domestic product (GDP) per capita is positive, and the estimates from an econometric model show that immigrant workers may raise the South African income per capita by up to 5%. This result is not surprising given the limited or even positive impact of immigration on native-born employment rates, and the relatively high employment rate of immigrant workers. This could be due to the higher average educational attainment of foreign-born workers, the higher share of foreign-born individuals in the working-age population as well as the possible increase in total factor productivity through efficiency gains as a result of, for example, increased specialisation of the labour force.

- **Public finance**

Immigrants also have a positive net impact on the government's fiscal balance. This is due to the fact that they tend to pay more in taxes, especially in income and value added taxes. In 2011, the per-capita net fiscal contribution of immigrants

ranged between 17% under the average cost scenario and 27% under the marginal cost scenario. Native-born individuals, on the other hand, contributed -8% under both scenarios.

Policies to boost the economic contribution of immigration

This report identifies three areas of policy interventions that merit particular attention with a view to boosting the economic contribution of immigration, namely adapting migration policies to labour market needs, fighting discrimination and investing in immigrant integration. These areas also feature in the government's 2017 White Paper on International Migration, which acknowledges the positive contribution immigration can make to the South African economy.

Better linking labour market needs and migration policies requires effective labour market information systems. Such systems should not only be fed by regular data and information on foreign-born and native-born workers, but also be linked to institutional arrangements which allow for an articulation of employment policy with migration policy, as well as an adequate representation of social partners.

Specific measures to counter discrimination in the labour market and the workplace should be encouraged. This is particularly the case with respect to the vulnerable position of low-skilled workers. Measures could range from awareness raising regarding social and cultural differences and stereotypes, to monitoring of incidents and enforcement of labour standards on equal treatment of foreign-born and native-born workers.

In the area of integration policies, it is important to recognise that such policies cannot be the responsibility of an individual government department. Rather, what is needed is a coherent whole-of-government approach, which addresses all dimensions of immigrants' integration. Such an approach to integration builds on a strong collaboration between government departments and involvement of social partners.

Chapter 1

Immigrants' contribution to South Africa's economy: Overview and policy implications

This chapter provides an overview of the overall report. It first describes the project on Assessing the Economic Contribution of Labour Migration in Developing Countries as Countries of Destination, and its implementation in South Africa. It then presents the report's key findings regarding the foreign-born population in South Africa, in particular the significant economic contribution made by immigrants, and the limited or even positive impact of the presence of immigrant workers on native-born labour market outcomes. The chapter ends with policy implications related to how immigrants affect South Africa's labour market, economic growth and public finance.

South Africa's history and position as a regional economic powerhouse make it a major destination country for immigrants from the region and from further afield. Even though various aspects of immigration have been the subject of research before, a comprehensive study into the economic contribution of immigrants has been lacking. At the same time, public debate would benefit from an analysis of the role of immigrant workers, to better inform policy makers and public opinion and in view of xenophobic sentiments which at times emerge in the media and elsewhere in South Africa.

This report aims to provide policy makers and the general public with empirical evidence on the economic role of immigrants in South Africa. It was written in the context of a joint OECD Development Centre – International Labour Organization project on Assessing the Economic Contribution of Labour Migration in Developing Countries as Countries of Destination (Box 1.1).

The report comprises six chapters. Chapter 1 assesses the overall economic contribution of immigration in South Africa and draws some policy implications. Chapters 2 and 3 describe the underlying context shaping the economic contribution of immigration to South Africa. Chapter 2 provides a brief overview of the country's immigration history and current policies, and Chapter 3 compares the labour market outcomes and characteristics of the foreign- and native-born populations. Chapters 4 to 6 investigate different economic impacts of immigration: its effect on the labour market outcomes of the native-born population (Chapter 4), immigration's contribution to economic growth (Chapter 5) and the impact of immigrants on public finance (Chapter 6).

This country report can be read in conjunction with the project's comparative report (OECD/ILO, 2018). While the current report provides an in-depth discussion of the economic contribution in South Africa, the integrated report presents a comparative overview of the findings across the project's ten partner countries. It seeks to explain patterns in these outcomes based on the characteristics of the countries and their immigrant populations.

Box 1.1. What is the added value of the project?

In August 2014, the OECD Development Centre and the International Labour Organization (ILO) launched a project, co-funded by the European Union's (EU) Thematic Programme on Migration and Asylum, on **Assessing the Economic Contribution of Labour Migration in Developing Countries as Countries of Destination**. This project, implemented from 2014 to 2018, aimed to analyse the economic impact of immigration in developing countries across a variety of dimensions.

The OECD, ILO and EU launched the project to address a dual reality. More than one third of international migrants (UN DESA, 2017) and 25% of all working-age international migrant workers (ILO, 2015) currently live in low- and middle-income countries, and yet little is known about how these economies are affected by immigrant populations. This stands in stark contrast to the depth of literature on the economic impacts of immigration in high-income (usually OECD) countries (Kerr and Kerr, 2011; Bodvarsson and Van den Berg, 2013; and Böhme and Kups, 2017). This missing analysis would not be an issue if the existing research results on OECD countries applied equally to non-OECD countries, but they may be different due to a different context.

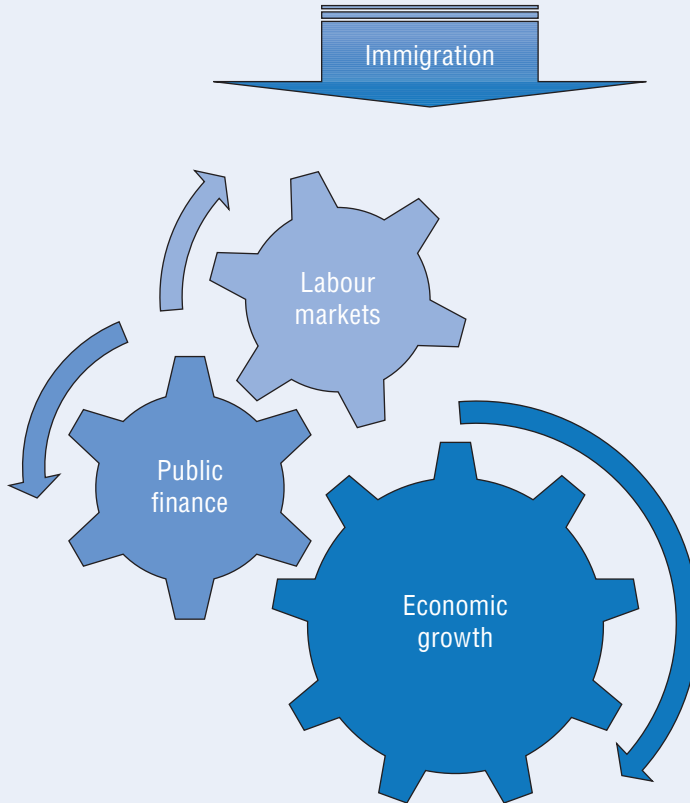
A large number of immigrants in developing countries come from within their region while many OECD countries host immigrants from the entire globe. Moreover, the economic and policy context in which these immigrants integrate into the labour market is different. As an example, the share of informal employment^a tends to be more elevated in lower- than in higher-income countries. Both of these factors likely contribute to impacts of immigration that differ between developed and developing countries. Understanding these differences could help low- and middle-income countries formulate immigration and integration policies that maximise the development potential of immigration.

The project was carried out in collaboration with ten partner countries: Argentina, Costa Rica, Côte d'Ivoire, the Dominican Republic, Ghana, Kyrgyzstan, Nepal, Rwanda, South Africa and Thailand. They were selected based on their interest in the project, a substantial (but varying) share of immigrants and a relatively low share of humanitarian immigrants. By working with a diverse group of countries in terms of their geographic location and economic and immigration history and characteristics, the project aimed to provide an indication of the range of possible economic impacts of immigration in developing countries. It therefore addressed not only stakeholders in the ten partner countries, but equally policy makers and other interested parties in other low- and middle-income countries with mid-sized to large immigrant populations.

The project examines empirically how immigrants contribute to their host countries' economies by focusing specifically on: i) labour markets, not only in terms of labour force and human capital, but also employment and wages; ii) economic growth, in particular production and productivity, at both firm and economy levels; and iii) public finance, including public spending and fiscal contributions (Figure 1.1).

Box 1.1. What is the added value of the project? (cont.)

Figure 1.1. Immigration: Contributing to host countries' economies



The methodologies to analyse these various impacts generally follow those used in other contexts and published in the academic literature. Leading migration researchers provided their perspectives on suitable methodologies at an international expert meeting that took place at the OECD in Paris on 23-24 February 2015.^b Data constraints sometimes made it impossible to analyse all aspects in every partner country. Each country report and the integrated report provide detailed descriptions of their methodologies.

a. Informal employment encompasses the following situations: own-account workers and employers in their own informal sector enterprises, own-account workers producing solely for their households, contributing family workers, members of informal producers' co-operatives and employees holding informal jobs (that is, if their employment is not subject to for example national labour law) (Husmanns, 2004).

b. For more information, see: www.ilo.org/global/topics/labour-migration/events-training/WCMS_344708/lang--en/index.htm.

Impact of immigration assessed by prior literature and contribution of the project

In view of the increased importance of migration in recent decades as well as concerns about jobs and inequality, South Africa has become increasingly aware of the need to effectively manage immigration and integrate immigrants into labour markets. In fact, the government's 2017 White Paper on International Migration (DHA, 2017) marked a shift to a greater emphasis on capturing the economic benefits from migration, which was also the intention behind some earlier policies such as those related to "critical skills".

While interest in the labour market effects of immigration outside the traditional high-income destination countries is growing, few empirical studies have been undertaken. Nevertheless, South Africa is one of the countries in which literature on the labour market impact of immigration is available. For example, an inventory of existing data on migrant workers has been established (Budlender, 2013a), and recommendations for improvement of migration statistics have been developed (Budlender, 2013b and c). A comparison between the labour market position of immigrants and native-born individuals has been produced, based on 2012 data from the Quarterly Labour Force Survey (Budlender, 2014; Fauvelle-Aymar, 2014). Broader assessments of migration trends and policies have also been made (Crush and Williams, 2001, 2010; Crush, 2008, 2011; Crush, Peberdy and Williams, 2006; Hammerstad, 2011; Mthembu-Salter et al., 2014; Rasool and Botha, 2014; Waller, 2006).

Facchini, Mayda and Mendola (2013) assess the impact of immigration on native-born employment in South Africa. They find small negative effects of immigration on the income of native-born workers, but not on the employment at the national level, and the reverse at the district level (i.e. a negative effect on employment, but not on income). A more recent study suggests that there may also be some negative effects of immigration on employment at the national level (Fauvelle-Aymar, 2015).

The current report contributes and adds to the existing literature by implementing an analysis based on common methodologies that are applied across all ten partner countries, thereby providing room for cross-country comparability. Although similar approaches have been used in South Africa for an assessment of some of the effects of immigration, this report is new in that nationally representative population census data are used to assess labour market impacts of immigrant work, the relationship between immigration and economic growth as well as immigrants' contribution to public finance.

The project's work in South Africa was launched in the context of a national consultation seminar on 23 June 2015, which was organised in collaboration with Statistics South Africa, the Department of Labour, the Delegation of the European

Union to South Africa and the ILO Decent Work Team for Eastern and Southern Africa and Country Office for South Africa, Botswana, Lesotho and Swaziland.¹

Immigration's significant economic contribution in South Africa

The findings of this report suggest that immigrant workers make a significant contribution to the South African economy (for a definition of immigrant workers, see Box 1.2). Immigrants are well-integrated into the labour market in terms of employment and unemployment rates, and in general do not seem to displace native-born workers. The contribution of immigrant workers to GDP is estimated to be close to 9% in 2011, and just below their share in employment. Nevertheless, immigration is raising income per capita in South Africa, while immigrants also make a positive net fiscal contribution.

Box 1.2. Definitions of immigrants

Immigrant and foreigner status

No universal definition of an immigrant exists. The most commonly cited definition accords with the 1998 Recommendations on Statistics of International Migration: “any person who changes his/her country of usual residence, [...] in which an individual normally spends his daily period of rest” (United Nations, 1998). An individual who enters the nation for up to three months is not considered as an immigrant, but rather a visitor. Beyond three months, the individual will be termed a short-term immigrant for the next nine months. Only after one year of legal residency in the country the immigrant will be termed a long-term migrant.

In line with this definition, the Population Division of the United Nations' Department of Economic and Social Affairs estimates international migrant stocks by using the country of birth as a reference (United Nations, 2016). This report adopts this definition, as it is widely used in analytical work and as data are available in all countries covered by the project. International immigrants are therefore individuals who were born in another country than the country in which they live. This definition does not take into account the citizenship of people.

Some people are born abroad but are not foreigners, while others are born in their country of residence but do not have its citizenship. This often relates to the national legislations in terms of citizenship and naturalisation. Four different scenarios in terms of country of birth and citizenship are illustrated in Table 1.1:

- In countries that favour *jus sanguini*, it is more difficult for the children of immigrants born in the country to get access to the citizenship of their country of birth (**native-born foreigners**).
- In countries where *jus soli* prevails, children of immigrants can become citizens of their country of birth more easily. They are therefore **native-born citizens**, but are often referred to as the second generation.

Box 1.2. **Definitions of immigrants** (cont.)

- In some countries, and depending on the naturalisation rules, individuals born abroad can become citizens of their country of residence after a certain number of years. They are **foreign-born citizens**.
- While most people born in their country of residence are also citizens of that country, in most cases the foreign-born are also foreigners (**foreign-born foreigners**). This is because i) they do not stay long enough to acquire citizenship, ii) the legislation in their country of origin does not allow for dual citizenship or iii) the rules in their host country are too strict.

Table 1.1. **Understanding the difference between immigrants and foreigners**

	Country of birth	
	Born in the country of residence	Born in a foreign country (immigrants)
Citizenship	Native-born citizens	Foreign-born citizens
<i>Citizens of the country of residence</i>	Native-born citizens	Foreign-born citizens
<i>Citizens from another country (foreigners)</i>	Native-born foreigners	Foreign-born foreigners

Labour immigrants

While labour immigration refers to immigration for employment in the destination country as the primary purpose, different ways to measure it exist. Strictly speaking, immigrants who have a work permit in the destination country are labour immigrants. A less strict definition would be those who immigrate for work or employment-related opportunities. Information on the reason for immigration is not always available, even in high-income countries (OECD/European Union, 2014). Yet, some partner countries (e.g. Argentina, Costa Rica, the Dominican Republic and Thailand) have such information.

This report refers to labour immigration in a broad sense by taking from labour force surveys or population censuses those immigrants who are looking for work or are employed. Such a definition reflects the fact that labour immigration often drives other types of immigration flows, such as family immigration, and may be partly driven by those flows. Non-labour immigrants by a strict definition, for instance humanitarian immigrants and students, may also enter the labour market at some point and contribute to the destination country's economy in similar ways that labour immigrants do.

Citizenship is another criterion to define labour immigration. For example, the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families defines the term migrant worker as "any person who is to be engaged, is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national" (United Nations, 1990). The present report distinguishes between different definitions of labour immigrants as appropriate.

Box 1.2. Definitions of immigrants (cont.)

It is important to recognise the differences that may result from using different definitions. To define internationally agreed concepts and standards, an ILO working group on labour immigration statistics was established following the 19th International Conference of Labour Statisticians (ICLS) in 2013. The working group will report at the next ICLS meeting in October 2018.

In this report, two main sources of data were used: administrative and census data. Administrative data capture people registered in administrative processes, while the census data aim at achieving universal coverage of individuals present on the reference date. The data acquired through administrative procedures are used in Chapter 2, which provides insights into some of the common channels of immigration in South Africa as well as policies and procedures. Administrative data usually concern foreign citizens who are born abroad. The remaining chapters, on the other hand, are mostly based on the census data which allow for a comprehensive analysis of international immigrants and their characteristics.

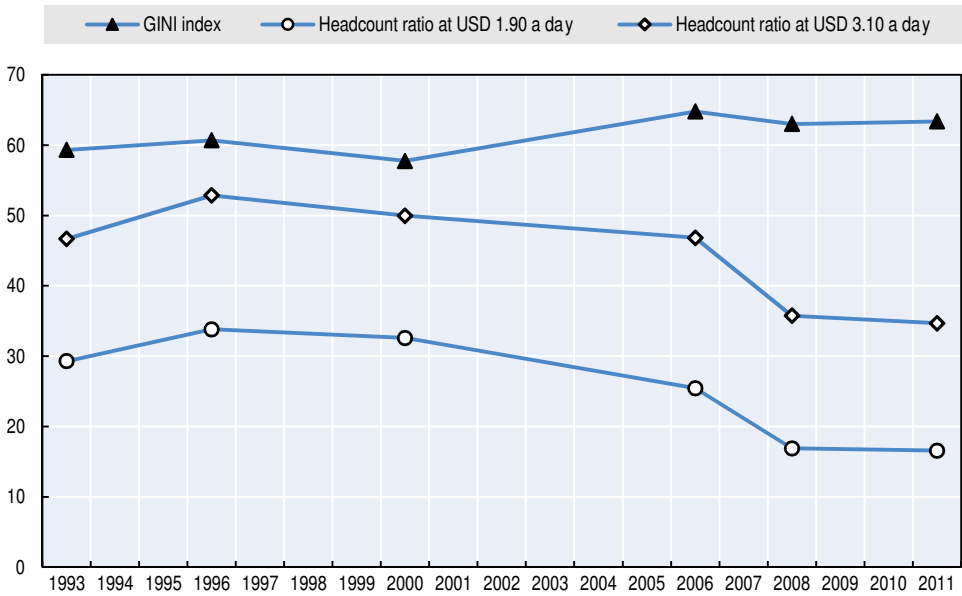
Temporary migration continues to be important

Although the performance of the South African economy appears less volatile than that of its neighbours, economic growth has been slow since the global financial crisis and job creation has been insufficient. Progress has been made in reducing poverty, but the country continues to experience high levels of inequality (Figure 1.2). The labour market is characterised by widespread unemployment and a simultaneous need for skilled workers. Employment and human resource development feature prominently in government policies, as reflected in several long-term labour market targets, alongside measures to address macroeconomic challenges including low growth and high budget deficits.

Migration to South Africa has for decades been shaped by the need for labour to serve the main labour-intensive industries such as agriculture and mining, mostly as (temporary) “migrant labour”, while (permanent) “immigration” was limited to those meeting the criteria of the governing minority. This so-called two-gate policy was based on legislative measures and policies introduced by the National Party from 1948 onwards, although key principles were introduced even earlier. Policy measures including subsidies were used for decades to attract mostly European immigrants in the second half of the 20th century. Trends in immigration and emigration during the apartheid period reflected major political events, such as the 1985 state of emergency, while **permanent migration** rates (immigration minus emigration) became consistently negative in the early 1990s (Figure 1.3). Figures of permanent residence permits generally do not include the numbers of granted residence permits obtained through five post-1994 amnesties.

Figure 1.2. **Income inequality remains high, while poverty has declined.**

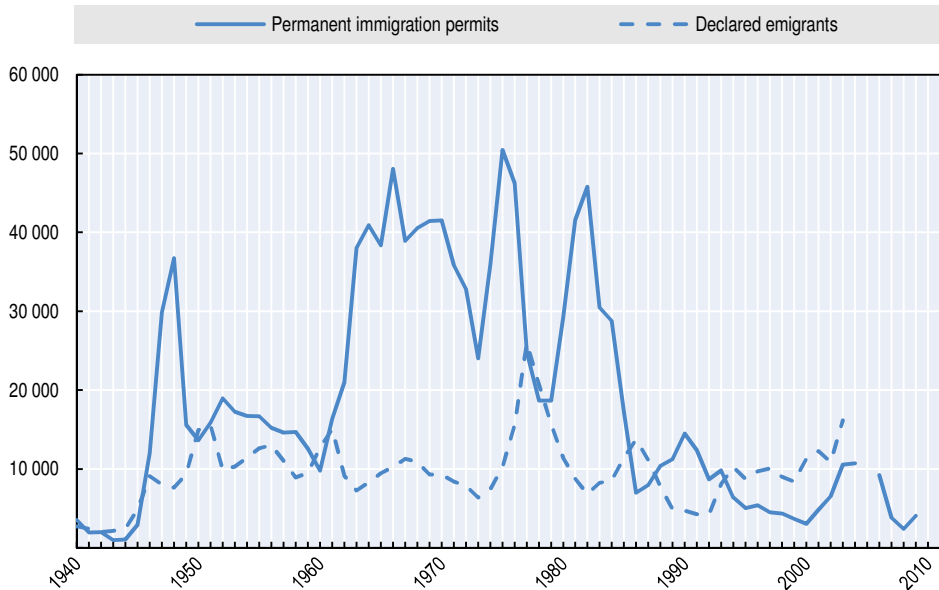
Poverty headcount ratio (USD 1.9 and USD 3.1 a day); Gini index (%)



Source: World Bank (2016).

Figure 1.3. **Declared emigrants have outnumbered permanent immigrants since 1994**

Permanent immigration permits versus declared emigrants, 1940-2009



Note: South African authorities stopped recording emigration after 2004.

Source: DHA (2008 and 2009); Statistics South Africa (2012b).

Even though permanent migration to South Africa decreased dramatically in the early 1990s, **temporary migration**, mostly from African countries, showed the opposite trend. The increase in temporary immigration was related to the need to fill positions previously held by the white minority, but was also fuelled by students and others seeking to benefit from the end of the apartheid era. Population census data show that the black population in South Africa born outside the country amounted to 315 000 people in 1985, compared to 921 000 in 1991. More recent population census data also show that the overall foreign-born population in South Africa increased from 2.3% of the population in 2001 to 4.3% in 2011, with concentrations in the Gauteng, Mpumalanga (Mozambican border) and North West (Botswana and Zimbabwe borders) provinces. In the latter year, Africans accounted for the majority of temporary residence permits, although most work permits (a sub-group of temporary residence permits) were issued to Europeans, Americans and Asians.

Foreign-born workers have traditionally constituted an important part of the workforce in the mining sector, but their role has been diminishing in more recent years. In the early 2000s, foreign-born labour still accounted for more than half of the workers in the mining industry. This fell to about one in five workers in 2012, according to The Employment Bureau of Africa (TEBA), an employment agency.

Another group that merits attention in South Africa are asylum seekers, originating largely from the Democratic Republic of Congo, Ethiopia, Nigeria, Somalia and Zimbabwe. With the adoption of the Refugee Act of 1998, which entered into force in 2000, asylum in South Africa was formalised, and throughout the 2000s applications have increased rapidly. Part of this increase is due to the fact that asylum seekers had full access to education and employment, and asylum procedures risked serving as a back door into the labour market.

South African attitudes and the governance of migration

Fifty years of apartheid policies on mobility have entrenched particularly negative attitudes towards African workers among a range of South African institutions. For example, hostility towards foreign workers has been a reality of employment in South African mines. In the post-apartheid period, xenophobic sentiment and low-intensity violence had become a permanent feature of relationships between citizens and foreigners, particularly African and Asian foreigners. Regular opinion surveys conducted in the 1990s and 2000s, as well as qualitative research, have confirmed high levels of xenophobic sentiment across population groups and social classes (Crush, 2008; Facchini, Mayda and Mendola, 2011; IDASA, 1997; Mataure, 2013; Mattes et al., 1999).

The 1991 Aliens Control Act, nicknamed “apartheid’s last act”, was the cornerstone of South African immigration policy throughout the 1990s and

early 2000s (Government of South Africa, 1991). Despite being subject to constitutional review, in part with regard to migrants' rights, the Act survived 12 years into the post-apartheid period. The newly elected South African government decided to embark on a broad consultative process which resulted in the publication of a Green Paper on International Migration in 1997, and White Papers on Refugees and on Immigration, respectively. Eventually the process led to the adoption of the 1998 Refugee Act and the 2002 Immigration Act. In the meantime, existing practices, administrations and institutions in charge of migration management continued to operate as they had done for many years. The Immigration Act of 2002 was used for at least 15 years to regulate the major changes in flows and the redistribution of migrants across sectors of the economy.

The latest policy developments considered in this report are the publication of a new Green Paper on International Migration by the Department of Home Affairs in 2016 (DHA, 2016) and a White Paper in 2017. The papers argue that international migration is, in general, beneficial if it is well-managed, and should be underpinned by the Constitution and the National Development Plan 2030. One central question dominating discussions on South African immigration policy has been that of the skills shortages, which in turn is related to the role of migration in development planning. While the official government position has been that efforts should be placed in attracting and retaining skills in South Africa, policy implementation has often been lacking in this field. In this regard, the 2016 Green Paper and 2017 White Paper on International Migration represent progress towards a migration management strategy more to the tune of economic and labour market planning.

Immigrants are well-integrated into the labour market in terms of employment and unemployment rates

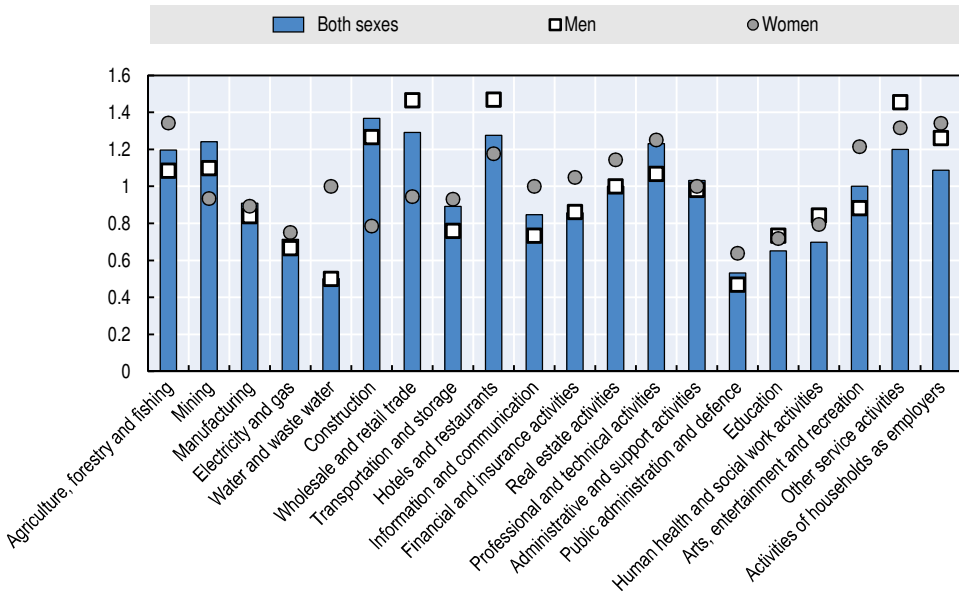
Immigrants in South Africa have much higher employment rates than native-born workers. The difference in the employment-to-population rate between foreign-born and native-born South African workers was almost 25 percentage points in 2011.² Male rates are higher than female rates, but for both sexes the foreign-born employment rates exceed the commensurate native-born rates. Foreign-born workers are relatively young, as a large share is less than 35 years old.

There is not sufficient information to conduct a full assessment of the quality of work performed by immigrants in comparison with native-born workers. However, 2001 and 2011 population census data do suggest that foreign-born workers have become more likely to be in paid employment (as opposed to being self-employed). Foreign-born employment has decreased in agriculture and even more so in industry (including mining), and more foreign-born workers are employed in the growing service sectors of the economy. Despite the drop in

employment of foreign-born miners, foreign-born workers are still overrepresented in this sector as well as in construction, wholesale and retail trade, and several other service sectors (Figure 1.4). Over time, sectoral distributions of immigrants and native-born workers have become slightly more equal.

Figure 1.4. **Immigrant workers are most overrepresented in the construction, trade, hospitality and professional sectors**

Ratio of foreign- and native-born sectoral employment shares, 2011



Note: A ratio of one indicates that the number of foreign-born employed in a sector, expressed as a proportion of all foreign-born employed, is the same as the proportion of the native-born employed in this sector. A ratio exceeding one indicates "overrepresentation" of foreign-born workers in a sector.

Source: Calculations based on Statistics South Africa (2012a).

Occupational employment growth reflects increased educational attainment

Employment growth rates of medium- and high-skilled occupations are relatively high in South Africa compared to the average growth rate across all occupational groups, and immigrant workers are slightly overrepresented in many of these occupations. Together with the slight underrepresentation of foreign-born workers among slow growing occupations, this suggests that labour immigration is sensitive to labour market demand (Figure 1.5).

Occupational growth can be considered from a demographic perspective to analyse the relative contribution of immigration in comparison with other groups. To this end, occupational change is decomposed into changes due to new young entrants to the labour market, prime-age workers, older workers

and new immigrants. This analysis underlines that the employment growth in most occupations is largely driven by new entrants to the labour market, and to a far lesser extent by the other groups including new immigrants.

Figure 1.5. **Immigrants are overrepresented in the two fastest growing occupations**

Employment by major occupational group and place of birth, 2011 (%)



Source: Calculations based on Statistics South Africa (2002 and 2012a).

Education and skills of workers are important factors influencing labour market outcomes, both for immigrant workers and for native-born workers. Skills mismatch arises if levels of education are not in accordance with job requirements. In general, over-qualification has risen for both native- and foreign-born workers while under-qualification rates have dropped in South Africa due to increasing levels of educational attainment. Furthermore, the increase in educational attainment of native-born persons in comparison with immigrants has reduced the advantages of being highly educated for the latter.

Immigration has a limited but positive impact on labour markets

The analysis based on a comparison of labour market indicators is not sufficient to examine possible displacement effects of immigration on native-born workers. Therefore, these effects are examined using an econometric framework, in which immigration is considered as an increase in the supply of labour. This increase is analysed based on two dimensions – education and experience –, which jointly determine the so-called skill cells which are central

to the analysis of the labour market impact of immigration. The analysis uses data from the last two South African population censuses, conducted in 2001 and 2011, and the third quarter wave of the South African Labour Force Survey of 2012 (Statistics South Africa, 2002, 2012a and 2012c). It examines the impact of the presence of immigrant workers on labour market indicators of the native-born population.

In accordance with Facchini, Mayda and Mendola (2013), the analysis finds no impact of the presence of immigrant workers on native-born employment rates at the national level. However, both negative effects on native-born employment rates and positive effects on native-born wages are found at the regional level (Table 1.2). Furthermore, the presence of newly-arrived migrants has a positive impact on both the employment and wages of native-born workers at the national level. One interpretation of these results is that positive effects in the short run are likely to be less favourable for those who are active in the same province as immigrants. The benefits for the native-born population associated with the presence of new immigrants appear to subside in the medium term when the economy has adjusted to the presence of new immigrants.

Table 1.2. Foreign-born workers do not have an impact on South African-born workers, but new immigrants do

Summary of results of regressions of several South African-born labour market outcomes and foreign-born share

Variables	All workers National	All workers Regional	Men	Men (controlling for women)	Women	New immigrants
Employment rate of South African-born workers	o	-	o	o	o	+
Unemployment rate of South African-born workers	o	o	o	o	o	-
Paid employment rate of South African-born workers	o	o	o	o	o	o
Monthly income of South African-born workers	o	+	o	o	+	+

Note: The table reports the sign of the immigrants' share variables from regressions where the dependent variable is the mean South African-born labour market outcome for an education*experience group at a particular point in time. o = no significant effect; + = a significant positive effect; - = a significant negative effect.

Source: Calculations based on Statistics South Africa (2002, 2012a and 2012c).

Immigrant labour raises income per capita

The sectoral distribution of workers is a major determinant of immigrants' contribution to GDP. Over time, South Africa's sectoral shares in terms of both employment and value added demonstrate a steady rise in the weight of the service sector, while a decline is witnessed for agriculture and industry. Across these sectors, an unequal distribution of foreign- and native-born workers is seen, although some convergence occurred between 2001 and 2011. Based only on the sectoral distribution of foreign-born employment, the contribution of immigrant workers to GDP (9.1%) would likely be just below their share in employment (9.2%) in 2011.

The analysis also considers the contribution of immigrant workers based on an estimated production function for the period 2001-11, as well as a macroeconomic model for the South African economy. Simulations with the model, which distinguishes between low-skilled and high-skilled workers, demonstrate that foreign-born workers raise GDP per capita by up to 5%. This effect is due to several factors, including the relatively low earnings of foreign-born workers, which improves the country's competitive position, and their relatively high employment rates.

Immigrants contribute positively to public finance

The fiscal impact of immigration is a recurrent theme in discussions on the costs and benefits of migration. The basic framework for the calculation of the net fiscal benefits of both native-born and foreign-born populations used in this report demonstrates that these benefits are greater for foreign-born workers. Their per-capita net fiscal contribution amounted to 68% of GDP per capita in 2001 and 17% in 2011 in the average cost scenario. In this scenario, all expenditures on public goods are equally allocated to native-born and foreign-born individuals. According to the marginal cost scenario, which allocates some expenditures only to native-born individuals (assuming expenditures would have been the same if foreign-born individuals had not arrived), the per capita net fiscal contribution would be 75% and 27% of per capita GDP for the respective years. In comparison, the net fiscal contribution of the native-born population amounted to 2% in 2001, while in 2011 it was negative (-8% of per capita GDP).

The difference between the net fiscal contributions of the two groups is explained by the far greater contribution of the foreign-born population to government revenue in the form of income tax and value added tax. However, the net contributions of foreign-born and native-born individuals have converged over time.

Conclusions

Overall, immigration generates favourable economic effects in South Africa. Immigrants workers have an upward effect on income per capita and a positive net fiscal contribution, while in general they do not displace native-born workers. Immigrant workers also appear well-integrated in the labour market, demonstrate high employment rates, and may also generate additional employment opportunities for native-born workers.

The government's 2017 White Paper on International Migration acknowledges the positive contribution immigration can make to the South African economy, and introduces a range of policy and strategic interventions (DHA, 2017). Some of these interventions aim to adapt migration policies better to labour market needs, which is one of the five priorities that has been identified in the comparative

analysis of the findings across the project's ten partner countries (OECD/ILO, 2018). Other priorities that have been identified in this analysis and seem particularly relevant in South Africa are fighting discrimination and investing in immigrant integration.

The White Paper recognises that international migration policy is not sufficiently linked to the skills development and investment priorities of the country, and proposes measures that would enable South Africa to compete more effectively for skills and investment. The Paper suggests that such measures could include a points-based system, which could be combined with a list of critical skills or quotas. The regular production and update of such lists should be informed by adequate labour market information systems (Reddy et al., 2016; Sparreboom, 2013). Apart from regular data collection, labour market information systems require institutional arrangements which allow for an articulation of employment policy with migration policy, and adequate representation of social partners.

The way immigrants contribute to economies depends on their job and conditions of work. In South Africa, a considerable proportion of both native-born and foreign-born consist of low-skilled workers, who are vulnerable to exploitation. In the case of foreign-born workers this vulnerability may be reinforced if they have an irregular status. Specific measures to counter discrimination in the labour market and at the workplace are therefore important and should be encouraged (ILO, 2017). Measures could range from awareness raising regarding social and cultural differences and stereotypes, to monitoring of incidents and enforcing of labour standards regarding equal treatment of foreign and native-born workers.

One of the objectives stated in the White Paper concerns the integration of international migrants, and in this context the Paper emphasises that an integration policy requires the adoption of a coherent whole-of-government approach. Such an approach to migration, which brings together all relevant parts of government, workers' and employers' organisations and other non-governmental actor, can bring legitimacy to (labour) migration policies and counteract negative perceptions of migration (ILO, 2017). The White Paper lists important issues that should be addressed by the integration policy, including mechanisms to facilitate provision of social security and portability of social benefits.

The analysis in this report is constrained by the limited availability of data on immigrant workers, and the economic contribution of labour immigration would benefit from regular monitoring and data collection regarding immigrant workers' activities throughout the South African economy. For example, regular collection of data on immigrants as part of household surveys including the labour force survey would allow for improved analysis, and as such serve as a stronger basis for policy development. An area that deserves particular attention is the regular monitoring of integration of immigrant workers in

terms of quality of employment. Although some analysis can be undertaken on the basis of population census data, more indicators are needed which are only available from household and establishment surveys. Besides the need for more regular data on migration flows, there appears to be a need for better utilisation of existing data, as well as improved co-ordination between government departments dealing with data on migration.

Notes

1. For details, see: www.ilo.org/global/topics/labour-migration/events-training/WCMS_384786/lang-en/index.htm.
2. This report mostly relies on population census data; the most recent data available are for the year 2011.

References

- Bodvarsson, Ö.B. and H. Van den Berg (2013), *The Economics of Immigration: Theory and Policy*, 2nd ed., Springer New York, New York.
- Böhme, M. and S. Kups (2017), "The economic effects of labour immigration in developing countries: A literature review", *OECD Development Centre Working Papers*, No. 335, OECD Publishing, Paris, <http://dx.doi.org/10.1787/c3cddd52-en>.
- Budlender, D. (2014), "Migration and employment in South Africa: Statistical analysis of the migration module in the Quarterly Labour Force", *MiWORC Report*, No. 5, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Budlender, D. (2013a), "Improving the quality of available statistics on foreign labour in South Africa: Existing data-sets", *MiWORC Report*, No. 2, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Budlender, D. (2013b), "Improving the quality of available statistics on foreign labour in South Africa: Strategic recommendations", *MiWORC Report*, No. 3, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Budlender, D. (2013c), "Improving the quality of available statistics on foreign labour in South Africa: Suggestions for a Quarterly Labour Force Survey migration module and municipal level surveys", *MiWORC Report*, No. 4, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Crush, J., S. Peberdy and V. Williams (2006), "International migration and good governance in the Southern African region", *Migration Policy Brief*, No. 17, South African Migration Project.
- Crush, J. (2011), "Complex movements, confused responses: Labour migration in South Africa", *SAMP Policy Brief*, No. 25, Southern African Migration Programme.
- Crush, J. (2008), "The perfect storm: The realities of xenophobia in contemporary South Africa", *Migration Policy Series*, No. 50, Southern African Migration Project.
- Crush, J. and V. Williams (2010), "Labour migration trends and policies in Southern Africa", *SAMP Policy Brief*, No. 23, Southern African Migration Programme.
- Crush, J. and V. Williams (2001), "Making up the numbers: Measuring 'illegal immigration' to South Africa", *Migration Policy Brief*, No. 3, South African Migration Project.

- DHA (2017), "White Paper on International Migration for South Africa", *Government Gazette*, Department of Home Affairs, Government of South Africa, Pretoria, https://www.gov.za/sites/default/files/41009_gon750.pdf.
- DHA (2016), "Green Paper on International Migration", *Government Gazette*, No.40088, Department of Home Affairs, Government of South Africa, Pretoria.
- DHA (2009), *Strategic Plan 2010/2011–2012/2013*, Department of Home Affairs, Government of South Africa, Pretoria.
- DHA (2008), *Strategic plan 2008/2009–2010/2011*, Department of Home Affairs, Government of South Africa, Pretoria.
- Facchini, G., A.M. Mayda and M. Mendola (2013), "South-South migration and the labour market: Evidence from South Africa", *IZA Discussion Paper*, No. 7362, Bonn.
- Facchini, G., A.M. Mayda and M. Mendola (2011), "What drives individual attitudes towards immigration in South Africa", *Development Studies Working Papers*, No. 235, Centro Studi Luca D'Agliano and the World Bank.
- Fauvelle-Aymar, C. (2015), "Immigration and the South African labour market", *MiWORC Working Paper*, No. 2, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Fauvelle-Aymar, C. (2014), "Migration and employment in South Africa: An econometric analysis of domestic and international migrants (QLFS (Q3) 2012)", *MiWORC Report*, No. 6, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Hammerstad, A. (2011), "Linking South Africa's immigration policy and Zimbabwe diplomacy", *Policy Briefing*, No. 42, South African Foreign Policy and African Drivers Programme.
- Hussmanns, R. (2004), *Statistical Definition of Informal Employment: Guidelines Endorsed by the 17th International Conference of Labour Statisticians (2003)*, ILO Bureau of Statistics, Geneva.
- IDASA (1997), *Public Opinion Service Questionnaire*, IDASA Political Culture Study, South African Data Archive.
- ILO (2017), *Addressing Governance Challenges in a Changing Labour Migration Landscape*, Report IV, International Labour Conference, Geneva.
- ILO (2015), *ILO Global Estimates on Migrant Workers: Results and Methodology, Special Focus on Migrant Domestic Workers*, International Labour Office, Geneva.
- Kerr, S.P. and W. R. Kerr (2011), "Economic impacts of immigration: A Survey", *NBER Working Paper*, No. 16736, Cambridge, Massachusetts.
- Mataure, M. (2013), "Citizens perception on migration in South Africa", *Afrobarometer Briefing Paper*, No. 112.
- Mattes, R. et al. (1999), "Still waiting for the barbarians: SA attitudes to immigrants and immigration", *Migration Policy Series*, No. 14, The Southern African Migration Project.
- Mthembu-Salter, G. et al. (2014), "Counting the cost of securitising South Africa's immigration regime", *Migrating out of Poverty Working Paper*, No. 20, Brighton.
- OECD/European Union (2014), *Matching Economic Migration with Labour Market Needs*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264216501-en>.
- OECD/ILO (2018), *How Immigrants Contribute to Developing Countries' Economies*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264288737-en>.

- Rasool, F. and C. J. Botha (2014), "Developing a competitive skills immigration policy for South Africa", *Journal of Social Sciences*, Vol. 39/2, pp. 225-234.
- Reddy, V. et al. (2016), "Skills supply and demand in South Africa", *LMIP Publication*, Human Science Research Council, Pretoria.
- Sparreboom, T. (2013), "Labour market information and analysis systems", in S. Cazes and S. Verick (eds.), *Perspectives on Labour Economics for Development*, International Labour Office, Geneva.
- Statistics South Africa (2012c), "Quarterly Labour Force Survey (QLFS)", 3rd Quarter 2012, Statistical Release P0211 and QLFS 2012 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=1854&PPN=P0211&SCH=5367.
- Statistics South Africa (2012b), "Tourism and migration August 2012", *Statistical Release P0351*, Statistics South Africa, Pretoria.
- Statistics South Africa (2012a), "Census 2011", Statistical Release P0301/4 and Census 2011 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3839.
- Statistics South Africa (2002), "Key Results" and Census 2001 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3908.
- Waller, L. (2006), "Irregular migration to South Africa during the first ten years of democracy", *Migration Policy Brief*, No. 19, Southern African Migration Project.
- United Nations (2017), *International Migration Report 2017: Highlights*, United Nations Department of Economic and Social Affairs, Population Division, New York.
- United Nations (1998), "Recommendation on statistics of international migration", *UNDESA Statistical Papers Series M*, No. 58, Rev. 1, United Nations Department of Economic and Social Affairs, New York.
- United Nations (1990), "International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families", *United Nations General Assembly Resolution 45/158*, New York.
- World Bank (2016), *World Development Indicators* [online], WB Publishing, Washington, DC, <https://data.worldbank.org/products/wdi>.

Chapter 2

The immigration landscape in South Africa: Patterns, drivers and policies

This chapter presents the economic and policy context of labour immigration in South Africa. It starts with an overview of the macroeconomic environment and recent socio-economic development the country has experienced. Subsequent sections provide the immigration context in a historical perspective and discuss South African attitudes towards migration. The chapter ends with a review of the current governance of immigration, including the link between immigration policy and the broader economy

South Africa's immigration context is intrinsically linked with its history. The country's economic development follows the colonial expansion in the 18th century and the discovery of large amounts of ores in the late 19th century. This gave rise to one of the most concentrated systems of capital accumulation based on mineral extraction that has been established on the African continent.

Central to the reproduction of the South African mineral-extracting industries over a century was the migrant labour system. As labour intensive sectors, mineral extraction as well as agricultural production required constant supplies of labour that met the requirements of the mining houses and farmers: abundance, docility and exploitability at minimal costs (Paton, 1995). In parallel to the migrant labour system, apartheid South Africa both prevented its own black population from becoming equal citizens and tried to use aggressive immigration policies to increase the share of its white minority.

In the post-apartheid era, South Africa has had to manage gradual but substantive change in migration flows towards its territory and labour market. The profile of migrants to South Africa, the sectors in which they have been hired and the reaction of the local population, recently reincorporated into the polity but still relatively marginalised socio-economically, have been the key challenges. Effort to improve immigration governance recently culminated in a new migration policy.

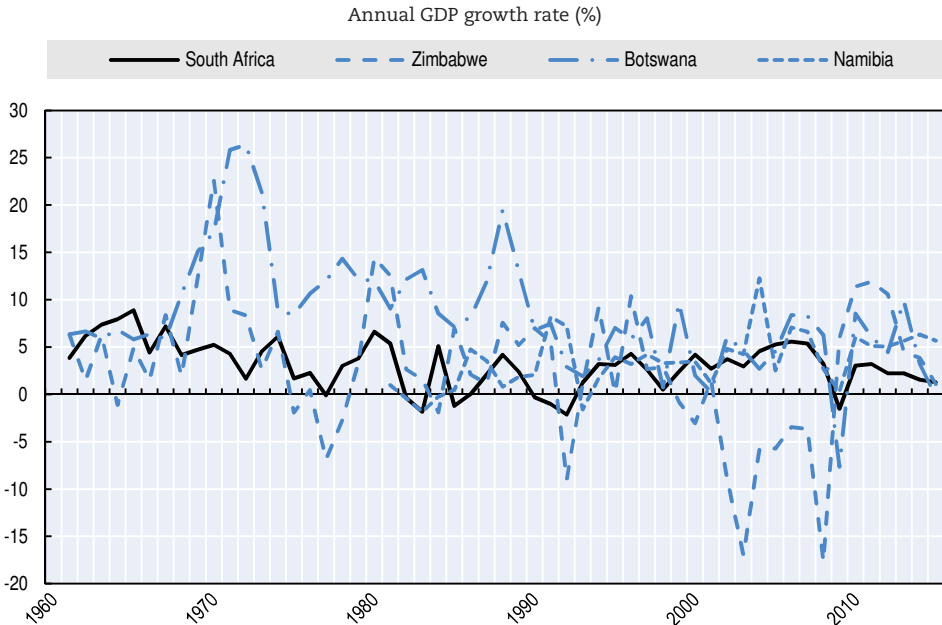
Economic context: Stable but slow economic growth and high levels of inequality

Since 1945, South Africa has had a tormented history characterised by apartheid, defined as political segregation at the service of a racist, unequal socio-economic development model, and its demise in 1990. Since its first democratic elections in 1994, the country has made strides in poverty reduction, in particular thanks to large investments in infrastructure and in social grants targeting the poorest. With a GDP per capita in 2015 of 12 390 USD PPP,¹ South Africa is categorised among upper middle-income countries by the World Bank, and is considered the second largest economy in Africa behind Nigeria. However, it also has some of the highest inequality levels in the world, persistently high levels of poverty and very high levels of structural unemployment particularly among black youth.

Over the past 20 years, South Africa has experienced a 3% average annual growth rate of GDP, which compared to its neighbours was stable yet also

quite low (Figure 2.1). The period prior to 1994 witnessed a general decline in growth rates largely due to the international trade and financial sanctions against the apartheid government, as well as low investment levels related to political instability (Faulkner and Loewald, 2008). By 1994, the downward trend in economic growth rates was reversed as a basic level of political stability was re-established, consumer and business confidence was built, and consumption and investment levels started to rise (*ibid.*). The following ten-year period saw an average annual growth rate of 3%, accelerating to more than 5% from 2005 to 2007. However, this successful growth spurt was interrupted by the global financial crisis which resulted in a negative GDP growth rate of 1.5% in 2009 and led to a decrease in per capita GDP from 12 275 United States dollars (USD) to USD 11 911 (World Bank, 2016a). Since that time, South Africa has not been able to return to its pre-crisis growth rates.

Figure 2.1. **Stable but slow economic growth compared to neighbouring countries**



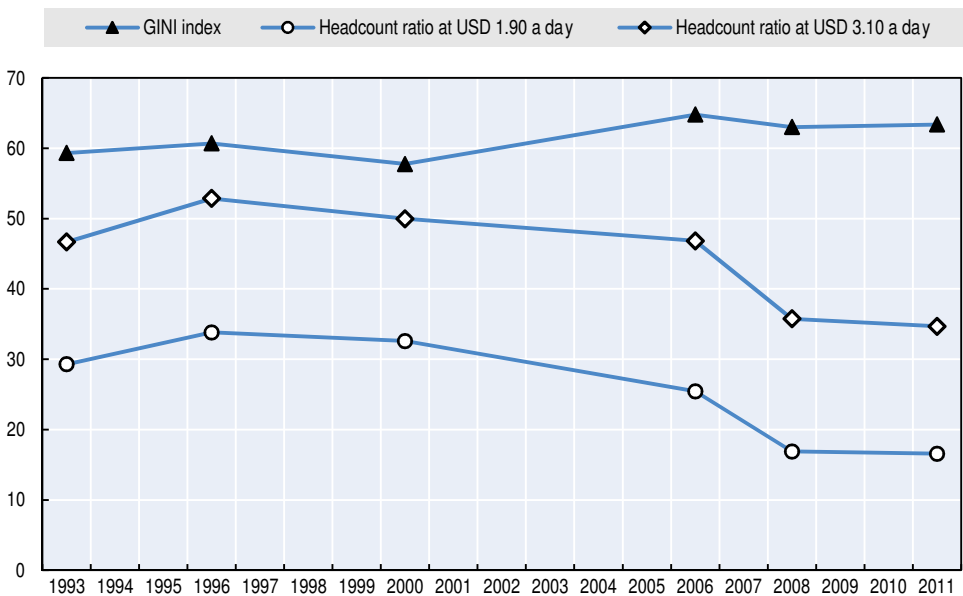
Source: World Development Indicators (World Bank, 2016a).

Other factors hampering South Africa's prosperity are income inequality and poverty. While inequality was on the rise in the early 2000s, poverty declined partially due to the expansion of the social grant system in 2002 and faster job creation (Faulkner and Loewald, 2008). Since 2008, progress in poverty reduction and inequality appears to have stagnated (Figure 2.2). The high levels of inequality (as measured by a Gini coefficient exceeding 60%) are partially the result of employment growth not keeping up with the growth of the labour

force, resulting in continuously high unemployment rates of well over 20%. Inequality is generated between the employed and the unemployed, as well as due to wage gaps in the workplace (Keeton, 2014). It has been argued that in order to reduce inequality, South Africa must not only create more jobs, but also increase the educational attainment of its citizens in order to fill the high- and semi-skilled positions that are vacant at the moment (ibid.). Furthermore, the education system should allow for more post-school training opportunities as well as improve the quality of management and administration of schools (Bhorat et al., 2014).

Figure 2.2. **Income inequality remains high, while poverty has declined in the past ten years**

Poverty headcount ratio (USD 1.9 and USD 3.1 a day); Gini index (%)



Source: World Development Indicators (World Bank, 2016a).

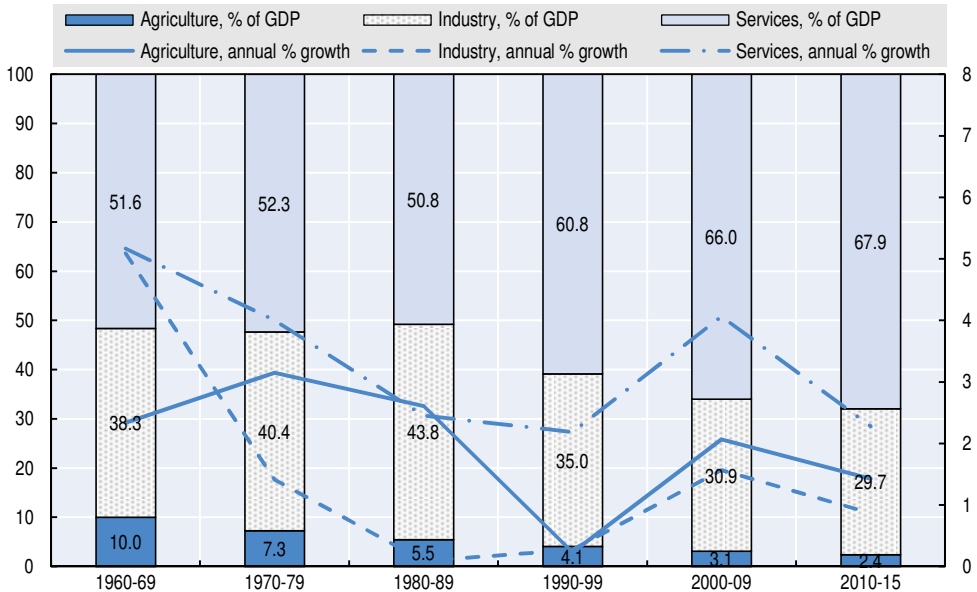
The need for skilled workers has increased and financial challenges continue

Trends in the sectoral contributions to GDP illustrate the need for skilled- and semi-skilled workers (Figure 2.3). While the sectoral contribution of agriculture shows a long-term decline, the contribution of services has been on an upward trend since the 1980s. In 2014, services accounted for 69% of GDP, while agriculture and industry account for 2.3% and 29%, respectively. The contribution of industry has been declining in the absence of a competitive and strong manufacturing sector, while exports of raw materials have continued to

dominate. Industry, and particularly many service occupations, require higher levels of education than are often available in the workforce. The South African government indeed continues to place emphasis on building a skilled and capable workforce for inclusive development (Reddy et al., 2016).

Figure 2.3. Services contribute most to gross domestic product

Value added by sector (% of GDP, left-hand axis), annual value added growth by sector (% , right-hand axis)



Source: World Development Indicators (World Bank, 2016a).

On the financial side, South Africa's growth prospects are held back by a rising level of government debt, as well as considerable deficits on the current account. In fact, the GDP growth outlook for 2016 was revised downwards to 0.4% (World Bank, 2016b). Key drivers of the revision included the plunge in commodity prices, domestic issues such as weak investment sentiment and policy uncertainty as well as the increasing levels of unemployment (*ibid.*). In order to curb the increasing deficits, South Africa follows the budget framework that was outlined in the Medium Term Budget Policy Statement 2013. This framework seeks to limit government spending, reduce the budget deficit and shift borrowing to capital and investment expenditure (Bhorat et al., 2014; World Bank, 2016b).

Employment constitutes a focus of development policies

The government has adopted the 2030 National Development Plan (NDP) with a view to doubling GDP, eliminating poverty and reducing inequality (Government of South Africa, 2012). The plan outlines objectives for various

social and economic areas, including an unemployment rate falling to 6% in 2030 and an increase of employment to 24 million people. This should be achieved through job creation including public employment programmes, which should reach 2 million people. Secondly, the proportion of working adults should rise to 61%, while the labour force participation rate is expected to rise to 65%. Thirdly, real GDP should grow at a rate of 5.4% annually. Finally, the plan aims at reducing the number of households living below 419 South African rand (ZAR) per person from 39% to 0%, reduce the Gini coefficient from 69% to 60% and increase national income earned by the bottom 40% to 10% in 2030.

Through the objectives outlined above and related measures, the NDP is trying to achieve a decent standard of living for all its citizens. The NDP consists of various elements including, for example, the provision of housing and utilities, quality education and skills development, and social protection. The plan emphasises that actions need to be taken by the social partners across all sectors in the society.

The two-gate policy: African migrant labour and European immigration

Against the backdrop of these socio-economic challenges, this section elaborates on South Africa's migration system throughout the second half of the 20th century. The structure of immigration to South Africa in the 19th and 20th centuries was shaped by the progressive consolidation of the “two-gate policy” (Crush, 2000; Peberdy, 2009). The front gate welcomed people who corresponded to the criteria of attractiveness defined by the governing minority. The back gate served a double function, preventing unwanted migrants from entering and settling in, while allowing cheap labour to enter for well-defined periods. Closely connected to the grand apartheid scheme, notably its homelands policy, this system blurred the lines between citizens (specifically, the indigenous population) and foreigners.

Immigration to South Africa and the reaction of South African society to it are the result of a combination of factors. First, they should be seen as an outcome of the complex and changing relations between the South African state, the agricultural and mining sectors, and labour-sending neighbouring countries. Secondly, immigration to South Africa and its impact have resulted from the combined effects of the proactive “white” immigration policy of successive nationalist governments with competition between its Afrikaner and British components. Finally the apartheid legislation itself, specifically on residential segregation, influx control and preferential job criteria, has impacted immigration and South Africa's reaction as well. These different constraints, imperatives and political choices contributed to mainly coercive migration management practices and stereotyped images of foreigners that have shaped approaches to reforming migration policy well into the 21st century.

The situation that prevailed in 1990, under the De Klerk administration, reflected 90 years of legislation aimed at creating and preserving a racist society and serving its mode of capitalist accumulation mostly relying on mining and farming. In the early 1990s, laws regulating immigration essentially replicated the principles enshrined in the 1937 Aliens Control Act (Peberdy, 2009). The act first introduced the term “alien” into legislation and explicitly introduced the “racial” criterion as a condition of entry into South African territory. Section 4(3)(b) of the act stated that all applicants should be “likely to become readily assimilated” with the European inhabitants of the Union and that they should not represent a threat to “European culture.” From 1948 onward, the National Party passed three major laws that closely bound immigration policy, citizenship and the management of indigenous populations: the 1950 Population Registration Act (on racial classification), the 1962 Commonwealth Relations Act (which ended uncontrolled transborder movements in Southern Africa) and the 1955 Departure from the Union Regulation Act (which required authorisation to depart from South African territory).

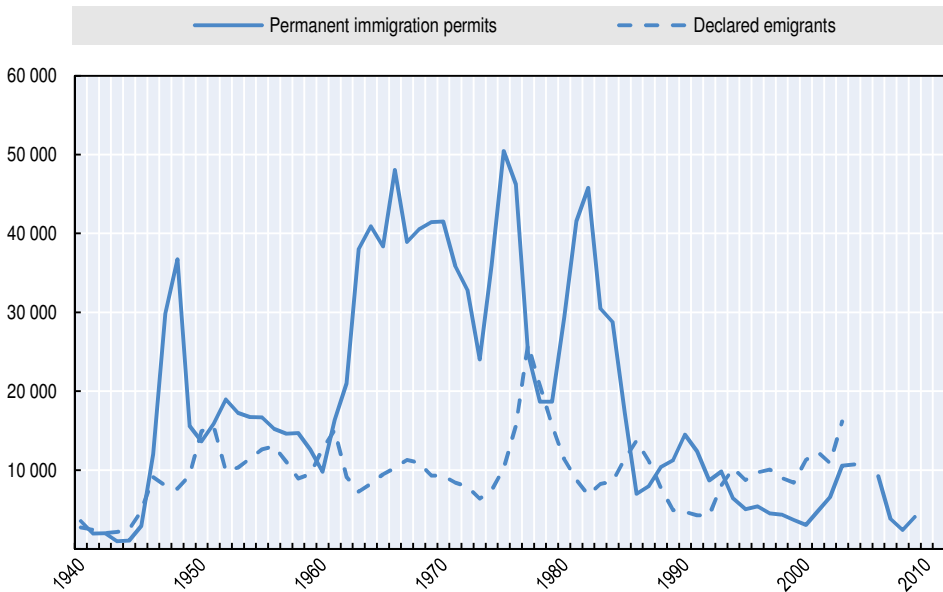
In the 1950s, the (largely Afrikaner) National Party considered curtailing largely Anglophone immigration for fear of losing its majority in Parliament. By the early 1960s, the political context had changed and the politically strengthened National Party decided to set up a proactive (albeit still discriminatory) policy to address the increasing scarcity of qualified white labour. Between 1961 and 1991, several programmes were implemented and subsidies and direct state aid allowed for the settlement of European immigrants. These subsidies – used to fund travel expenses, accommodations and settlement allowances – reached ZAR 3.6 million in 1972/73 and up to ZAR 8 million in 1991, when they were eliminated. The recruitment of British immigrants continued to dominate, largely due to the ease of recruitment, the suitability of candidates and the changing views of the National Party, that had managed to draw increasing numbers of South Africans of British descent to its ranks. Besides Europeans, two other groups of immigrants were actively sought after. Firstly, white settlers fleeing from newly independent African countries, many of them in fact being returning South Africans; and secondly, refugees and people leaving Eastern Europe (Peberdy, 2009).

Immigration was volatile during apartheid; migration rates turned negative in the 1990s

While the policy managed to attract several hundreds of thousands of immigrants over three decades (1960s-1980s), ranging from 18 000 to a peak of more than 50 000 in 1975 (Peberdy, 2009), government efforts neither managed to turn around the bias in favour of British immigrants, nor to counter the negative impact of political unrest on white South Africans’ decision to leave the country. Figure 2.4 provides a clear indication of peaks of emigration recorded at each

major political event the country went through, starting with the National Party's election in 1948, the 1960 Sharpeville massacre, the 1976 Soweto uprising, the 1985 state of emergency and the 1994 democratic elections. The uncertainties of the last decade before 1994, coupled with a sense of imminent loss of power for white South Africans, have resulted in a negative migration rate since 1994. Based on the number of permanent residence permits issued, it can also be seen that the proportion of African immigrants decreased until 1992/93, while the numbers of Asian immigrants jumped dramatically. In the course of the 1990s the proportions of African, European and Asian immigrants stabilised at about one-third from each region (see Figure 2.5).

Figure 2.4. **Declared emigrants have outnumbered permanent immigrants since 1994**
Permanent immigration permits versus declared emigrants, 1940-2009



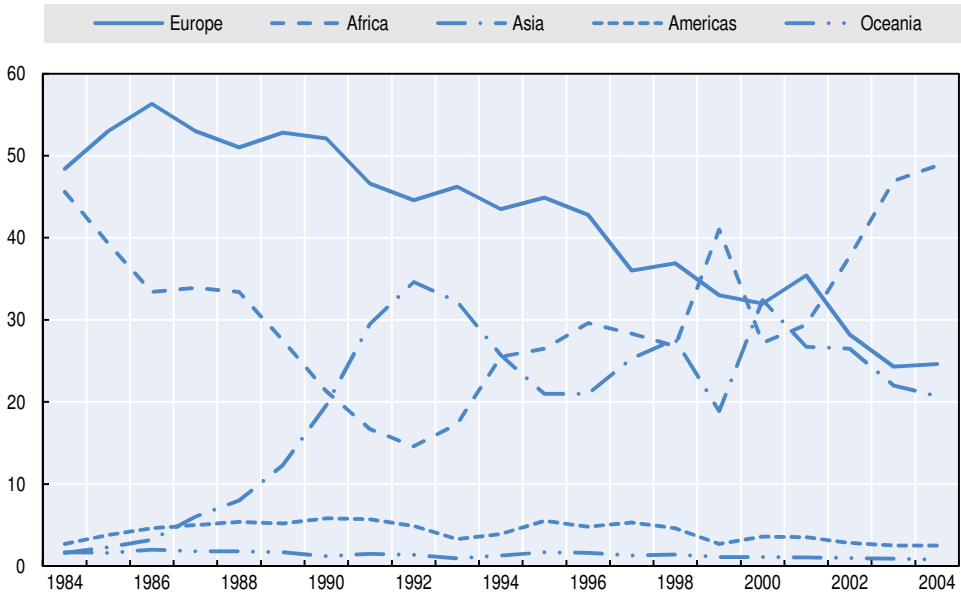
Note: South African authorities stopped recording emigration after 2004.

Source: DHA (2008 and 2009); Statistics South Africa (2012).

Figures 2.4 and 2.5 reflect only legal emigration and immigration, and do not take into account temporary residence permits or irregular migration. The restrictions imposed on permanent residence led to an explosion in temporary entries in the years leading up to the democratic transition, rising from about 400 000 a year in 1988 to almost 700 000 in 1992 (DHA, n.d.). This boom mostly benefited immigrants from Africa, particularly African students, who represented up to 60% of foreign students enrolled at South African universities in 1996 (Ramphela, 1999).

Figure 2.5. Legal immigrants from Europe, Africa and Asia each accounted for around one-third of immigration in the course of the 1990s

Permanent residence permits issued per continent of origin, 1984-2004



Source: DHA (n.d.).

Black immigrants originating from other Southern African countries have been coming to South Africa since the 1800s, although they were largely considered as non-citizens and prevented from settling in the country. Often viewed as temporary sojourners, this group of immigrants nonetheless formed a substantive part of the population present on the territory of South Africa since the beginning of the 20th century. The legislation was only amended in 1986 when, for the first time, non-whites were authorised, in theory, to apply for immigration permits into South Africa. Table 2.1 shows their numbers over the 20th century on the basis of census data.

Table 2.1. The black foreign-born population has grown steadily over the past century

Black population born outside South Africa enumerated in censuses, 1911-1996

1911	1921	1936	1951	1960
229 207	279 650	333 777	605 992	586 043
1970	1980	1985	1991	1996*
516 043	677 160	315 482	920 913	549 720

Note: *Includes whites born in African countries outside South Africa.

Source: Cited in Peberdy (2009), based on various government statistics.

To sum up, at the turn of the 1990s, there were fewer permanent immigrants entering South Africa who were no longer exclusively Europeans. The early 1990s was also the time when increasing numbers of white-collar workers from other African countries and Asia reached South Africa. Unable to access permanent residence because of weak financial resources (permanent residence fees were prohibitively high at the time), they progressively occupied positions deserted by the white minority. However, their situation remained precarious, given their status as holders of temporary work permits.

Immigration trends in the post-apartheid era

Trends since 1994 confirm the general dwindling in permanent resident permits. Nevertheless, immigration has been growing due to increases in temporary migration and mobility (of less than 90 days) to South Africa, as well as amnesties. Based on population census data, the foreign-born population has grown from about 2.3% or 1 million people in 2001 to 4.3% or 2.2 million people in 2011, with concentrations in the Gauteng, Mpumalanga (Mozambican border) and North West (Botswana and Zimbabwe borders) provinces (Budlender, 2013).

Trends per type of permit, nationality and sector

Numbers of permanent residence permits issued decreased substantially to less than 10 000 a year from the early 1990s onwards, and often numbered less than 5 000 a year (see Figure 2.4 and Budlender [2013, Table 4]). By comparison with the 1960s, 1970s and 1980s, the number of permanent residence permits issued annually has reached an all-time low.

Numbers of temporary work permits issued, which were below 10 000 a year in the first half of the 1990s, have increased but also show large fluctuations (Table 2.2). Although higher than the number of permanent residence permits, the numbers remain low in relation to the national workforce.² Based on arrival statistics, Crush and Williams (2010) report higher numbers of work-related entries into South Africa for a number of years from 1996 to 2008 (Table 2.3). These numbers indicate that Europeans continued to be favoured over migrants from other regions until the second half of the 1990s, but by the mid-2000s, work-related entries into South Africa reflected a more balanced picture in terms of regions of origin (Crush and Williams, 2010).

In 2011, the share of permits issued to Africans had increased to around 54% of all permits and 29% of all permits were issued to nationals of the Southern African Development Community (SADC) (Table 2.4). However, the majority of work permits, out of all these temporary residence permits, continued to be allocated to mostly Europeans, Americans and Asians (57% of all work permits)

while African nationals were mostly issued other types of permits (which include spouse, medical, pensioners, etc.). Study permits were overwhelmingly issued to African nationals (78% of all study permits).

Table 2.2. The number of new work permits issued is on an upward trend
Work permits issued, 1990-2000, 2004, 2006-08 and 2010-11

Year	New permits	Renewals	Total
1990	7 657	30 915	38 572
1991	4 117	32 763	36 880
1992	5 581	33 318	38 899
1993	5 741	30 810	36 551
1994	8 714	29 352	38 066
1995	11 053	32 838	43 891
1996	19 498	33 206	52 704
1997	11 361	17 129	28 490
1998	10 828	11 207	22 035
1999	13 163	10 136	23 299
2000	6 643	9 191	15 834
2004	4 185	n/a	n/a
2006	17 205	n/a	n/a
2007	19 601	n/a	n/a
2008	32 344	n/a	n/a
2010	5 926	n/a	n/a
2011	132 577	n/a	n/a

Source: Budlender (2013).

Table 2.3. Countries of origin have become more geographically balanced
Legal entry into South Africa for work by country of origin, 1996-2008 (%)

	1996	1998	2000	2002	2004	2006	2008
Africa	45	29	25	29	35	37	34
Europe	23	39	38	36	30	27	25
North America	6	12	12	10	7	5	5
Central and South America	1	2	2	2	2	1	1
Australia	1	2	2	2	2	1	1
Middle East	1	1	1	2	1	1	1
Asia	7	10	12	12	17	21	21
Indian Ocean Islands	0	0	1	0	0	0	0
Unspecified	15	5	7	6	6	6	12
Number	118 449	81 442	68 979	58 747	83 264	114 237	137 032

Note: Numbers may not add up due to rounding.

Source: Budlender (2013); Crush and Williams (2010).

Table 2.4. Most work permits are still issued to overseas migrants
Temporary residence permit recipients by geography and type, 2011

	Business	Work	Study	Other	Total	% of work
Total	1 346	20 673	16 928	67 226	106 173	100
Overseas	883	11 885	3 657	32 206	48 631	57
Africa	463	8 765	13 266	34 966	57 460	42
SADC	93	6 329	7 901	17 473	31 796	31
Angola	12	47	1 012	968	2 039	0
Botswana	3	97	206	425	731	0
Democratic Republic of the Congo	17	214	1 072	1 298	2 601	1
Lesotho	3	107	536	2 060	2 706	1
Madagascar	0	7	27	45	79	0
Malawi	6	239	233	1 569	2 047	1
Mauritius	0	51	64	167	282	0
Mozambique	6	94	159	1 138	1 397	0
Namibia	0	14	325	465	804	0
Seychelles	0	1	9	20	30	0
Swaziland	1	87	318	689	1 095	0
Tanzania	2	62	129	511	704	0
Zambia	7	240	425	981	1 653	1
Zimbabwe	36	5 069	3 386	7 137	15 628	25
Other Africa	370	2 436	5 365	17 493	25 664	12

Source: Budlender (2013); Statistics South Africa (2012).

In 2016, the South African Department of Home Affairs (DHA) indicated that between 2010 and 2013, over 91 000 applications for work-related temporary residence visas (a new name for permits) were received. General work visa applications accounted for over 55% of work-related temporary residence visas while intra-company transfers (section 19 (5) work visas) accounted for 18%. Corporate work visa applications were the lowest at 3.6%. China accounted for the highest number of applications followed by Zimbabwe, India, Pakistan and Nigeria. These top 5 countries constituted over 65% of applications between 2010 and 2013. The top 15 countries account for 81% of all applications (DHA, 2016: 27).

The latest statistics released by the DHA covering the period between June 2014 and January 2016 indicate that a total of 124 453 temporary residence visa applications were received. Of these, 24% were relatives visas. Nationals from Bangladesh, Nigeria and Pakistan were the most likely to apply for such visas. Applications for relatives visas were followed by applications for study visas and visitors visas which made up respectively 18% and 14% of all applications for temporary residence visas received. Nationals from Zimbabwe (20%), followed by those from Nigeria (15%), the Democratic Republic of the Congo (9%) and Angola (6%) accounted for half of the study visa applications (DHA, 2016).

Foreign workers have traditionally constituted an important part of the workforce in the mining sector. Data show that until the early 2000s more than half of the workers in goldmines were foreign citizens, but from 2001, this proportion declined rapidly. The South African Government agreed on a Mining Charter with mining companies in 2003, which entrenched the principle of the phasing out of foreign workers through the non-renewal of contracts. Nevertheless, two countries (Lesotho and Mozambique) retained large numbers of mineworkers while Botswana and Swaziland saw their numbers shrink to very low levels. Political solidarity with Lesotho and Mozambique, and mutual economic dependency, largely explain these differences (Table 2.5). The large majority of workers in the mining industry are recruited by The Employment Bureau of Africa (TEBA), an employment agency, and their data demonstrate that about one in five workers in the mining industry was a foreigner by 2012 (Table 2.6).

Table 2.5. The immigrant share of mineworkers peaked in 1997 and has fallen steadily since

Mineworkers in gold mines by country of origin, 1990-2006

Year	South Africa	Botswana	Lesotho	Mozambique	Swaziland	% foreign	Total
1990	199 810	14 609	99 707	44 590	17 757	47	376 473
1991	182 226	14 028	93 897	47 105	17 393	49	354 649
1992	166 261	12 781	93 519	50 651	16 273	51	339 485
1993	149 148	11 904	89 940	50 311	16 153	53	317 456
1994	142 839	11 099	89 237	56 197	15 892	55	315 264
1995	122 562	10 961	87 935	55 140	15 304	58	291 902
1996	122 104	10 477	81 357	55 741	14 371	58	284 050
1997	108 163	9 385	76 361	55 879	12 960	59	262 748
1998	97 620	7 752	60 450	51 913	10 336	57	228 071
1999	99 387	6 413	52 188	46 537	9 307	54	213 832
2000	99 575	6 494	58 224	57 034	9 360	57	230 687
2001	99 560	4 763	49 483	45 900	7 841	52	207 547
2002	116 554	4 227	54 157	51 355	8 698	50	234 991
2003	113 545	4 204	54 479	53 829	7 970	51	234 027
2004	121 369	3 924	48 962	48 918	7 598	47	230 771
2005	133 178	3 264	46 049	46 975	6 993	43	236 459
2006	164 989	2 992	46 082	46 707	7 124	38	267 894

Source: Budlender (2013).

Permanent residence through amnesties

One significant add-on to stocks of regular immigrants in South Africa in the post-apartheid period has been coming from amnesties of irregular immigrants already present in the country. The figures of permanent residence permits shown previously did not include the numbers of granted residence permits obtained through five post-1994 amnesties, namely the 1995 amnesty

for mineworkers; the 1996 amnesty for nationals from SADC; the 1999-2000 amnesty for Mozambicans; the 2009-10 special dispensation for Zimbabweans; and the 2016 special dispensation for Basotho. The first three amnesties reportedly granted permanent residence to a total of around 258 000 people – 51 000 in the mineworker amnesty, 124 000 in the SADC national amnesty and 82 000 in the Mozambican national amnesty (Budlender, 2013).

Table 2.6. The share of migrant mineworkers continues to drop

Mineworkers recruited by The Employment Bureau of Africa for mines and sub-contractors, by country of origin, 2006-12

Year	RSA	Lesotho	Botswana	Swaziland	Mozambique	% foreign	Total
2006	218 137	46 078	2 992	7 123	46 706	32	321 036
2007	225 949	45 608	2 845	7 099	44 879	31	326 380
2008	243 701	42 851	2 654	6 397	43 004	28	338 607
2009	224 544	38 559	2 357	5 855	39 090	28	310 405
2010	228 370	35 179	1 800	5 009	35 782	25	306 140
2011	240 896	34 583	1 783	4 779	34 940	24	316 981
2012	244 842	30 519	1 527	4 485	31 596	22	312 969

Source: Budlender (2013).

There are conflicting figures regarding the special dispensation for Zimbabweans. The *Annual Report 2011-12* from the Department of Home Affairs indicates that 203 364 cases were resolved out of around 275 000 applications (Budlender, 2013). However, not all of the applicants were granted permanent resident permits; many were in fact granted three-year work or study permits (Amit, 2011). By September 2016, 48 000 applications for Basotho had been approved, a far cry from the 400 000 applications initially expected.³

The question of displaced populations

Until the democratic transition of 1994, South Africa was widely regarded as a country of origin rather than a destination of refugees. It was endowed with a better border monitoring capacity than its neighbours, protecting it from massive inflows stemming from the civil conflicts that affected the region following independence elsewhere. Furthermore, South Africa was actively involved in the conflicts that generated refugees in other countries through the regional destabilisation strategy conceived by the apartheid state in the early 1980s. Southern Africa was also affected by the major refugee movements experienced elsewhere on the continent in the early 1990s, namely the crises in Burundi, the Democratic Republic of the Congo and Rwanda.

Although asylum systems had been progressively put in place in neighbouring African countries, South Africa entered the 1990s without asylum legislation and processes. The lack of such a system reflected both the fact that South Africa had fewer refugees than other countries and the isolation of the

South African government internationally. Before the 1990s, asylum reflected segregationist immigration policies rather than international agreements. South Africa welcomed different waves of European immigrants in the 20th century: Lithuanian and Russian Jews who fled pogroms and the rise of Nazi Germany in the 1930s; Italian prisoners during the Second World War; Greeks fleeing the dictatorship of the colonels; Belgians and Portuguese fleeing Angola, the Democratic Republic of the Congo and Mozambique after independence; and returnee South Africans from Northern and Southern Rhodesia.

In the 1980s, conditions within the region began to put pressure on South Africa's refugee and asylum policies and practices. The Mozambican conflict created an important inflow of refugees from 1984 onward, which was the only massive inflow of refugees to South Africa in recent history. The Mozambican inflow had major repercussions for the asylum and immigration policies that the new post-apartheid government developed during the 1990s. Agreements signed between the United Nations High Commissioner for Refugees and the South African government from 1993 onward made it possible (after a laborious process) to grant Mozambican refugees a status. However, in spite of an official legal recognition of their refugee status, Mozambicans who had sought refuge in South Africa continued to be deported as illegal immigrants and only relatively small numbers managed to legalise their situation in the late 1990s and early 2000s.

With the adoption of the Refugee Act of 1998, which entered into force in 2000, asylum in South Africa was formalised, resulting in a rapid increase of applications throughout the 2000s. In the absence of a legal channel of entry for the low-skilled from the area outside of corporate permits, asylum became the back door to the labour market. This was facilitated by the fact that South Africa had opted for non-encampment of refugees, while, following a jurisprudence decision of 2002, asylum seekers have full access to studies and employment (Peberdy, 2009). In turn, this promoted corruption in the adjudication of refugee status, allowing the country to become notorious for hosting a large asylum seeker population in the early 2010s.

A recent revision of application data has led the Department of Home Affairs to update its asylum figures. According to the Department of Home Affairs (DHA, 2016), in May 2015 there were around 78 000 asylum seeker visas issued and active, and around 97 000 refugees. The vast majority of refugees and asylum seekers are African, with the Democratic Republic of the Congo, Ethiopia, Nigeria, Somalia and Zimbabwe among the top countries of origin (DHA, 2016: 30). In addition to access to the labour market, since 2006 refugees (not asylum seekers) have also been entitled to all social grants offered to citizens. In 2016 however, the DHA introduced an amendment bill to the Refugee Act which should considerably modify conditions of asylum in South Africa and in particular repeal asylum seekers' right to work and study.

South African attitudes – a country of immigration?

In many respects, South Africa can be compared to countries of immigration such as Australia, Canada, New Zealand or the United States. It shares a history of trade route, colonial conquest and settler destination from the 17th to the 20th centuries. However, successive waves of European immigrants, particularly as from the late 19th and early 20th centuries, have had to face the hostility of former settlers, in particular those of Dutch descent, first called Boers and then Afrikaners, who had a claim over ownership of the land. The discovery of ore (gold and then diamond ore) in the second half of the 19th century led to new arrivals of British and other European nationalities while, as noted before, South Africa welcomed various groups of immigrants in the 20th century. Many had to face negative attitudes including anti-Semitism and anti-Catholicism, and each inflow triggered legislative amendments designed to stymie their arrivals. Parliamentary debates from the 1930s to the 1980s provide an illustration of these perceptions and attitudes (Peberdy, 2009). Another major difference with North America and Oceania is that white settlers continued to be outnumbered by the indigenous populations.

Denationalisation of the indigenous population and stigmatisation of immigrant workers

Throughout the 20th century, and more so as from the 1960s with the implementation of influx control and the homeland and Bantustan policies, South Africans of African descent underwent a process of gradual denationalisation. This happened first by being deprived of considerable land areas, with the 1913 Natives Land Act, then with confinement to the homeland and Bantustan areas and deprivation of South African citizenship. Indigenous people's mobility into so-called "white areas" would only be tolerated for labour related purposes and harshly repressed in other circumstances. Black South Africans were thus compelled to carry passes providing an indication of their whereabouts. Their right to moving into and about white South African territory was entirely conditioned by formal employment.

Fifty years of apartheid policies on mobility and settlement into "white areas" have entrenched particularly negative attitudes towards African workers among a range of institutions, in particular the South African Police Services, Defence Forces and immigration officials (Vigneswaran, 2011). Their approach to deportations, which continue on a large scale today and find their legal origin in British colonial and Apartheid eras, has been documented as careless and dehumanising, therefore reflecting and reinforcing the idea that African workers are illegitimate as permanent immigrants (Peberdy, 2009: 11).

Hostility towards foreign workers was also a reality of employment on South African mines, particularly in the 1980s with the rise of trade unionism. Anti-apartheid narratives often portray a trans-ethnic, trans-national class

solidarity among mine workers which distorts the reality of tensions between foreign and South African miners, between nationalities and ethnic groups, as well as between mine management and the South African government, not to mention the changing positions of governments in neighbouring countries (McNamara, 1988). As local labour began to accept longer-term contracts, their coexistence with foreign miners became increasingly tense. Within the South African government, while the Ministry of Native Affairs (later called Ministry of Development and Cooperation) pushed for increased local recruitment, the Ministry of Foreign Affairs was in favour of maintaining bilateral labour agreements with Southern African countries (Paton, 1995; Crush, 2011).

A new migration hub in Africa and xenophobic violence

Xenophobic violence deliberately targeting foreign nationals can be traced to as early as 1994 with the lynching of three Central and West Africans on a train in Gauteng. Various mobilisations of unemployed South Africans were associated with violence against foreigners, while low-intensity one-on-one violence also took place, particularly targeting township-based Bangladeshi, Chinese and Somali spaza (informal convenience stores) shopkeepers (Crush, Chikanda and Skinner, 2015). In 2008, however, mobilisation and violence against foreigners, more specifically African foreigners, took on a different scale. Following a one-month series of riots across the country's urban areas, which were initially sparked by a housing conflict in the Alexandra township of Johannesburg, 62 people were killed and 150 000 left homeless and displaced (Landau, 2012).

As several analysts have shown, the May 2008 riots did not break out without any warning sign (Landau, 2012). In fact, xenophobic sentiment and low-intensity violence had become a permanent feature of relationships between citizens and foreigners, particularly African and Asian foreigners, in the post-apartheid period. Regular opinion surveys conducted in the 1990s and 2000s, as well as qualitative research, have confirmed high levels of xenophobic sentiment across population groups and social classes (Crush, 2008; Landau, 2012; Mattes et al., 1999). Violence against foreigners has also been systematically recorded pre- and post-2008 for acts as serious as homicides, particularly against Somali shopkeepers (Gastrow and Amit, 2013). Motives more often raised by violent xenophobic groups are related to two sets of topics: housing and business operations (small township business). Incidents at workplaces have been few.

Governance of migration

The core features of immigration to South Africa over the past two decades are better understood if envisaged against the policy choices which have marked the end of apartheid and shaped current institutional settings. The immigration policy inherited by the De Klerk administration in 1989 bore

three characteristics. First, it was based on a classical colonial settlement policy, focusing on the almost exclusive development of the needs of the European minority and its corollary, a cheap black labour force to serve the needs of mining and agriculture as described earlier in this chapter. Second, the management of migration and foreigners was discretionary and often based on opaque practices with no tradition of open consultation of either economic operators or social partners. While it is likely that discussions were taking place regularly behind closed doors between the private sector and government, little of this has been shared publicly. Third, the development mode through which this policy was meant to evolve was incremental, rarely providing enough space for assessment of policy efficiency and consequences. It was thus largely disconnected from both ongoing migration trends and dynamics and actual assessments of skills needs in the economy.

The ascension of F.W. de Klerk to power in 1989, the fall of the Berlin Wall, and the decision to abandon the apartheid system and the regional destabilisation policy through negotiations contributed to the adoption of a new immigration law in 1991. The legislation was meant to address domestic issues rather than to be a long-term management instrument for regional migration, however. The volatile situation of the early 1990s and the isolation of South Africa from the rest of the continent contributed to maintain a strong security focus on immigration issues despite the post-Cold War context.

The 1991 Aliens Control Act, nicknamed “apartheid’s last act”, was the cornerstone of South African immigration policy throughout the 1990s and early 2000s. Drafted in order to unify and simplify all immigration laws which had been adopted since 1937 as well as to mark a break from the past, this act reflected a fundamental paradox in the context of the 1994 democratic regime. On issues of fundamental rights of migrants and powers of police, the act was successively in contradiction with the interim Constitution (1993-96) and the 1996 Constitution and became subject to constitutional review. As constitutional conformity could not only be addressed through legislative amendment to the existing act, the decision was taken to deeply reform immigration legislation. Despite the constitutional review, the act survived 12 years into the post-apartheid period.

Governing immigration into democracy

The dominant “two-gate policy” was no longer sustainable in the new context of the advent of democracy and South Africa’s reopening to the rest of the continent and the world. Profound economic restructuring in core sectors such as mining and agriculture, the rise of other sectors (construction, hospitality and other services) and mounting internal pressure due to structural unemployment all contributed to reshape immigration to South Africa at the turn of the 1990s.

The new regime that came into office in 1994 had to face a rapidly changing migration situation with a legal instrument focused on a policing and coercive vision of immigration management. The new situation required an understanding of the broader field of migration to assess pressing issues such as the increasing numbers of asylum seekers, the brain drain/brain gain phenomena, the decline of the mining sector and mounting pressure to recruit locally, increased demand in construction, services and domestic work, skills needs, and the rights of undocumented migrants.

The newly elected South African government decided to embark on a broad consultative process which resulted in the publication of a Green Paper on International Migration in 1997, and two White Papers, one on Refugees and one on Immigration, eventually leading to the adoption of new legislation in the late 1990s (1998 Refugee Act) and early 2000s (2002 Immigration Act) (Government of South Africa, 2002). In the meantime, the management of flows remained very much unchanged. Existing practices, administrations, and institutions in charge of migration management and the legal apparatus ensured the continuity of a national immigration policy awaiting redefinition.

The ten-year period (1994-2004) of the wide consultative process and passage of the new Immigration Act in 2002 and the Immigration Amendment Act in 2004 was crucial in shaping positions and structuring networks on migration issues. But it also meant immobility in terms of migration management. Various positions competed on the political agenda which can be summarised as follows:

- A neoliberal agenda favouring the withdrawal of the state from migration matters, the subcontracting of administrative processing of control to employers, the establishment of incentives to highly-skilled labour and investors, and accelerated policy reform simplifying administrative procedures. This agenda was put forward beginning in 1994 by the then Minister of Home Affairs and supported by business circles and to some extent liberals in the opposition.
- An interventionist approach in favour of balanced migration control, taking into account democratic commitments and state capacity for a flexible, reactive and transparent migration policy. This approach, shared by advocacy groups and minority constituencies within the African National Congress (ANC) and the Congress of South Africa Trade Unions (COSATU), called for more profound policy transformation and a regional thrust.
- A security and sovereignty-centred agenda favoured by the majority in the ANC and by departments' bureaucratic strata, based on a narrowly defined notion of national interest bearing many resemblances to previous positions.

In the end, the Immigration Act of 2002 revealed much continuity with previous legislation with only limited alterations for constitutional conformity. In essence, the new laws were a continuation of the dual system of limited permanent high-skilled immigration and temporary lower-skilled migration, mainly through corporate permits.

Changing the governance of immigration

In May 2005, a strategic plan for 2005-10 was presented to Cabinet, which formally linked immigration policy to two dimensions: South Africa's shortage of skills and its regional policy within the frameworks of SADC and the African Union. In the DHA minister's 2006 budget speech, amendments to the Immigration Act were presented which sought to meet South Africa's foreign policy objectives in the region. Two examples were changes in favour of traders (in particular women) and the relaxation of the requirement that African students pay repatriation deposits. The DHA annual reports for 2007-10 reiterated the three pillars of South African migration policy: the link to regional development policies; the commitment to a human rights-based approach; and the sovereignty of South Africa in the fight against illegal migration and the promotion of border security.

However, the DHA was facing internal organisational problems with several changes in ministers. These considerably slowed down policy changes. Amendments to the act voted in 2007 only partially came into force in 2011 and for some as late as 2014 with new regulations.

Regularisations and deportation as policy instruments: Addressing irregular migration

For 15 years (2002-16), the Immigration Act of 2002 and its numerous amendments and regulations were used to regulate the major changes in flows and the redistribution of immigrants across sectors of the economy. Alongside visas, South Africa also resorted to two other instruments: large scale regularisations (permanent residence through amnesties, discussed earlier in this chapter) and deportations.

As a mostly untold mechanism of immigration policy management, deportation is the invisible regulatory instrument displacing hundreds of thousands of "surplus" immigrant workers and dependents unable to make their way legally into the system. Deportations were not a new feature of South African migration management. They were systematically applied to all non-white people not in a position to justify their stay in or travel through a "white area" under apartheid laws of influx control, officially repealed in 1986. Since 1990, deportations from South Africa have however grown as a result of at least three dynamics. Firstly, until 1993 (Memorandum of Understanding with the United Nations High Commissioner for Refugees) and in fact until the adoption of legislation on asylum (Refugee Act of 1998), non-white asylum seekers were systematically treated like irregular migrants and deported. Secondly, the lack of legal possibilities for low-skilled immigrant workers to enter into the labour market resulted in increases in the number of irregular migrants. And finally, systematic policing of migrants by the South African Police Services helped identify irregular migrants (Vigneswaran and Duponchel, 2009).

In 2009, the DHA released cost indications, showing that housing in detention centres cost the South African taxpayers ZAR 7-8 million a month, an amount which did not include travel costs back to the home country or litigation costs. Table 2.7 shows the sharp increase in deportations in the late 1990s and early 2000s.

Table 2.7. Repatriation of illegal aliens has become more spread out over countries of origin

Removals/repatriation of illegal aliens from South Africa, 1994-2015 (thousand)

	Mozambique	Zimbabwe	Lesotho	Other	All
1994	71	13	4	2	91
1995	132	18	4	4	157
1996	157	15	3	5	181
1997	146	22	4	4	176
1998	142	29	5	7	182
1999	124	43	6	11	184
2000	85	46	6	9	146
2001	94	48	6	8	156
2002	84	38	5	25	152
2003	82	56	7	19	164
2004	.	.	.	.	167
2005	.	.	.	.	210
2006	.	.	.	.	266
2007	.	.	.	.	313
2008	.	.	.	.	281
2009	39	36	15	16	106
2010	.	.	.	.	56
2011	14	10	31	11	66
2012	21	36	26	20	102
2013	.	.	.	.	NA
2014	.	.	.	.	132
2015	.	.	.	.	54
Total	1 191	407	123	142	3 342

Note: Breakdowns per nationality not available from 2004 to 2010.

Source: Annual Reports: 1994-2015 (DHA, n.d.).

Restrictions on legal channels to labour markets and the labour needs of emerging sectors such as construction and services have resulted in substantial increases in flows of irregular immigrant workers. In South Africa, deportation has increasingly been seen as a policy instrument to entrench the idea that government is not passive on irregular migration and acts effectively to protect the South African unemployed. Although substantive numbers of people have been deported from South Africa since 1994, this policy instrument seems particularly costly to South African taxpayers and perhaps also ineffective. As most irregular migrants coming from the region, they often return soon after

deportation. The new 2016 Green Paper on International Migration acknowledges the multiple challenges associated with this policy:

The above statistics confirm the need to find a solution for the documentation of migrants from SADC with lower-level skills since they account for a large proportion of the yearly deportations conducted by the Department. This puts a large strain on the budget of the DHA. While conclusive data is not available on whether these deportations amount to “revolving door” movements (i.e. the same person being deported several times in a year) there are strong indications that this is the case. (DHA, 2016: 31)

The Green Paper on International Migration (2016)

In 2016, the DHA published a new Green Paper on International Migration. This Green Paper is the result of a long consultation process, first announced in 2008, and involving a broad spectrum of South African, regional and international stakeholders starting in 2013. The process culminated in December 2015 with a colloquium called for by the minister in order to compile all contributions into a final document which was subsequently turned into the Green Paper submitted to public comments between June and September 2016. This is a particularly innovative process for the DHA since 1996 (the previous consultation for the 1997 Green Paper) as most channels of communication between the DHA, other spheres of government, and South African social partners and civil society have been intermittent.

The Green Paper argues that international migration is, in general, beneficial if it is well-managed. It argues for a new immigration policy that:

- is underpinned by the Constitution and National Development Plan 2030
- contributes to national interests such as national security
- orientated towards Africa
- contributes to nation building and social cohesion by giving the country a competitive edge in a knowledge-based world economy
- enables South Africans living abroad to contribute to national development priorities as valuable sources of skills, capital and connections
- actively strengthens international efforts in building bilateral and multilateral partnerships to promote and implement good practices and principles of shared and collective responsibility and co-operation.

It has been noted that the Green Paper identifies seven areas in need of policy reform (Cronjé, 2016):

1. the lack of a risk-based approach to international migration that is considered best practice globally
2. a bias towards mechanical compliance to formal residency and naturalisation requirements rather than managing international migration strategically

3. the need for better management of international migrants with skills and capital
4. the lack of a holistic policy approach in particular a lack of engagement with South African emigration communities abroad
5. policy gaps regarding asylum seekers and refugees
6. inadequate processes to integrate migrants into society
7. inadequate consideration of historical and geopolitical migration patterns in Africa.

In spite of the clear diagnosis, the Green Paper seems focused on movement control and security issues even if it pledges a reorientation towards economic and employment issues. The document makes no reference to international standards and best practice or to the ongoing development of a national labour migration policy under the Department of Labour.

As far as work-related visas are concerned, the Green Paper proposes a number of innovative visa measures intended to ease and alleviate visa application procedures, through simplification and a more generous package for the highly-skilled. Some of the proposed measures are for instance the possibility for students to be granted critical skills visas or permanent residence upon graduation or automatic work permits issued to spouses of work permit holders. One of the key work-related immigration measures that the Green Paper seeks to address is the idea of a special permit for low-skilled SADC nationals, launched by then Minister Pandoor in her 2008 budget speech. Four types of measures are proposed in the new document: i) SADC special work visas based on quotas subject to political negotiation; ii) long-term multiple entry visas to facilitate the mobility of cross-border traders; iii) a small and medium enterprise visa for self-employed people who pay taxes and follow South African business regulations; iv) and specific regularisation programmes on the model of the Zimbabwean and Lesotho Special Dispensation Projects. On the other hand, the Green Paper announces the DHA's intention to remove the right to work and study for asylum seekers (DHA, 2016: 66).

The new White Paper on International Migration (2017)

Following the Green Paper published in 2016, a new White Paper on International Migration for South Africa was published in 2017 by the Department of Home Affairs (DHA, 2017) and was opened for public submissions. The White Paper is in line with the Green Paper and has recommended policy and strategic interventions in policy areas, which correspond with the areas in need of policy reform outlined above.

In addition to the outlined new White Paper on International Migration, the Department of Labour with support of the ILO started its labour migration policy development process, which will supplement the Department of Home Affairs' international migration policy and cover all aspects pertaining to labour migration.

Economic restructuring and immigration

What seems to have been poorly anticipated and acted upon by the South African government in its management of migration flows is, firstly, the profound restructuring of the South African economy post-1994 and its consequences on employment. And, secondly, the inevitable inflow of low-skilled workers from the region (Crush and Williams, 2010; Segatti and Jinnah, 2013; Segatti and Landau, 2011). It has been noted that South African growth has been exclusive, benefiting only those already in powerful economic positions, due to “insufficient employment growth” (OECD, 2015: 4).

Apart from a few studies published in the framework of the MiWORC project in 2014-15,⁴ little is known about employment dynamics in specific sectors such as construction, hospitality and other services for low-skilled migrant workers or finance, banking and professional occupations for the highly skilled. Existing research remains too limited to date and should be undertaken more systematically. For example, in a recently completed major effort to assess skills demand and supply and to improve evidence-based skills planning, migration issues received little attention, although the intention is stated to cover migration issues in future reports (Reddy et al., 2016).

Immigration policies and skills shortages

One central question dominating discussions on South African immigration policy has been that of the skills shortages. While the official government position has been that efforts should be placed in attracting and retaining skills in South Africa, policy implementation has often been lacking in this field.

There are different categories of visas allowing for skilled migration to South Africa for work-related purposes, including permanent residence visas, critical skills work visas, general work visas and intra-company transfer visas. The Immigration Act of 2002 created the quota permit which was later given the specific objective of skills transfer under the Joint Initiative on Priority Skills Acquisition (JIPSA) launched in 2006. This became part of the Human Resources Development Strategy for South Africa (HRD-SA) in 2009. However, neither DHA annual reports nor JIPSA or HDR reports since 2006 provide any overall impact evaluation of the implementation of quota permits on identified scarce skills sectors.

Throughout the 2000s, businesses continued to complain that foreign executives working on intra-company work permits were refused extensions to their two-year documentation. The Immigration Amendment Act of 2011 extended the duration of intra-company transfer permits to four years but precluded their renewal. The quota system for work permit applications with regard to certain skills and professions was criticised by businesses; the lists were considered to have been established without direct consultation with the

business sector, and to be largely out of sync with the reality of skills needs. The Department of Labour (DoL) acknowledged in 2012 that its communication with the DHA on these matters was limited. The DoL sits on the Immigration Advisory Board which reviews quotas (albeit erratically given the ad hoc functioning of the Board), however it does not have direct access to DHA databases. Decisions taken in terms of quota allocations between 2007 and 2011 were therefore almost entirely at the discretion of the DHA minister.

While the quota list was in force (2007-11), there were major disagreements over the calculation and nature of skills shortages per sector. Interactions between Sector Education and Training Authorities (SETAs), the DoL, the business sector, organised labour and academic research have been dominated by controversies around the calculation methodologies and the definition of skills shortages and skills gap (Erasmus and Breier, 2009). In a 2009 study undertaken for the DoL, the Human Sciences Research Council found large discrepancies between official estimates of skills shortages and the quota lists issued by the DHA, even in sectors identified by the government as being in crisis (Erasmus and Breier, 2009). For instance, the National Scarce Skills List (NSSL) for 2006 indicated needs in personnel amounting to more than 200 thousand, while the DHA 2007 quota lists stopped at around 24 thousand (*ibid.*).

Between the repeal of the quota permit in 2011 and the adoption of the list of critical skills in demand in the 2014 Immigration Regulations, the question was left at the discretion of officials processing critical skills applications. The methodology used to establish the 2014 list of critical skills is as yet unclear. This continues to be a priority issue according to the 2016 Green Paper (DHA, 2016: 42) which supports strengthened inter-departmental capacity, a points-based system, and mechanisms for the transfer of skills (*ibid.*) but remains for now technically unspecific.

Conclusions

Historically, immigration to South Africa has been characterised by the dual imperative of circular migration to the mining and agricultural sectors and of permanent immigration by populations of European descent for political and skills shortage reasons. However, the reopening of the country and its reintegration into the international community, combined with profound changes in the South African economy, raised the question of policy adequacy perhaps more than ever before. In the context of South Africa's commitment to human rights, and return to the Southern African Development Community (SADC), the South African government had to find a balance between internal pressure to protect employment and external pressure to treat all immigrants, including irregular economic migrants, decently. In contrast to many other countries, immigrant workers in South Africa do not experience restrictions on the right to freedom of association and collective bargaining.

At the same time, the country was going through a crisis of economic restructuring and needed to ensure it continued to attract much needed skills. The reform of current policies and administrative efficiency has posed serious challenges to the Department of Home Affairs. Looking back at 20 years of policy and administrative reform helps understand the current specificities of immigration dynamics in South Africa and provides perspectives on possibilities for change.

In the context of porous borders and limited job creation that continue to characterise South Africa, unrefined large scale instruments such as short-term regularisation schemes and deportation orders may in fact backfire. Without strong inspectorates, the opening of borders to larger numbers of low-skilled SADC nationals may exacerbate exploitative conditions for migrants, accelerate their concentration in specific sectors known for decent work deficits, as well as embed precarious modes of living (aggravated by the risk of deportation). Measures contributing to stabilise populations are more likely to succeed if they are openly connected to employment schemes or sectors and if they are accompanied by national sensitisation and education campaigns.

The 2016 Green Paper on International Migration undeniably represents progress towards a migration management strategy more to the tune of economic and labour market planning. Its diagnosis is thorough and open on the current weaknesses of the system. Any progress in terms of professionalisation of documentation, visa issuance turnover and reinforcement of immigration services capacity will eventually benefit the entire immigration process. However, because of an approach that remains focused on visa categories and their management, the Green Paper falls short of strongly tying migration, and specifically labour migration, to South Africa's developmental challenges.

While it does acknowledge institutional co-ordination as a key challenge, it remains silent on ways to co-ordinate migration to employment policy and development targets set out in the National Development Plan, or sectoral policies such as the National Industrial Policy Strategy. At the heart of this reluctance to deal with policy development is the question of the relationship between the DHA and the Department of Labour. If labour migration to South Africa is to become a more prominent component of the national employment strategy, and in general of economic policy, the need for national labour migration policy co-ordination will be much stronger.

While South Africa has robust legislative frameworks and sound statistical data collection mechanisms, the co-ordination and implementation instruments it relies on remain weak in many respects. Besides the need for more regular data on migration flows, there appears to be a need for better utilisation of existing data, as well as improved co-ordination between the departments dealing with migration. This could be part of efforts to strengthen labour market information systems in the country (Reddy et al., 2016; Sparreboom, 2013).

Notes

1. Measured in purchasing power parity, in constant 2011 international USD (World Bank, 2016a).
2. The number of temporary work permits issued should not be taken as an adequate reflection of the number of temporary permit holders in the country as no information is available on the duration of the permit.
3. www.iol.co.za/news/africa/no-extension-for-basotho-lsp-2072278.
4. www.miworc.org.za.

References

- Amit, R. (2011), *The Zimbabwean Documentation Process: Lessons Learned*, African Centre for Migration & Society/University of the Witwatersrand, Johannesburg.
- Bhorat, H. et al. (2014), “Economic policy in South Africa: Past, present and future”, *Development Policy Research Institute Working Paper*, No. 201401, DPRU, University of Cape Town.
- Budlender, D. (2013), “Improving the quality of available statistics on foreign labour in South Africa: Existing data-sets”, *MiWORC Report No.2*, African Centre for Migration & Society/University of the Witwatersrand, Johannesburg.
- Cronjé, J.B. (2016), *South Africa's New Draft Policy on International Migration*, TRALAC Trade Law Center, <https://www.tralac.org/discussions/article/10037-south-africa-s-new-draft-policy-on-international-migration.html>.
- Crush, J. (2011), “Complex movements, confused responses: Labour migration in South Africa”, in *The Southern African Migration Project (SAMP) Policy Brief*, No. 25 (ed.), Southern African Migration Project, Queens' University, Canada.
- Crush, J. (2008), “The perfect storm: The reality of xenophobia in contemporary South Africa”, in *The Southern African Migration Project (SAMP) Migration Policy Series*, No. 50.
- Crush, J. (2000), “Borderline farming: Foreign migrants in South African commercial agriculture”, in *The Southern African Migration Project (SAMP) Migration Policy Series*, No. 16 (ed.), Institute for Democracy in South Africa (IDASA)/Queen's University, Cape Town/Kingston.
- Crush, J., A. Chikanda and C. Skinner (eds.) (2015), *Mean Streets: Migration, Xenophobia and Informality in South Africa*, Southern African Migration Programme/African Centre for Cities/International Development Research Centre, Waterloo/ Rondebosch/ Nairobi.
- Crush, J. and V. Williams (2010), “Labour migration trends and policies in Southern Africa”, in *The Southern African Migration Project (SAMP) Policy Brief*, No. 23, Southern African Migration Programme, Cape Town.
- DHA (2017), “White Paper on International Migration for South Africa”, *Government Gazette*, Department of Home Affairs, Government of South Africa, Pretoria, https://www.gov.za/sites/default/files/41009_gon750.pdf.
- DHA (2016), “Green Paper on International Migration”, *Government Gazette*, No. 40088, Department of Home Affairs, Government of South Africa, Pretoria.
- DHA (2009), *Strategic Plan 2010/2011–2012/2013*, Department of Home Affairs, Government of South Africa, Pretoria.
- DHA (2008), *Strategic plan 2008/2009–2010/2011*, Department of Home Affairs, Government of South Africa, Pretoria.

- DHA (n.d.), *Annual Reports: 1941-2015*, Department of Home Affairs, Government of South Africa, Pretoria.
- Erasmus, J. and M. Breier (2009), *Skills Shortages in South Africa: Case Studies of Key Professions*, Human Sciences Research Council, Pretoria.
- Faulkner, D. and C. Loewald (2008), "Policy change and economic growth: A case study of South Africa", *Policy Paper*, No. 14, National Treasury of the Republic of South Africa, Pretoria.
- Gastrow, V. and R. Amit (2013), "Somalinomics: A case study on the economics of informal trade in the Western Cape", *ACMS Report*, African Centre for Migration & Society, Johannesburg.
- Government of South Africa (2012), "National Development Plan 2030. Our Future -make it work", National Planning Commission, Pretoria.
- Government of South Africa (2011), "Immigration Amendment Act No.13", *Government Gazette*, Vol. 554, No. 34561, Cape Town.
- Government of South Africa (2002), *Immigration Act No. 13 of 2002*, Government of South Africa, Pretoria.
- Government of South Africa (1991), *Aliens Control Act No. 96 of 1991*, Government of South Africa,
- Keeton, G. (2014), "Inequality in South Africa", *The Journal of the Helen Suzman Foundation*, No. 74.
- Landau, L. (ed.) (2012), *Exorcising the Demons Within: Xenophobia, Violence and Statecraft in Contemporary South Africa*, Wits University Press, Johannesburg.
- Mattes, R. et al. (1999), "Still waiting for the barbarians: South African attitudes to immigrants and immigration", *Southern African Migration Project* (ed.), Institute for Democracy in South Africa, South Africa and Canada.
- McNamara, K. (1988), "Inter-group violence among black employees on the South African gold mines, 1974-1986", *South African Sociological Review*, Vol. 1, pp. 23-38.
- OECD (2015), *OECD Economic Surveys: South Africa 2015*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-zaf-2015-en.
- Paton, B. (1995), *Labour export policy in the development of Southern Africa*, Macmillan in association with the Institute of Social Studies, Basingstoke.
- Peberdy, S. (2009), *Selecting Immigrants. National Identity and South Africa's Immigration Policies, 1910-2008*, Wits University Press, Johannesburg.
- Ramphela, M. (1999), "Immigration and education: International students at South African universities and technikons", *Southern African Migration Programme Migration Policy Series*, No. 12, Queen's University/Institute for Democracy in South Africa, Kingston/Cape Town.
- Reddy, V. et al. (2016), "Skills supply and demand in South Africa", *LMIP Publication*, Human Science Research Council, Pretoria.
- Segatti, A. and Z. Jinnah (2013), *Concept Note: MiWORC Work Package 3: The Political Economy of Migrant Labour in South Africa: Examining Skills, Wages, Policies, and Practices*, African Centre for Migration & Society/University of the Witwatersrand, Johannesburg.
- Segatti A. and L. Landau (eds.) (2011), "Contemporary migration to South Africa: A regional development issue", *Africa Development Forum Series* (ed.), pp. 9-30, World Bank/Agence Française de Développement, Washington, DC/Paris.

- Sparreboom, T. (2013), "Labour market information and analysis systems", in S. Cazes and S. Verick (eds.), *Perspectives on Labour Economics for Development*, International Labour Office, Geneva.
- Statistics South Africa (2012), "Tourism and migration August 2012", *Statistical Release P0351*, Statistics South Africa, Pretoria.
- Vigneswaran, D. (2011), "Migration control, documentation, and state transformation", in A. Segatti and L. Landau (eds.), *Contemporary Migration to South Africa: A Regional Development Issue*, Africa Development Forum Series (ed.), pp. 105-120.
- Vigneswaran, D. and M. Duponchel (2009), *One Burden Too Many? A Cost-Benefit Analysis of Immigration Policing in Gauteng*, Forced Migration Studies Programme, Johannesburg.
- World Bank (2016a), *World Development Indicators* [online], WB Publishing, Washington, DC, <https://data.worldbank.org/products/wdi>.
- World Bank (2016b), *South Africa: Overview* [online], WB Publishing, Washington, DC, <http://www.worldbank.org/en/country/southafrica/overview>.
- World Bank (2015), *South Africa* [online], WB Publishing, Washington, DC, <http://www.worldbank.org/en/country/southafrica>.

Chapter 3

Immigrant integration in South Africa: Labour market outcomes and human capital

This chapter conducts an empirical investigation of labour immigration in South Africa based on a review of labour market indicators concerning immigrant workers in comparison with native-born workers. Following the sections on the volume and nature of employment, the chapter examines occupational change using a demographic decomposition method. Comparisons are also made between the human capital of native-born and immigrant workers, including with regard to skills mismatch.

The profound changes in migration flows and policies following the democratisation of South Africa were highlighted in Chapter 2. Although new legislation was introduced in the early 2000s, there was also a continuation of past migration policies focusing on security issues. Nevertheless, the 2016 Green Paper on International Migration marked a shift to a greater emphasis on capturing the economic benefits from migration, which was also the intention behind some earlier policies such as those related to “critical skills”.

This chapter demonstrates that the increasing numbers of foreign-born workers, including young workers, are performing well in terms of employment and unemployment, although young foreign-born women have a more difficult position than young foreign-born men. In addition, occupational indicators point to the fact that demand for labour is an important driver of labour immigration in South Africa.

In this and following chapters we define an immigrant as someone who was born abroad and is currently living in South Africa (see Box 1.2 in Chapter 1).

Employment and unemployment: Striking differences between foreign-born and native-born workers

The South African working-age population grew from about 30.4 million to 35.4 million people between 2001 and 2011 (Table 3.1). During that time, the labour force also grew from 18.2 million to 22.0 million people. This reflects an increase of the labour force participation rate (LFPR) of roughly 2.3 percentage points to 62.2% in 2011, which mostly results from the increasing economic activity of women. The employment-to-population ratio increased by about 5.6 points to 37.4% in 2011 (Annex Table 3.A1.2), while the unemployment rate dropped 7.0 points to 39.8% (Table 3.A1.3a). As with the LFPR, changes in employment and unemployment rates were for a large part driven by the increasing employment and decreasing unemployment rates of women.

Underlying broad labour market developments, there exist some striking differences between South African-born and foreign-born workers. For instance, not only is the foreign-born LFPR considerably and consistently higher than the South African-born LFPR, the former also increased at a much faster rate, growing by about 7.3 percentage points to 78.8% by 2011, compared to an increase of the South African-born LFPR of 1.7 points to 61.2% in 2011. The share of foreign-born workers in the labour force also increased from 3.8% in 2001 to 7.1% in 2011 (see Figure 3.1).

Table 3.1. Women's participation in the labour market has grown considerably

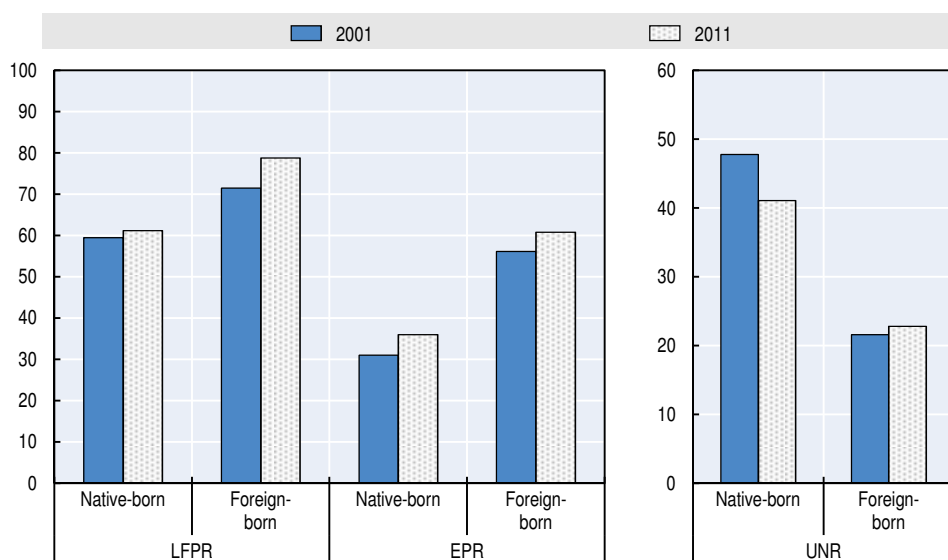
Working-age population, labour force and labour force participation rate, by sex, 2001-11

	Women			Men			All		
	2001	2011	Change 2001-11	2001	2011	Change 2001-11	2001	2011	Change 2001-11
Working-age population (15+) ('000)	16 180	18 564	2 384	14 257	16 877	2 620	30 437	35 441	5 004
Labour force (aged 15+) ('000)	8 717	10 741	2 024	9 499	11 293	1 794	18 216	22 034	3 818
Labour force participation rate (% or percentage points change)	53.9	57.9	4.0	66.6	66.9	0.3	59.8	62.2	2.3

Source: Calculations based on Statistics South Africa (2002; 2012).

Figure 3.1. Immigrant workers perform better than native-born workers in terms of several key labour market indicators on the volume of employment

Labour force participation, employment and unemployment by place of birth, 2001 and 2011 (%)



Note: LFPR = labour force participation rate; EPR = employment-to-population ratio; UNR = unemployment rate.

Source: Calculations based on Statistics South Africa (2002; 2012).

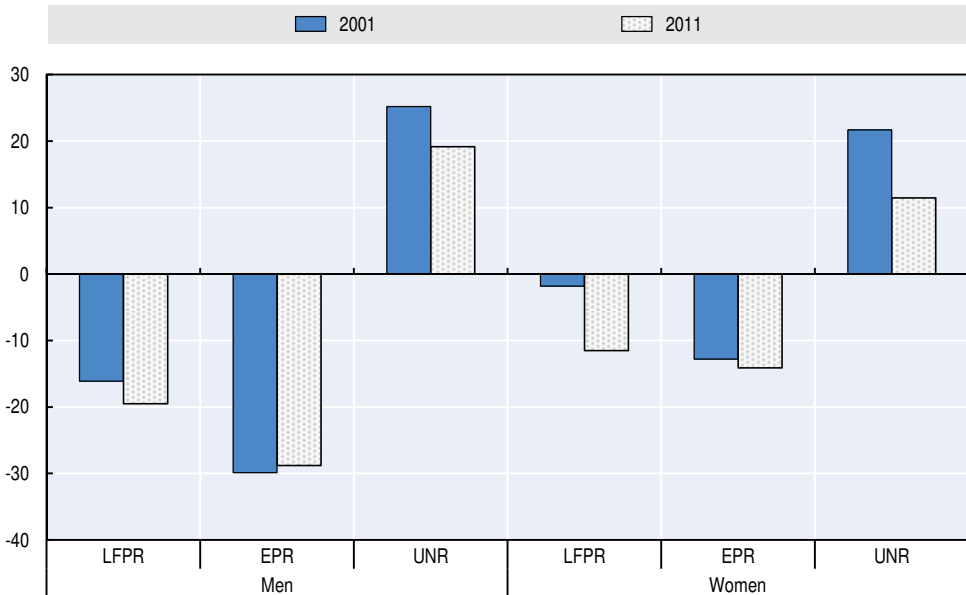
The difference in labour force participation between foreign-born workers and South African-born workers increased by approximately 6 percentage points from 2001 to 2011, and this increase was more notable for women. Whereas in 2001 the difference in participation rates for women was only 1.8 percentage points, by 2011 it had increased to 11.5 points (Figure 3.2).

Foreign-born workers' employment-to-population ratio was 24.8 percentage points higher than those of South African-born workers, and the difference is

mostly due to the high employment rates of foreign-born men. Some of the factors explaining the large difference, such as demographics and employment quality, will be discussed below.

The unemployment rate of South African-born workers decreased by about 6.7 percentage points, but remained exceptionally high at 41.1% in 2011. That of foreign-born workers, which was lower though still uncharacteristically high, barely increased from 21.6 to 22.8% over the period. The convergence in unemployment rates between South African-born and foreign-born workers was more pronounced for women (Figure 3.2).

Figure 3.2. Differences in participation, employment and unemployment between native- and foreign-born workers are larger for men, but changed more for women
Differences between labour force participation, employment and unemployment by place of birth and by sex, 2001 and 2011 (percentage points)



Note: The figure shows the rate for South African-born workers minus the rate for foreign-born workers for each of the three indicators; LFPR = labour force participation rate; EPR = employment-to-population ratio; UNR = unemployment rate.
Source: Calculations based on Statistics South Africa (2002; 2012).

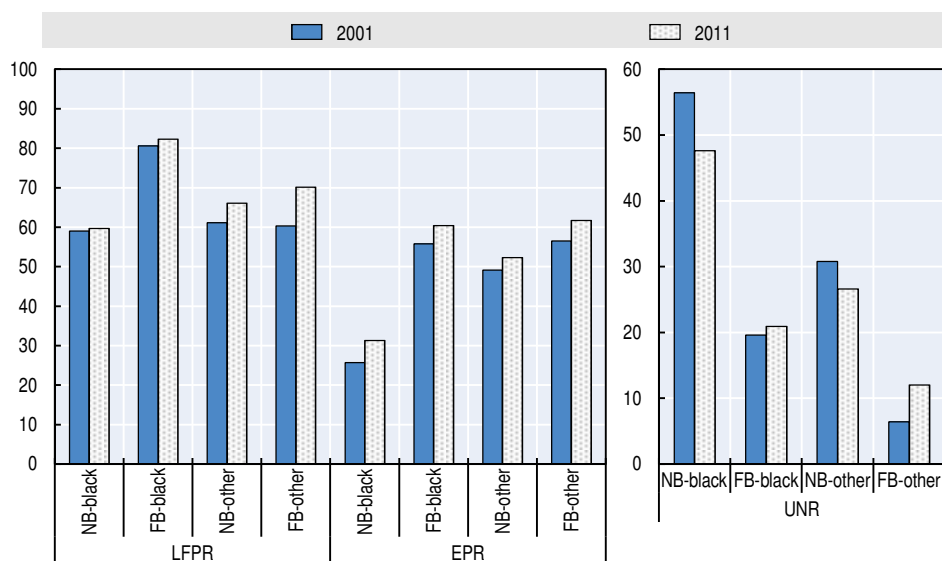
Despite some positive developments in South Africa in terms of key labour market indicators and particularly women's participation at the aggregate level, racial differences continue to be a source of inequality.¹ For instance, at 31.3%, the employment rate for black South African-born workers was considerably lower than that of all other South African-born workers, which stood at 52.3% (Annex Table 3.A1.5). Similarly, the unemployment rate of black South African-born workers was 47.6% in 2011, compared to an unemployment rate of 20.9% for all other South African-born workers. In

2011 the employment rate for black foreign-born workers, at 60.4%, is almost double that of their South African-born counterparts, and in fact towered over that of all South African-born workers (Figure 3.3). The employment rate for all other foreign-born workers was higher still, at 61.7%. Similarly, in 2011 the unemployment rate for black South African-born workers, at 47.6%, eclipsed that of all other South African-born workers (26.6%). Black foreign-born workers had an unemployment rate of 20.9%, lower than all South African-born workers, while the unemployment rate for all other foreign-born workers in 2011 was 12.0%.

Employment and unemployment rates disaggregated by race and place of birth demonstrate that there are significant racial differences that temper differences between workers of different places of birth. But they also suggest that the foreign-born workforce is highly mobile, responding quickly to short-term and structural labour demand.

Figure 3.3. Black native-born workers are less often employed and more often unemployed than both black foreign-born workers and all other native-born workers

Labour force participation, employment and unemployment by race and place of birth, 2001 and 2011 (%)



Note: LFPR = labour force participation rate; EPR = employment-to-population ratio; UNR = unemployment rate; NB = native-born, FB = foreign-born.

Source: Calculations based on Statistics South Africa (2002; 2012).

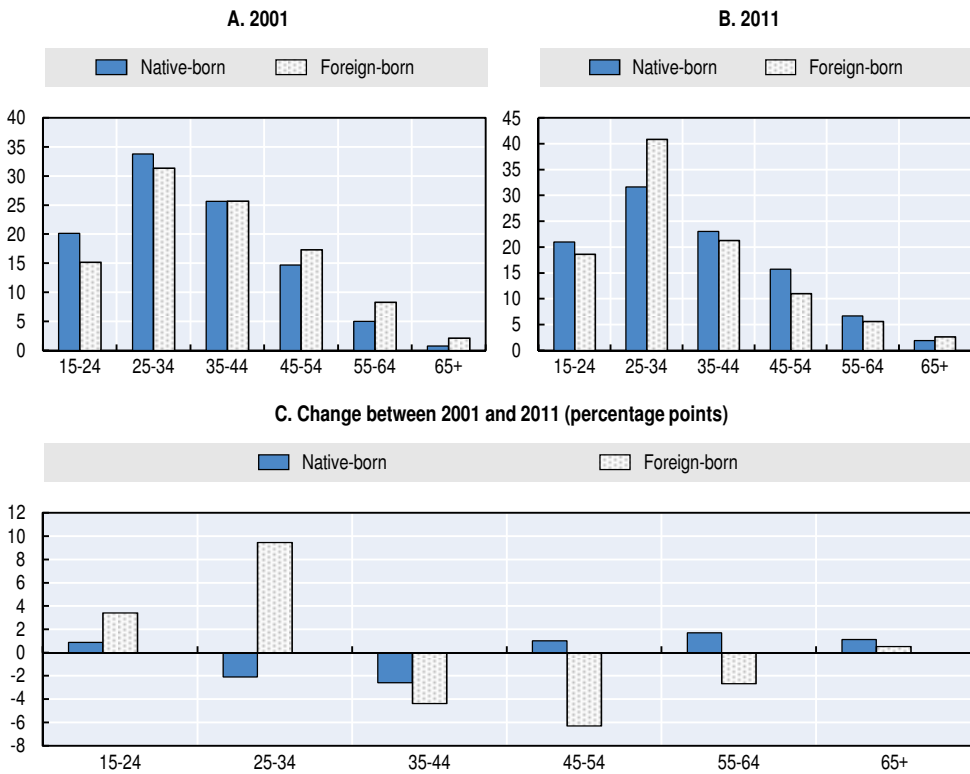
Immigrants are now younger than the native-born labour force

The average age of the South African labour force in 2001 was 34.9 years, which increased to 35.6 years in 2011. The average age of the foreign-born labour force showed an inverse trend, dropping from 37.4 years in 2001 to 34.8 years

in 2011. Age distributions of the South African and foreign-born labour forces, as shown in Figure 3.4A-C, illustrate diverging demographic trends. The South African labour force aged between 2001 and 2011, as reflected by the growth in older worker categories and a decrease in workers aged 25-44. At the same time, the foreign-born labour force saw a strong drop in workers aged 35-64 and a strong growth among workers aged less than 35.

Figure 3.4. **The majority of immigrants in the labour force are less than 35 years old**

Labour force by age group and place of birth (%), 2001-11



Note: Figure C is calculated by subtracting the 2001 share of native-born (or foreign-born) workers in a specific age group from the respective native-born (or foreign-born) share in 2011.

Source: Calculations based on Statistics South Africa (2002; 2012).

Youth unemployment remains a considerable hurdle to be addressed in the South African labour market (Table 3.2). While youth unemployment rates dropped by about 5 percentage points from 2001 to 2011, the rate remained extraordinarily high at 63.9% in 2011. The youth-to-adult unemployment ratio actually increased to 1.9, indicating that young workers are almost twice as likely as adults to be unemployed in South Africa.

The youth unemployment rate declined for both South African-born workers (from 69.8% to 65.8%) and foreign-born young workers (from 41.5% to 35.8%), but the foreign-born rates were much lower to begin with, and showed a larger decrease between 2001 and 2011. This is reflected in the marked improvement of the youth-to-adult unemployment ratio of foreign-born workers, which declined from 2.3 to 1.8 percentage points.

Furthermore, similar to the labour force trends seen in Figure 3.4C, the youth share of foreign-born employed workers increased by four points to 15.5%, while that of South African-born employed workers only increased marginally to 12.2%. At the same time, the youth share in unemployment of South African-born workers grew by 4.2 percentage points to 33.6%, while that of foreign-born workers stayed constant at 29.2%. Labour market participation grew considerably among young workers, as seen by the rise in both the employed as well as unemployed youth as a share of the youth population. Notable is that only among South African-born youth does the share of the unemployed increase. Also notable is that the share of the employed among foreign-born youth is more than three times higher than that share among South African-born youth (Table 3.2). These dynamics suggest that, compared to South African-born young workers, foreign-born young workers fare better on the labour market in terms of both obtaining employment and avoiding unemployment.

Table 3.2. Among immigrants, young workers constitute a smaller share of the unemployed than among native-born workers

Youth unemployment statistics, by place of birth, 2001-11

	Native-born			Foreign-born			All workers		
	2001	2011	Change 2001-11	2001	2011	Change 2001-11	2001	2011	Change 2001-11
Youth unemployment rate (%)	69.8	65.8	-4.0	41.5	35.8	-5.7	69.0	63.9	-5.1
Youth-to-adult unemployment ratio	1.7	1.9	0.2	2.3	1.8	-0.5	1.7	1.9	0.2
Youth share in employment (%)	11.7	12.2	0.5	11.3	15.5	4.2	11.6	12.5	0.9
Youth share in unemployment (%)	29.4	33.6	4.2	29.2	29.2	0.0	29.4	33.4	4.0
Employed youth as a share of youth population (%)	11.7	15.3	3.6	37.1	46.9	9.8	12.2	16.6	4.4
Unemployed youth as a share of youth population (%)	27.0	29.6	2.6	26.4	26.1	-0.3	27.0	29.4	2.4

Source: Calculations based on Statistics South Africa (2002; 2012); see also Annex Table 3.A1.4.

Gender differentials are more pronounced for foreign-born youth than for South African-born youth. The youth unemployment rate in 2011 was much higher for foreign-born females (54.6%) than foreign-born males (25.0%), and the difference between the two rates (29.6 percentage points) is much larger than the difference for South African-born youth (8.3 percentage points). The difference between males and females also increased for foreign-born youth

from 2001 to 2011, while it decreased slightly for South African-born youth, suggesting the position of young foreign-born females is not improving as fast as that of young foreign-born males in terms of finding employment.

Between 2001 and 2011, the share of youth not in employment, education or training (NEET) decreased by 2.3 percentage points to 31.6%. Foreign-born NEET rates increased slightly over the period, but the gender gap for NEET rates of foreign-born youth (24.3 percentage points) is considerably larger than that of South African-born youth (6.0 percentage points). Almost half of young foreign-born females (49.7%) are not in employment, education or training, while the gender gap in NEET rates for South African-born young decreased over the same period.

Nature and quality of jobs: More paid employment for immigrants

A widely used method to assess the quality of jobs is to consider vulnerable and non-vulnerable employment, which is based on the classification by status in employment. Vulnerable employment consists of the sum of own-account workers and contributing family workers, and these workers are less likely to have formal work arrangements (ILO, 2016; Sparreboom and Albee, 2011). Nevertheless, non-vulnerable employment such as wage employment may also fall short of decent work if, for example, an important part of wage employment is casual, informal or of limited duration, or if labour standards are not enforced. Immigrants are vulnerable to such situations, and are often concentrated in low-skill wage work. In other words, although trends in vulnerable employment are important to assess labour markets, consideration needs to be given to additional indicators to understand the position of immigrants, such as occupational indicators which will be discussed in later sections. As the South African population census data of 2011 do not differentiate between employers and own-account workers, this section distinguishes between wage and salaried workers on the one hand, and other categories of workers on the other.

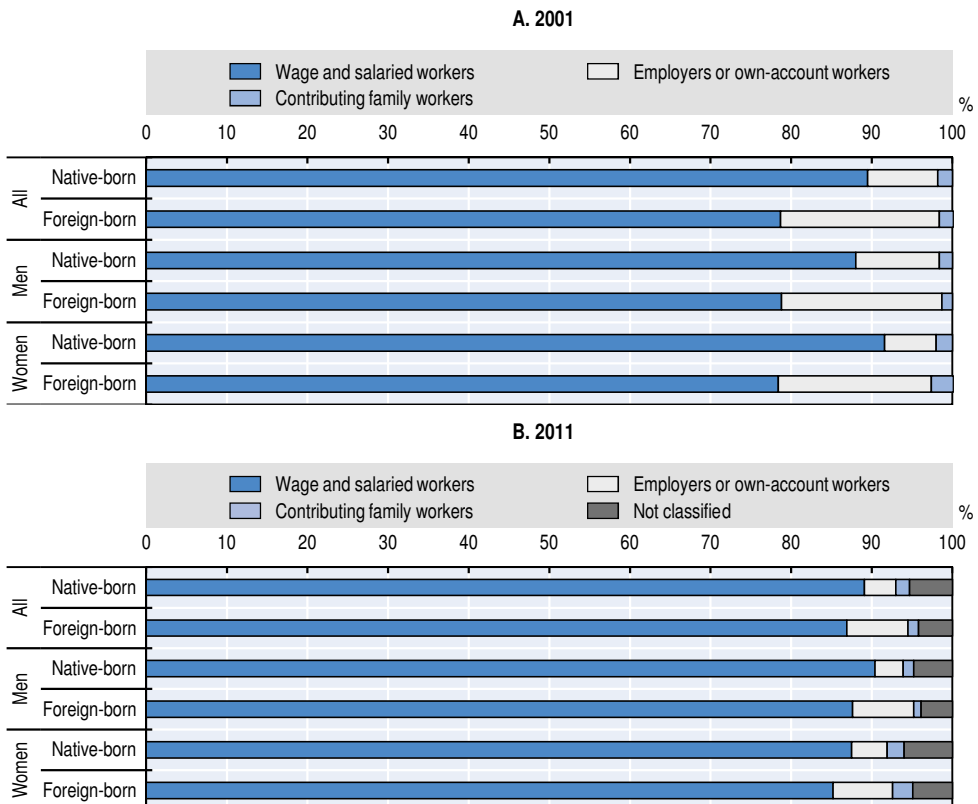
In 2001, 88.9% of all workers in South Africa were in wage and salaried employment. Another 9.3% of workers were either employers or own-account workers, while only 1.8% were recorded as contributing family workers. The percentage of wage workers was the same in 2011, but the share of employers or own-account workers dropped to 4.3%, and that of contributing family workers changed marginally, to 1.6% (Figure 3.5).

The share of workers in wage employment continues to tower above the regional average of sub-Saharan Africa (26.9%; ILO, 2015). However, the share of wage employees who report to be working in the formal sector decreased by 5 percentage points to 75.6% in 2011, suggesting that the quality of employment has been slowly falling since 2001. Similar observations have been made by

analysts who argue that market liberalisation in certain sectors has led to a relatively high proportion of wage workers on daily contracts or similar arrangements, even in the formal sector. Furthermore, this process has resulted in deteriorating wage and job security particularly among poorer workers, contributing to increasing poverty and inequality (for example, Barrientos and Kritzing, 2004; Di Paola and Pons-Vignon, 2013).

The distribution of status in employment differed slightly for foreign-born workers, particularly in 2001, when a relatively low 78.7% of foreign-born workers were in wage and salaried employment. This proportion increased to 86.9% in 2011, and it is clear that self-employment has become less prevalent among the foreign-born. This may be surprising in view of the low economic growth rates in the years leading up to 2011, and the loss of foreign-born wage employment in sectors such as mining (see Chapter 2). Differences in the data collection methods may explain part of the increase.²

Figure 3.5. **Shares of immigrants and native-born workers in wage work are converging**
Status in employment by place of birth (%), 2001 and 2011



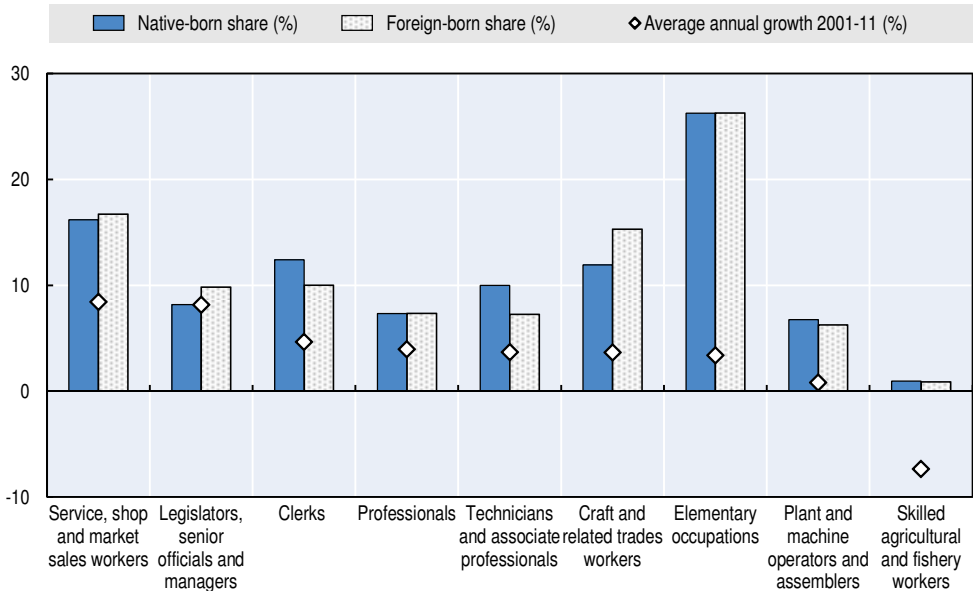
Source: Calculations based on Statistics South Africa (2002; 2012).

Medium- and high-skilled occupations are growing

Due to the diminishing role of agriculture as a source of employment, skilled agricultural and fishery workers were the only major occupational group showing negative growth in employment between 2001 and 2011.³ Service workers and shop and market sales workers together with legislators and managers saw the highest growth rates over the same period (Figure 3.6). Employment in elementary occupations grew only slightly, but did account for 26.3% of all employment in 2011. Employment as plant and machine operators and assemblers decreased for men but increased for women.

Following ILO (2014), we can make a distinction between high-skilled occupations (legislators, senior officials and managers; professionals; and technicians and associate professionals), medium-skilled occupations (clerks; service workers and shop and market sales workers; skilled agricultural and fishery workers; craft and related trade workers; and plant and machine operators and assemblers) and low-skilled occupations (elementary occupations). Average annual growth rates in these three groups are 4.7% (high-skilled occupations), 4.0% (medium-skilled occupations) and 3.1% (low-skilled occupations). Compared to an average employment growth rate of 3.2% across all occupations, growth rates of high- and medium-skilled occupations were relatively high in South Africa.

Figure 3.6. **Many immigrants are in growing occupations**
Employment by major occupational group and place of birth, 2011 (%)



Source: Calculations based on Statistics South Africa (2002; 2012).

Demand for labour is important for immigrants

When disaggregating employment by place of birth and major occupational group, foreign-born workers were slightly overrepresented in occupations of relatively high rates of growth including service and shop workers and legislators, senior officials and managers, but also among craft and trade workers when compared to native-born workers. Together with the slight underrepresentation of foreign-born workers among plant and machine operators and agricultural workers, the slowest growing and shrinking occupations, this pattern suggests that labour immigration is to an important extent demand driven.

Disaggregating occupational distributions further by ethnic group shows that non-black South African-born and foreign-born workers are overrepresented in all high-skilled occupational groups, while black South African-born and foreign-born workers predominate in the lower- and medium-skilled occupational groups. Black foreign-born workers are overrepresented, compared to their South African-born counterparts, in all the major occupational groups exhibiting growth except among clerks, professionals, and plant and machine operators. The extent of overrepresentation captured by the difference in employment shares is particularly large for craft and related trades workers occupations (Figure 3.7).

Figure 3.7. **Black foreign-born workers are overrepresented among all but two growing occupational groups**

Employment by major occupational group, race and place of birth, 2011 (%)



Source: Calculations based on Statistics South Africa (2002; 2012).

Occupational growth is mostly driven by new entrants

The distribution and annual growth of occupations can also be considered together with the evolution of occupations from a demographic perspective to shed light on the role of immigrant workers in labour markets. For this purpose, and based on a demographic accounting framework, the net occupational change over the period 2001 to 2011 can be decomposed into contributions from young workers (new entrants), prime-age workers, older workers (retirees) and new immigrants (defined as those foreign-born who have entered the country in the past ten years). These age-related components of the net change are estimated by comparing the situation of so-called “pseudo age cohorts” in 2001 and 2011, respectively (see Annex 3.A1 for methodological details). This approach implicitly includes the effects of emigration and mortality, as well as the possibility of multiple occupational changes that may have occurred during the period (only the situations in 2001 and 2011 are observed).

In this age-related decomposition, employed workers are distinguished by occupational groups, which have been ranked in order of average annual employment growth rates from 2001 to 2011 (Figure 3.8). While all occupational groups except for skilled agricultural and fishery workers experienced positive employment growth, the demographic decomposition shows some differences between occupations. Growth in all growing occupations is largely driven by new entrants to the labour market, and to a lesser extent by new immigrants. There is movement between occupations among prime-aged workers, who seem to have experienced some upward occupational mobility. For example, among prime-age workers there is growth in the category of legislators, senior officials and managers (though a small reduction among technicians and associated professionals). The remainder of movement among prime-aged workers appears to be lateral in terms of levels of skills, though the strong growth among service workers and shop and market sales workers, illustrates the broader shift of the economy towards services. At the same time, new immigrants are present in all growing occupational groups, though mostly in the service workers and shop and market sales workers group and elementary occupations group.

Not all immigration is driven by occupational employment growth

The share of new immigrants exceeded the share of new entrants entering in occupational groups such as legislators, senior officials and managers, professionals, craft and related trades workers, skilled agricultural and fishery

workers and elementary occupations (Figure 3.9). Elementary occupations present the largest difference between new immigrants and new entrants, with the share of new immigrants exceeding that of new entrants by 4.6 percentage points. The decomposition shows that new immigrants disproportionately enter several declining occupational groups, and thus suggests immigration is not driven only by occupational employment growth.

Figure 3.8. **Growth is largely driven by new entrants**

Demographic components of net occupational change by major occupational group, 2001-11



Note:

- O1 Legislators, senior officials and managers
- O2 Professionals
- O3 Technicians and associate professionals
- O4 Clerks
- O5 Service workers and shop and market sales workers
- O6 Skilled agricultural and fishery workers
- O7 Craft and related trades workers
- O8 Plant and machine operators and assemblers
- O9 Elementary occupations

Source: Calculations based on Statistics South Africa (2002; 2012); see Annex 3.A1 for methodological details on the demographic decomposition.

Decomposition by level of skills in major occupational groups shows that new immigrant entries, in comparison with young worker entries, are slightly more likely in low-skilled occupations (Figure 3.10). Prime-aged workers seem to have shifted heavily from medium- to high-skilled occupations, illustrating both the shift towards services and the concomitant upward occupational mobility of the prime-aged group of South African-born workers between 2001 and 2011.

Figure 3.9. New immigrants enter disproportionately into craft and elementary occupations

Entries of new immigrants and new entrants into growing and declining occupational groups (percentage points), 2001-11



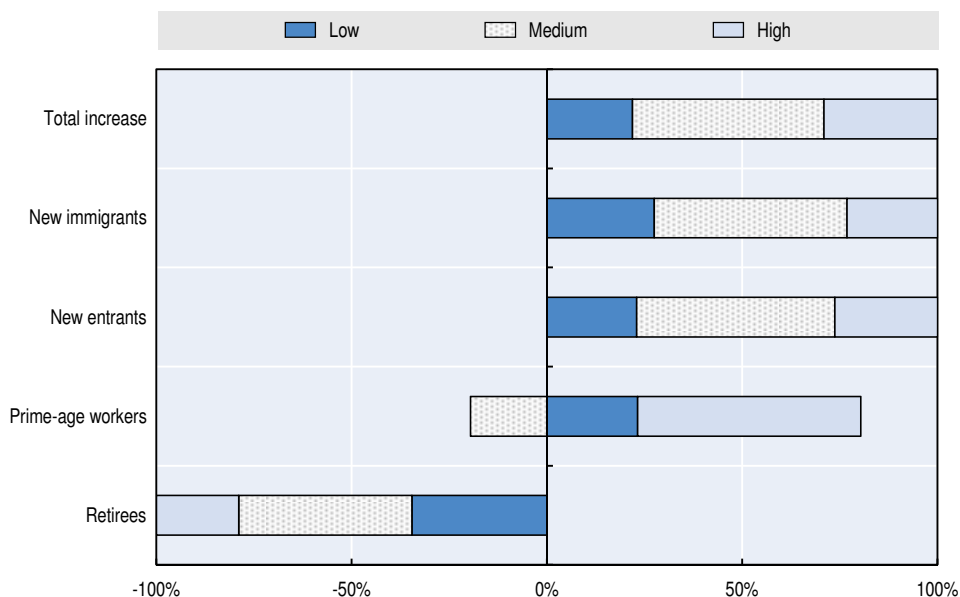
Note: The figure shows the share of new immigrants minus the share of new entrants in each major group, together with the change in the employment share of the group. A positive difference in shares means that proportionally more new immigrants entered the group.

- O1 Legislators, senior officials and managers
- O2 Professionals
- O3 Technicians and associate professionals
- O4 Clerks
- O5 Service workers and shop and market sales workers
- O6 Skilled agricultural and fishery workers
- O7 Craft and related trades workers
- O8 Plant and machine operators and assemblers
- O9 Elementary occupations

Source: Calculations based on Statistics South Africa (2002; 2012); see Annex 3.A1 for methodological details on the demographic decomposition.

Figure 3.10. **New immigrants are slightly more likely to enter into low-skilled occupations**

Skill composition of occupational entries or exits, by demographic group (%)



Source: Calculations based on Statistics South Africa (2002; 2012); see Annex 3.A1 for methodological details on the demographic decomposition.

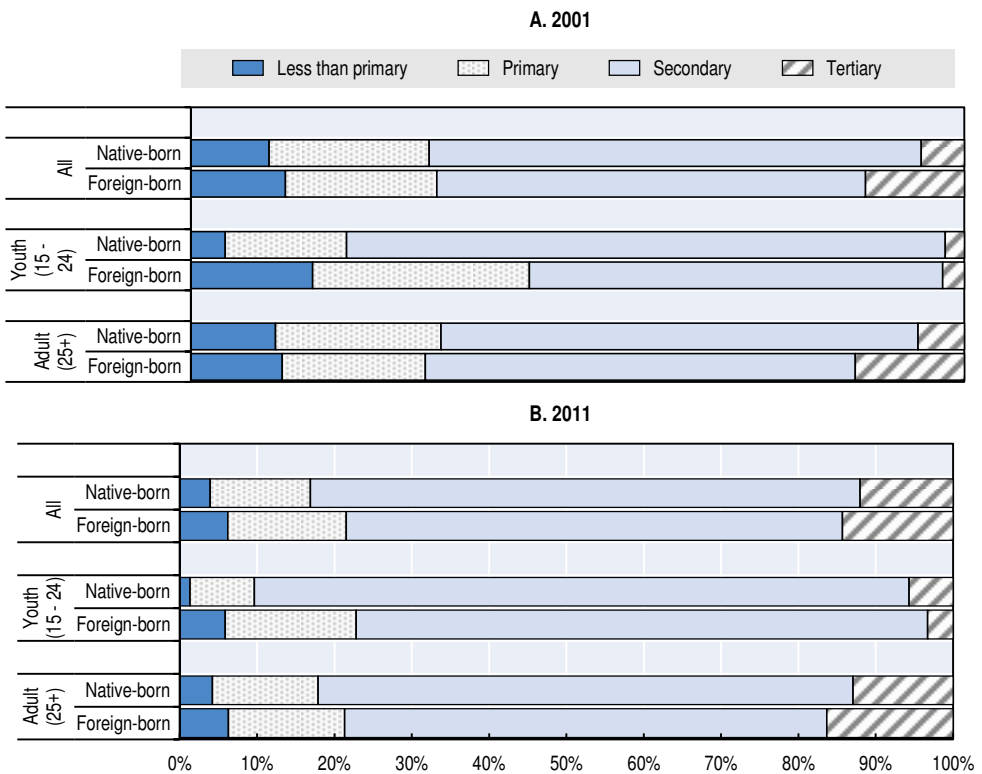
Immigrants are overrepresented at both ends of the educational spectrum

Education and skills of workers are an important factor influencing the labour market outcomes discussed in previous sections, both for immigrant and for native-born workers. This section examines the development of levels of education of foreign-born workers in comparison with South African-born workers in the context of changing labour market needs in the country. This is an important topic by itself, but also given that South Africa has made many attempts to better assess labour market needs and articulate skills development policies accordingly. For example, in 2016 a comprehensive report on skills supply and demand was prepared (Reddy et al., 2016). As discussed in Chapter 2, the availability of skills also plays a role in immigration policies.

In 2001, 30.8% of the South African employed population had a primary education or less, 63.1% had a secondary education and 6.0% had a tertiary education. Among the foreign-born employed the share of those with a secondary education was much lower while the share of those with a tertiary education was much higher (Figure 3.11A). The educational advantage of the foreign-born was especially visible among the adult employed population (aged 25 years and

older), among whom tertiary educated workers accounted for 14.1%, compared to 6.0% of South African employed adults. On the other end of the spectrum, South African-born workers with a primary education or less accounted for only 20% of the youth employed, while among the foreign-born employed youth, 43.7% had obtained a primary education or less. The foreign-born employed population seems therefore to have been overrepresented at both ends of the educational spectrum, with adult foreign-born workers overrepresented at the higher end, and foreign-born youth at the lower end.

Figure 3.11. **Continuing polarisation of foreign-born employment by level of education**
Employment by educational attainment, age and place of birth (%), 2001 and 2011



Source: Calculations based on Statistics South Africa (2002; 2012).

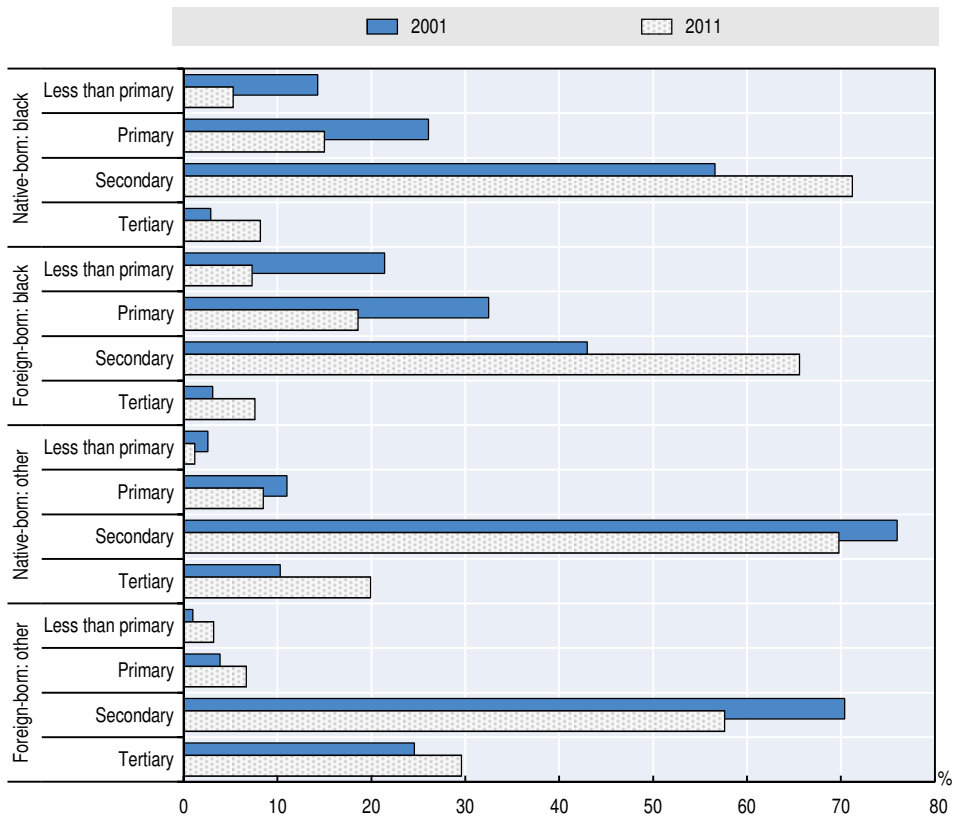
By 2011, education levels of the employed population in South Africa had improved considerably (Figure 3.11B). Although the polarised education pattern of foreign-born employment remained, a vast improvement in educational levels can be observed in 2011 particularly among young South African-born workers. The share of tertiary educated youth almost tripled to 5.7%, while those with a primary education or less halved to 9.6%. Foreign-born employed youth lost

their slight advantage at the tertiary level, and the advantage of foreign-born adults decreased considerably at this level of education.

Disaggregating educational change over time by place of birth and by race shows an interesting pattern (Figure 3.12). While black foreign-born workers are still overrepresented among lower education groups compared to all other foreign-born workers, the share of these workers with a secondary or higher level of education has grown much more than for all other foreign-born workers. The same trend is visible among the South African-born population, suggesting that education levels among the entire black labour force rose substantially between 2001 and 2011, compared to the rest of the labour force. This trend demonstrates that the segmentation of the labour force along racial lines as developed by apartheid-era (migration) policies is steadily changing.

Figure 3.12. **Educational achievement of black workers has increased dramatically**

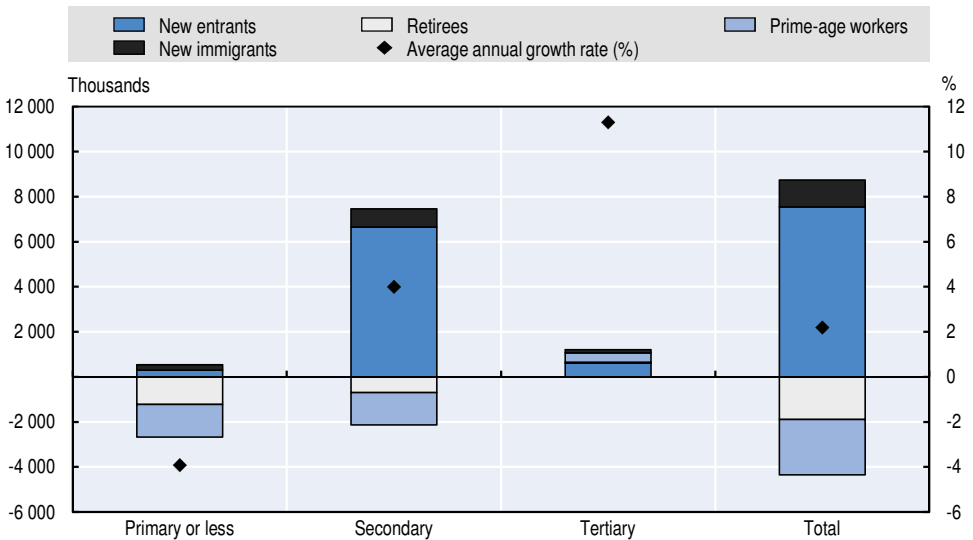
Employment by educational attainment, race and place of birth (%), 2001 and 2011



Source: Calculations based on Statistics South Africa (2002; 2012).

The improvement in educational attainment of the workers can also be seen in the demographic decomposition of the labour force by education level (Figure 3.13). While there were large outflows of prime-age workers and retirees from primary or lower education levels, only a small number of new entrants and new immigrants with primary or lower levels entered the workforce. The secondary and tertiary education levels had positive annual growth between 2001 and 2011. Large inflows of new entrants and a small number of new immigrants contributed to growth at the secondary level, while at the tertiary level, not only new entrants and new immigrants but also prime-age workers contributed to the positive growth.

Figure 3.13. **Educational attainment grew mostly due to new entrants in secondary education**

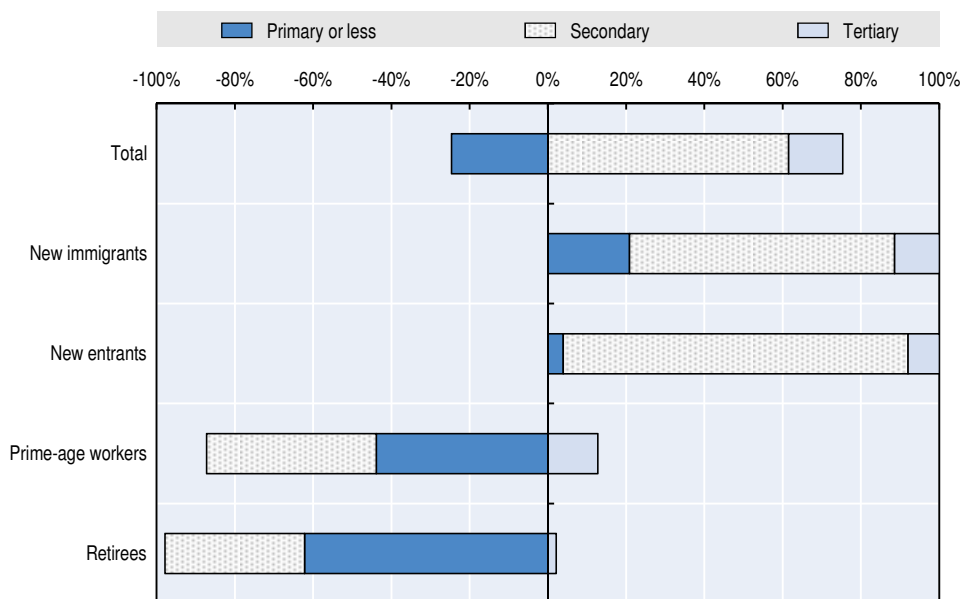


Source: Calculations based on Statistics South Africa (2002; 2012); see Annex 3.A1 for methodological details on the demographic decomposition.

Decomposition of the change in the employed labour force by educational achievement also shows that, compared to new entrants, new immigrants entered the labour market with a primary education or less much more frequently than new entrants, though, as above, also more frequently with a tertiary education (Figure 3.14). These two observations likely suggest the existence of two different demographic changes: an influx of, on the one hand, low-skilled young workers and, on the other hand, high-skilled adult workers. These changes likely also impact the types of jobs immigrants find, and the availability of the types of skills those jobs require.

Figure 3.14. Primary educated older workers are largely being replaced by secondary educated new immigrants and entrants

Changes in the educational attainment of the disaggregated employed population (%), 2001-11

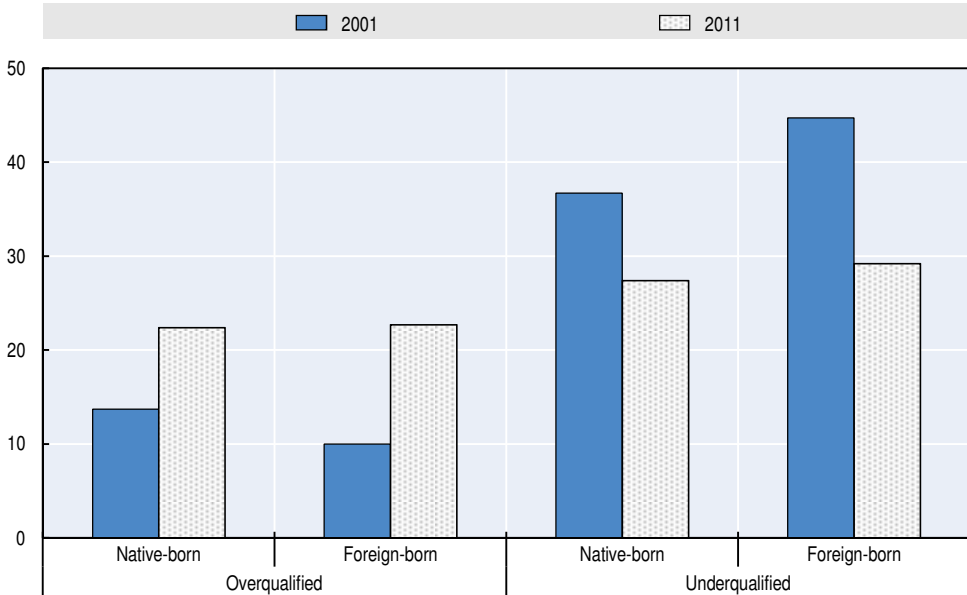


Source: Calculations based on Statistics South Africa (2002; 2012); see Annex 3.A1 for methodological details on the demographic decomposition.

Overqualification increased and underqualification decreased for foreign-born workers in comparison with native-born workers

Skills mismatch – levels of education not in accordance with the requirements of jobs – is an encompassing term which refers to various types of imbalances between skills offered and skills needed in the world of work, and includes overqualification and underqualification. Based on the normative measure (ILO, 2014; Sparreboom and Tarvid, 2017), the incidence of overqualification was higher for South African-born workers than for foreign-born workers in 2001. For both groups the incidence of overqualification increased between 2001 and 2011, though more so for foreign-born workers (from 10% to 22.7%) (Figure 3.15). Underqualification is more widespread among both South African- and foreign-born workers. The incidence of underqualification decreased considerably between 2001 and 2011, but it still affects close to 30% of the workers in both groups. The decrease of underqualification was also stronger for foreign-born workers.

Figure 3.15. **Overqualification increased while underqualification decreased**
Skills mismatch of employed population by place of birth, 2001 and 2011



Source: Calculations based on Statistics South Africa (2002; 2012).

Conclusions

Between 2001 and 2011, the South African labour market saw some positive developments in terms of key labour market indicators, and in particular increasing economic activity of women. During the same period, the foreign-born share of the labour force almost doubled, growing from 3.8% to 7.1%. This is reflected in the age distribution of the labour force, as foreign-born workers are on average younger.

Foreign-born workers perform well in terms of employment rates. This is likely driven, at least partly, by the necessity to earn a living and also points to immigrants' sensitivity to labour demand. The same is suggested by the sectoral distribution of foreign-born workers, which is fairly similar to the native-born distribution. In other words, immigrant workers are not extremely concentrated in particular sectors. Similar to native-born workers, the share of wage employment is high among immigrant workers, but part of this reflects casual and other forms of precarious employment.

Overall occupational employment patterns confirm that much work performed by immigrants is demand driven. Nevertheless, the demographic decomposition of occupational growth conducted in this chapter underlines that occupational growth is mostly driven by new entrants to the labour

market. Other groups, including new immigrants, play a far more limited role. New immigrants are more likely to have either no more than a primary level of education or a tertiary level of education, reflecting the segmentation of the foreign-born labour force between high-skilled and low-skilled migrants. Differences by age are important in this context as well, as young foreign-born workers are much more likely to have a primary or lower education compared to their native-born counterparts than adult foreign-born workers.

Foreign-born workers tend to be both more overqualified and more underqualified than their native-born counterparts. Overqualification among foreign-born workers suggests that better foreign skills recognition mechanisms could improve the utilisation of immigrant human capital. The relatively high rate of underqualification for foreign-born workers may be indicative of dirty, demeaning or dangerous jobs performed by these workers.

Notes

1. Ethnic classification, based on race, is a procedural relic from the apartheid era and has been retained by the South African Statistical Office to measure progress in reducing racial inequalities.
2. In the 2001 census, there was one question on status in employment, while the same topic was covered by three questions in 2011.
3. The skilled agricultural and fishery workers occupational category makes up a very small share of the occupational distribution in South Africa, which is likely due to the fact that farms only employ a small number of skilled workers for jobs such as irrigation, spraying or tractor driving. In addition, farms may rely on larger numbers of workers employed on a daily or casual basis for the bulk of the work, such as pruning and harvesting (Kitzinger, Barrientos and Rossouw, 2004). The latter group is likely classified as having elementary occupations.

References

- Barrientos, S. and A. Kritzinger (2004), "Squaring the circle: Global production and the informalization of work in South African fruit exports", *Journal of International Development*, Vol. 16, pp. 81-92.
- Di Paola, M. and N. Pons-Vignon (2013), "Labour market restructuring in South Africa: Low wages, high insecurity", *Review of African Political Economy*, Vol. 40/138, pp. 628-638.
- ILO (2016), *World Employment and Social Outlook: Trends 2016*, International Labour Office, Geneva.
- ILO (2015), *Key Indicators of the Labour Market*, 9th ed., International Labour Office, Geneva.
- ILO (2014), "Skills mismatch in Europe", *Statistics Brief*, International Labour Office, Geneva.
- Kitzinger, A., S. Barrientos and H. Rossouw (2004), "Global production and flexible employment in South African horticulture: Experiences of contract workers in fruit exports", *Sociologia Ruralis*, Vol. 44/1, pp. 17-39.
- OECD/European Union (2014), *Matching Economic Migration with Labour Market Needs*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264216501-en>.

- Reddy, V. et al. (2016), "Skills supply and demand in South Africa", LMIP Publication, Human Sciences Research Council, Pretoria.
- Sparreboom, T. and A. Albee (2011), *Towards Decent Work in Sub-Saharan Africa: Monitoring MDG Employment Indicators*, International Labour Office, Geneva.
- Sparreboom, T. and A. Tarvid (2017), *Skills mismatch of natives and immigrants in Europe*, Technical Report, Labour Migration Branch, International Labour Office, Geneva.
- Statistics South Africa (2012), "Census 2011", Statistical Release P0301/4 and Census 2011 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3839.
- Statistics South Africa (2002), "Key Results" and Census 2001 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3908.

ANNEX 3.A1

*Data, methodologies and additional tables***Data**

The empirical analysis in Chapters 3-6 uses population censuses and surveys conducted by Statistics South Africa, which are made available directly to users.

We define an immigrant as someone who was born abroad and is currently living in South Africa. Citizenship plays no role: Someone who was born in South Africa but has a different nationality is not understood to be an immigrant; while someone who has a South African passport but was born abroad is understood to be an immigrant whether or not he or she already had the nationality at birth (see also Box 1.2 in Chapter 1).

Unless stated differently, labour market indicators are defined in accordance with ILO (2015).

Methodology to assess sectoral and occupational employment patterns

The similarity of sectoral employment patterns between native-born workers and immigrants can be assessed using an index of dissimilarity. The index represents the proportion of a group, either native-born or foreign-born, that would need to move in order to create an equal distribution. The index is calculated based on the following equation:

$$D = \frac{1}{2} \sum_{i=1}^s \left| \frac{n_i}{N_T} - \frac{f_i}{F_T} \right|$$

where n_i is the number of native-born workers per sector, N_T is the total number of native-born workers across all sectors, f_i is the number of foreign-born workers per sector, F_T is the total number of foreign-born workers across all sectors and s is the number of sectors. The same index can be applied to occupational distributions.

Methodology of demographic decomposition

Following Chapters 3 and 4 of OECD/European Union (2014), the decomposition used in this chapter is based on a demographic accounting method, applied to changes in the distribution of workers by level of education and by occupation.

This method builds on the following equation concerning the measure of change in a particular variable between two points in time:

$$\Delta(T) = E + I + \Delta(PA) - R;$$

$\Delta(T)$ = the total change observed in the variable over the period

E = non-immigrant entrants over the period

I = new immigrants who arrived over the period

$\Delta(PA)$ = change in the prime-age group over the period

R = retirees over the period.

This equation shows that total change over the period equals inflows minus outflows, while deaths and emigration are included implicitly. The table below summarises how these components are obtained based on 2001 and 2011 population census data on the labour force (LF).

Table 3.A1.1. **Definition of components for the demographic accounting decomposition**

(1) = (2) – (3)	(2) 2011 population census	(3) 2001 population census
Non-immigrant new young entrants (E)	LF (aged 15-34 excluding foreign-born without long-term residence)	LF (aged 15-24)
Non-immigrant retirees (-R)	LF (aged 55+ excluding foreign-born without long-term residence)	LF (aged 45+)
Change in the non-immigrant prime-age group ($\Delta(PA)$)	LF (aged 35-54 excluding foreign-born without long-term residence)	LF (aged 25-44)
New immigrants (I)	LF (aged 15+ foreign-born without long-term residence)	0
Total change:	LF (aged 15+)	LF (aged 15+)
$\Delta(T) = E + I + \Delta(PA) - R$		

Non-immigrant entrants to the labour market are calculated by subtracting the labour force aged 15-24 in 2000 from the labour force aged 15-34 in 2010, which thus assumes that all people 15-24 who were part of the labour force in 2000 are still in the labour force ten years later (when they are 25-34 years of age). Similarly, retirees are those in the labour force who were aged 45 and above in 2000 minus those aged 55 and above in 2010 (temporary withdrawals and re-entries prior to definitive retirement are implicitly netted out). The change in the size of the prime-age group equals the labour force aged 35-54 in 2010 minus the labour force aged 25-44 in 2000. Finally, the number of new

immigrants is calculated as immigrants with duration of residence of less than five years, and such immigrants are excluded from the other components to avoid double counting. As can be verified from the table, these four components add up to the labour force in both 2000 and 2010. The same methodology can be used to decompose sub-groups of the labour force (such as the employed, educational and occupational groups).

Table 3.A1.2. **Employment-to-population ratio, by sex and age group**

Year	Origin	Sex	Age	Employed ('000)	Population ('000)	Employed (%)
2001	All	MF	15+	9 685.5	30 437.2	31.8
2001	South African-born	MF	15+	9 146.3	29 475.7	31.0
2001	Foreign-born	MF	15+	539.2	961.6	56.1
2001	All	M	15+	5 641.3	14 257.1	39.6
2001	South African-born	M	15+	5 245.9	13 678.5	38.4
2001	Foreign-born	M	15+	395.4	578.6	68.3
2001	All	F	15+	4 044.2	16 180.2	25.0
2001	South African-born	F	15+	3 900.4	15 797.2	24.7
2001	Foreign-born	F	15+	143.8	383.0	37.5
2001	All	MF	15-24	1 127.5	9 271.5	12.2
2001	South African-born	MF	15-24	1 066.3	9 106.9	11.7
2001	Foreign-born	MF	15-24	61.1	164.6	37.1
2001	All	M	15-24	657.6	4 554.3	14.4
2001	South African-born	M	15-24	610.9	4 456.7	13.7
2001	Foreign-born	M	15-24	46.7	97.6	47.8
2001	All	F	15-24	469.9	4 717.1	10.0
2001	South African-born	F	15-24	455.4	4 650.1	9.8
2001	Foreign-born	F	15-24	14.5	67.0	21.6
2001	All	MF	25+	8 558.0	21 165.8	40.4
2001	South African-born	MF	25+	8 080.0	20 368.8	39.7
2001	Foreign-born	MF	25+	478.1	797.0	60.0
2001	All	M	25+	4 983.7	9 702.7	51.4
2001	South African-born	M	25+	4 635.0	9 221.8	50.3
2001	Foreign-born	M	25+	348.7	480.9	72.5
2001	All	F	25+	3 574.3	11 463.0	31.2
2001	South African-born	F	25+	3 445.0	11 147.0	30.9
2001	Foreign-born	F	25+	129.3	316.0	40.9
2011	All	MF	15+	13 260.4	35 441.2	37.4
2011	South African-born	MF	15+	12 046.1	33 444.0	36.0
2011	Foreign-born	MF	15+	1 214.3	1 997.2	60.8
2011	All	M	15+	7 449.7	16 876.8	44.1
2011	South African-born	M	15+	6 582.4	15 653.8	42.1
2011	Foreign-born	M	15+	867.3	1 222.9	70.9
2011	All	F	15+	5 810.7	18 564.4	31.3
2011	South African-born	F	15+	5 463.7	17 790.1	30.7
2011	Foreign-born	F	15+	347.0	774.3	44.8

Table 3.A1.2. **Employment-to-population ratio, by sex and age group** (cont.)

Year	Origin	Sex	Age	Employed ('000)	Population ('000)	Employed (%)
2011	All	MF	15-24	1 656.9	9 973.2	16.6
2011	South African-born	MF	15-24	1 468.9	9 572.3	15.3
2011	Foreign-born	MF	15-24	187.9	400.9	46.9
2011	All	M	15-24	960.9	4 978.6	19.3
2011	South African-born	M	15-24	821.1	4 744.2	17.3
2011	Foreign-born	M	15-24	139.8	234.3	59.7
2011	All	F	15-24	696.0	4 994.6	13.9
2011	South African-born	F	15-24	647.8	4 828.0	13.4
2011	Foreign-born	F	15-24	48.2	166.6	28.9
2011	All	MF	25+	11 603.6	25 468.0	45.6
2011	South African-born	MF	25+	10 577.2	23 871.7	44.3
2011	Foreign-born	MF	25+	1 026.3	1 596.3	64.3
2011	All	M	25+	6 488.8	11 898.2	54.5
2011	South African-born	M	25+	5 761.4	10 909.6	52.8
2011	Foreign-born	M	25+	727.5	988.6	73.6
2011	All	F	25+	5 114.7	13 569.9	37.7
2011	South African-born	F	25+	4 815.9	12 962.1	37.2
2011	Foreign-born	F	25+	298.9	607.7	49.2

Table 3.A1.3a. **Unemployment (expanded definition), by sex**

Year	Origin	Sex	Employed (%)	Unemployed (%)
2001	All	MF	53.2	46.8
2001	South African-born	MF	52.2	47.8
2001	Foreign-born	MF	78.4	21.6
2001	All	M	59.4	40.6
2001	South African-born	M	58.1	41.9
2001	Foreign-born	M	83.3	16.7
2001	All	F	46.4	53.6
2001	South African-born	F	45.9	54.1
2001	Foreign-born	F	67.6	32.4
2011	All	MF	60.2	39.8
2011	South African-born	MF	58.9	41.1
2011	Foreign-born	MF	77.2	22.8
2011	All	M	66.0	34.0
2011	South African-born	M	64.2	35.8
2011	Foreign-born	M	83.4	16.6
2011	All	F	54.1	45.9
2011	South African-born	F	53.5	46.5
2011	Foreign-born	F	65.0	35.0

Table 3.A1.3b. **Unemployment (official definition), by sex**

Year	Origin	Sex	Employed (%)	Unemployed (%)
2001	All	MF	58.3	41.7
2001	South African-born	MF	57.3	42.7
2001	Foreign-born	MF	81.9	18.1
2001	All	M	63.9	36.1
2001	South African-born	M	62.7	37.3
2001	Foreign-born	M	85.7	14.3
2001	All	F	51.9	48.1
2001	South African-born	F	51.3	48.7
2001	Foreign-born	F	73.0	27.0
2011	All	MF	70.5	29.5
2011	South African-born	MF	69.5	30.5
2011	Foreign-born	MF	82.7	17.3
2011	All	M	74.7	25.3
2011	South African-born	M	73.3	26.7
2011	Foreign-born	M	87.2	12.8
2011	All	F	65.7	34.3
2011	South African-born	F	65.3	34.7
2011	Foreign-born	F	73.2	26.8

Table 3.A1.4. **Youth unemployment indicators, by sex**

Year	Origin	Sex	Youth unemployed (%)	Adult unemployed (%)	Ratio of youth unemployment rate to adult unemployment rate	Share of youth employed in total employed (%)	Share of youth unemployed in total unemployed (%)	Share of youth employed in youth population (%)	Share of youth unemployed in youth population (%)
2001	All	MF	69.0	41.3	1.7	11.6	29.4	12.2	27.0
2001	South African-born	MF	69.8	42.3	1.7	11.7	29.4	11.7	27.0
2001	Foreign-born	MF	41.5	18.0	2.3	11.3	29.2	37.1	26.4
2001	All	M	63.5	35.2	1.8	11.7	29.7	14.4	25.2
2001	South African-born	M	64.8	36.4	1.8	11.6	29.7	13.7	25.2
2001	Foreign-born	M	33.2	13.9	2.4	11.8	29.2	47.8	23.8
2001	All	F	74.3	48.1	1.5	11.6	29.1	10.0	28.8
2001	South African-born	F	74.6	48.7	1.5	11.7	29.1	9.8	28.8
2001	Foreign-born	F	58.2	27.4	2.1	10.1	29.3	21.6	30.1
2011	All	MF	63.9	33.5	1.9	12.5	33.4	16.6	29.4
2011	South African-born	MF	65.8	34.6	1.9	12.2	33.6	15.3	29.6
2011	Foreign-born	MF	35.8	19.8	1.8	15.5	29.2	46.9	26.1

Table 3.A1.4. **Youth unemployment indicators, by sex** (cont.)

Year	Origin	Sex	Youth unemployed (%)	Adult unemployed (%)	Ratio of youth unemployment rate to adult unemployment rate	Share of youth employed in total employed (%)	Share of youth unemployed in total unemployed (%)	Share of youth employed in youth population (%)	Share of youth unemployed in youth population (%)
2011	All	M	58.7	27.6	2.1	12.9	35.6	19.3	27.5
2011	South African-born	M	61.7	29.0	2.1	12.5	36.0	17.3	27.8
2011	Foreign-born	M	25.0	14.7	1.7	16.1	27.1	59.6	19.9
2011	All	F	69.3	39.7	1.7	12.0	31.8	13.9	31.4
2011	South African-born	F	70.0	40.2	1.7	11.9	31.8	13.4	31.3
2011	Foreign-born	F	54.6	30.1	1.8	13.9	31.1	28.9	34.8

Table 3.A1.5. **Employment-to-population ratio, by race, sex and age group**

Year	Origin and race	Sex	Age	Employed ('000)	Population ('000)	Employed (%)
2001	All	MF	15+	9 685.5	30 437.2	31.8
2001	South African-born black	MF	15+	5 871.2	22 807.5	25.7
2001	South African-born other	MF	15+	3 275.1	6 668.2	49.1
2001	Foreign-born black	MF	15+	295.8	530.5	55.8
2001	Foreign-born other	MF	15+	243.4	431.0	56.5
2001	All	M	15+	5 641.3	14 257.1	39.6
2001	South African-born black	M	15+	3 415.6	10 519.7	32.5
2001	South African-born other	M	15+	1 830.3	3 158.8	57.9
2001	Foreign-born black	M	15+	249.4	362.4	68.8
2001	Foreign-born other	M	15+	146.0	216.2	67.5
2001	All	F	15+	4 044.2	16 180.2	25.0
2001	South African-born black	F	15+	2 455.6	12 287.8	20.0
2001	South African-born other	F	15+	1 444.7	3 509.3	41.2
2001	Foreign-born black	F	15+	46.4	168.2	27.6
2001	Foreign-born other	F	15+	97.4	214.9	45.3
2001	All	MF	15-24	1 127.5	9 271.5	12.2
2001	South African-born black	MF	15-24	584.5	7 500.5	7.8
2001	South African-born other	MF	15-24	481.8	1 606.4	30.0
2001	Foreign-born black	MF	15-24	49.0	128.5	38.1
2001	Foreign-born other	MF	15-24	12.2	36.1	33.7
2001	All	M	15-24	657.6	4 554.3	14.4
2001	South African-born black	M	15-24	355.5	3 654.1	9.7
2001	South African-born other	M	15-24	255.4	802.6	31.8
2001	Foreign-born black	M	15-24	39.9	79.6	50.1
2001	Foreign-born other	M	15-24	6.8	18.0	37.7
2001	All	F	15-24	469.9	4 717.1	10.0
2001	South African-born black	F	15-24	229.0	3 846.4	6.0
2001	South African-born other	F	15-24	226.4	803.8	28.2
2001	Foreign-born black	F	15-24	9.1	48.8	18.6
2001	Foreign-born other	F	15-24	5.4	18.2	29.8

Table 3.A1.5. **Employment-to-population ratio, by race, sex and age group** (cont.)

Year	Origin and race	Sex	Age	Employed ('000)	Population ('000)	Employed (%)
2001	All	MF	25+	8 558.0	21 165.8	40.4
2001	South African-born black	MF	25+	5 286.7	15 307.0	34.5
2001	South African-born other	MF	25+	2 793.2	5 061.8	55.2
2001	Foreign-born black	MF	25+	246.8	402.1	61.4
2001	Foreign-born other	MF	25+	231.2	394.9	58.6
2001	All	M	25+	4 983.7	9 702.7	51.4
2001	South African-born black	M	25+	3 060.1	6 865.6	44.6
2001	South African-born other	M	25+	1 574.9	2 356.2	66.8
2001	Foreign-born black	M	25+	209.5	282.7	74.1
2001	Foreign-born other	M	25+	139.2	198.2	70.2
2001	All	F	25+	3 574.3	11 463.0	31.2
2001	South African-born black	F	25+	2 226.7	8 441.5	26.4
2001	South African-born other	F	25+	1 218.3	2 705.5	45.0
2001	Foreign-born black	F	25+	37.3	119.3	31.3
2001	Foreign-born other	F	25+	92.0	196.7	46.8
2011	All	MF	15+	13 652.0	36 487.8	37.4
2011	South African-born black	MF	15+	8 360.1	26 707.9	31.3
2011	South African-born other	MF	15+	4 041.8	7 723.7	52.3
2011	Foreign-born black	MF	15+	880.2	1 457.1	60.4
2011	Foreign-born other	MF	15+	369.9	599.1	61.7
2011	All	M	15+	7 669.7	17 375.1	44.1
2011	South African-born black	M	15+	4 605.0	12 440.1	37.0
2011	South African-born other	M	15+	2 171.8	3 676.0	59.1
2011	Foreign-born black	M	15+	646.8	913.4	70.8
2011	Foreign-born other	M	15+	246.0	345.6	71.2
2011	All	F	15+	5 982.3	19 112.7	31.3
2011	South African-born black	F	15+	3 755.1	14 267.8	26.3
2011	South African-born other	F	15+	1 870.0	4 047.7	46.2
2011	Foreign-born black	F	15+	233.4	543.7	42.9
2011	Foreign-born other	F	15+	123.9	253.5	48.9
2011	All	MF	15-24	1 705.8	10 267.7	16.6
2011	South African-born black	MF	15-24	1 015.7	8 220.7	12.4
2011	South African-born other	MF	15-24	496.6	1 634.3	30.4
2011	Foreign-born black	MF	15-24	160.6	348.1	46.1
2011	Foreign-born other	MF	15-24	32.9	64.6	50.9
2011	All	M	15-24	989.2	5 125.6	19.3
2011	South African-born black	M	15-24	584.1	4 068.7	14.4
2011	South African-born other	M	15-24	261.2	815.6	32.0
2011	Foreign-born black	M	15-24	117.8	199.1	59.2
2011	Foreign-born other	M	15-24	26.1	42.1	61.9
2011	All	F	15-24	716.6	5 142.1	13.9
2011	South African-born black	F	15-24	431.7	4 152.0	10.4
2011	South African-born other	F	15-24	235.3	818.7	28.7
2011	Foreign-born black	F	15-24	42.8	149.0	28.7
2011	Foreign-born other	F	15-24	6.8	22.5	30.1

Table 3.A1.5. **Employment-to-population ratio, by race, sex and age group** (cont.)

Year	Origin and race	Sex	Age	Employed ('000)	Population ('000)	Employed (%)
2011	All	MF	25+	11 946.2	26 220.1	45.6
2011	South African-born black	MF	25+	7 344.4	18 487.2	39.7
2011	South African-born other	MF	25+	3 545.2	6 089.4	58.2
2011	Foreign-born black	MF	25+	719.6	1 109.0	64.9
2011	Foreign-born other	MF	25+	337.0	534.5	63.1
2011	All	M	25+	6 680.5	12 249.5	54.5
2011	South African-born black	M	25+	4 020.9	8 371.4	48.0
2011	South African-born other	M	25+	1 910.6	2 860.4	66.8
2011	Foreign-born black	M	25+	529.0	714.3	74.1
2011	Foreign-born other	M	25+	220.0	303.5	72.5
2011	All	F	25+	5 265.8	13 970.6	37.7
2011	South African-born black	F	25+	3 323.4	10 115.8	32.9
2011	South African-born other	F	25+	1 634.6	3 229.0	50.6
2011	Foreign-born black	F	25+	190.6	394.7	48.3
2011	Foreign-born other	F	25+	117.1	231.0	50.7

Chapter 4

How immigrants affect the labour market in South Africa

When considering how immigration affects an economy, a key concern is whether native-born individuals lose their jobs or get paid less because of the presence of foreign-born workers. This chapter addresses this question based on an econometric approach. Following a section on income differences, the chapter examines the evolution and trends of the employment, unemployment, paid employment and income of native-born individuals across levels of education and work experience. The chapter also examines the impact of foreign-born workers on these four labour market outcomes of native-born workers and provides policy implications.

As discussed in Chapter 2, since apartheid was abolished, labour immigration has become increasingly important and geographically more balanced. The analysis in Chapter 3 showed that immigrant workers are ever more present in all sectors of the economy, and therefore may compete for jobs with native-born workers. Their population share doubled over a ten-year period, becoming younger and more likely to work in wage employment, although the quality of employment is a concern. The growing numbers of immigrant workers raises the question of whether or to what extent immigration has been beneficial or detrimental for the employment of native-born workers.

This chapter looks into this question based on a formal econometric approach. Existing literature on economic impacts of immigration generally does not find strong negative employment effects. In accordance with much of the literature, no effect is found of the presence of immigrant workers on key labour market indicators of the native-born in South Africa at the national level. However, the presence of immigrants is negatively related to native-born employment at the regional level, suggesting that in certain provinces, immigrants could reduce the employment rates of South African-born workers. This relationship is reversed, i.e. becomes positive, when solely considering the effect of the presence of newly-arrived migrants on employment outcomes of South African-born workers.

An increased share of immigrants does not seem to have any relationship with South African-born workers' incomes at the national level. Yet both positive and negative effects are found at the regional level. Furthermore, the share of newly-arrived immigrants is positively associated with both employment rates and incomes of native-born workers.

Income differences between native-born and immigrant workers

Foreign-born workers' recorded incomes, pooled across two census waves, are a third higher than those of native-born workers, suggesting that foreign-born workers tend to be considerably better off financially than the average South African-born worker (Table 4.1). However, the pooled numbers do not show the considerable changes over time. While average real income increased nationally between 2001 and 2011, South African-born workers' incomes increased by an average of 24% while those of foreign-born workers actually fell by about 32%.

Table 4.1. Foreign-born workers' incomes are higher than those of South African-born workers

Monthly total income by place of birth, sex and year (real 2005 ZAR), 2001 and 2011

	South African-born			Foreign-born		
	Men	Women	Total	Men	Women	Total
2001	5 111	3 785	4 533	8 818	9 139	8 904
2011	6 222	4 889	5 630	6 109	5 793	6 022
Total	5 733	4 412	5 150	6 900	6 731	6 854

Source: Calculations based on Statistics South Africa (2002 and 2012b).

The negative growth of foreign-born workers' incomes compared to the South African-born conforms to the findings in Chapter 3 suggesting that the situation of foreign-born workers is becoming more difficult. On the other hand, the share of wage workers among the foreign-born increased between 2001 and 2011. This in itself is not an unequivocal indication of improvement, as a considerable number of them might be in daily or otherwise precarious, and hence poorly paid, contract employment (Sparreboom and Albee, 2011).

It should also be noted that income in the 2001 and 2011 South African census waves is not a measure of labour income, but rather of total personal income regardless of its source. Therefore, observed differences in income might not necessarily or exclusively reflect a change in the labour market situation of the two groups of workers. Furthermore, the quality of the income data in at least one South African census wave has been questioned, given the high share of respondents indicating no income at all (Barnes, Gutierrez-Romero, and Noble, 2006; Yu, 2009). Moreover, the data gathered in both census waves is organised in broad categories, meaning that it suffers from the well-known "top-coding" problem (in which the highest category is coded as the lowest possible value, i.e. 204 801 for 204 801+), which might lead to an underestimation of the highest incomes, thus biasing results downwards.

Part of the differences in income between South African-born and foreign-born workers can be ascribed to personal characteristics, such as education, sex, relationship status (married or cohabiting versus being single), age and occupation, as well as the place in which one is living. In Table 4.2, the results of several Mincer-type regressions, in which the natural log of income is regressed on various controlling variables, are shown. Differences between foreign-born and South African-born workers cannot be fully accounted for by any of the examined personal characteristics, though some noteworthy patterns arise. Foreign-born workers earn about 5% less income than South African-born workers, controlling for year, province, sex, broad education level and experience (Table 4.2, model 1).

Table 4.2. **Foreign-born workers tend to have lower incomes than comparable South African-born workers**

Variables	All workers					Low-skilled occupations		Mid-skilled occupations		High-skilled occupations	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Foreign-born	-0.05*** (0.00)	-0.02*** (0.00)	-0.04*** (0.00)	-0.07*** (0.00)	0.06*** (0.01)	-0.19*** (0.01)	-0.18*** (0.00)	-0.13*** (0.01)	-0.10*** (0.01)	-0.01 (0.01)	-0.00 (0.01)
Experience	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.03*** (0.00)	0.03*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.05*** (0.00)	0.05*** (0.00)
Secondary education	2.53*** (0.00)	2.18*** (0.00)	1.92*** (0.00)	1.56*** (0.00)	1.56*** (0.00)	2.27*** (0.01)	2.14*** (0.01)	2.17*** (0.01)	2.00*** (0.01)	2.00*** (0.01)	1.99*** (0.01)
Tertiary education	1.90*** (0.02)	1.63*** (0.02)	1.47*** (0.02)	1.18*** (0.02)	1.18*** (0.02)	1.51*** (0.04)	1.40*** (0.04)	1.66*** (0.03)	1.51*** (0.03)	1.62*** (0.03)	1.62*** (0.03)
Other education	-0.21*** (0.00)	-0.14*** (0.00)	-0.16*** (0.00)	-0.17*** (0.00)	-0.17*** (0.00)	-0.36*** (0.00)	-0.25*** (0.00)	-0.05*** (0.00)	-0.06*** (0.00)	-0.13*** (0.01)	-0.11*** (0.01)
Female	6.16*** (0.00)	5.75*** (0.00)	6.54*** (0.01)	6.24*** (0.01)	6.24*** (0.01)	6.30*** (0.01)	6.04*** (0.01)	6.40*** (0.01)	6.02*** (0.01)	6.95*** (0.01)	6.71*** (0.02)
Observations	1 551 160	1 550 984	1 550 984	1 544 818	1 543 535	598 945	598 899	539 802	539 768	373 844	373 812
R-squared	0.30	0.36	0.39	0.46	0.46	0.27	0.32	0.23	0.27	0.30	0.31
Time and area fixed effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Sector fixed effects	.	yes	yes	yes	yes	.	yes	.	yes	.	yes
Occupation fixed effects	.	.	yes	yes	yes	.	.	.	.	.	.
Race fixed effects	.	.	.	yes	yes	.	.	.	.	.	.
Citizenship fixed effects	.	.	.	.	yes	.	.	.	.	.	.

Note: Regressions of log monthly income on immigrant status. Robust standard errors appear in parentheses. Regressions are weighted and standard errors are clustered by year and district. * p < 0.1, ** p < 0.05, *** p < 0.01.

Source: Calculations based on Statistics South Africa (2002 and 2012b).

This difference decreases slightly when comparing people who work in the same sector (model 2), but increases again when only comparing the same occupations within sectors (model 3). This suggests that there are considerable differences in the occupations foreign-born workers have in different sectors. Controlling for race, as would be expected, slightly increases the income gap between South African- and foreign-born workers (model 4).

Notably, citizenship has a strong effect on the income gap between foreign- and South African-born workers (model 5) indicated by the reversal of the sign of the foreign-born income gap. This means that when comparing within races,

foreign-born workers who are citizens earn 6% higher incomes than South African-born citizens, while foreign-born workers who are not citizens earn 14% lower incomes than South African-born citizens.

Income by broad occupational category is also examined. Income gaps remain relatively high for low- and medium-skilled occupations, ranging between 10% and 19% lower incomes for foreign-born workers, even when controlling for sector of employment (Table 4.2, models 7 and 9), while no income gap exists among high-skilled occupations both within and across sectors (models 10 and 11). These results, in line with those found in Chapter 3, suggest that there is a likely segmentation of the foreign-born labour force in South Africa. While foreign-born workers in high-skilled occupations have similar incomes to their South African-born counterparts, those of lower-skilled foreign-born workers (particularly those in the lowest-skilled occupations) are considerably lower than similarly skilled South African-born workers. This would suggest that lower-skilled foreign-born workers might be more likely to find employment in daily contract labour or otherwise precarious forms of work.

Effects of immigration on native-born employment and wages

According to economic theory, labour immigration increases the supply of labour in destination countries and can lead to adjustments in employment and wages of native-born workers. At the theoretical level, the nature of such adjustments depends on various assumptions, while empirical studies in the context of developed countries tend to show limited effects, both positive and negative. However, effects are more likely to be negative for certain population groups, such as low-income workers and prior immigrant cohorts (Barone and Mocetti, 2011; Borjas, 1994, 1999, 2003, 2006, 2015; Borjas and Hilton, 1996; Friedberg and Hunt, 1995; Hanson, 2008; Kerr and Kerr, 2011; Longhi et al., 2005, 2010).

While interest in the labour market effects of immigration in developing countries is growing, few empirical studies have been undertaken. An important exception is the study by Facchini, Mayda and Mendola (2013) of the South African labour market. This study uses a “skill-cell approach” (see explanation below) combined with a disaggregation at the district level to estimate economic effects on income and employment. The authors find small negative effects of immigration on income, but not on employment of native-born workers at the national level, and the reverse at the district level (i.e. a negative effect on employment but not on incomes of native-born workers). They employ an instrumental variable analysis to confirm the reading that, at the district level, the negative effect on employment rates likely results from native-born workers’

relocation to low-immigration districts and to the informal labour market. Some negative effects of immigration on employment at the national level are found in a more recent study (Fauvelle-Aymar, 2015).

Following Borjas (2003), this study considers immigration as an increase in the supply of labour, which can be analysed based on two dimensions: education and experience. As noted by Borjas, both dimensions have been emphasised by human capital theory (Becker, 1975; Mincer, 1974), and education and experience jointly determine the skill cells that are central to the analysis of immigration in this chapter.

Under the assumption that workers (both South African-born and foreign-born) with comparable levels of education and work experience are perfect substitutes and hence compete for the same jobs, skill cells are used to assess how labour market outcomes of South African-born workers of a certain skill level are affected by the presence of immigrant workers. Skill level is estimated by dividing the working-age population into groups based on four levels of educational achievement and eight levels of years of experience. Subsequently, variations in the proportion of immigrants across skill cells are used to assess the impact of immigration on labour market outcomes (see Annex 4.A1 for further methodological details).

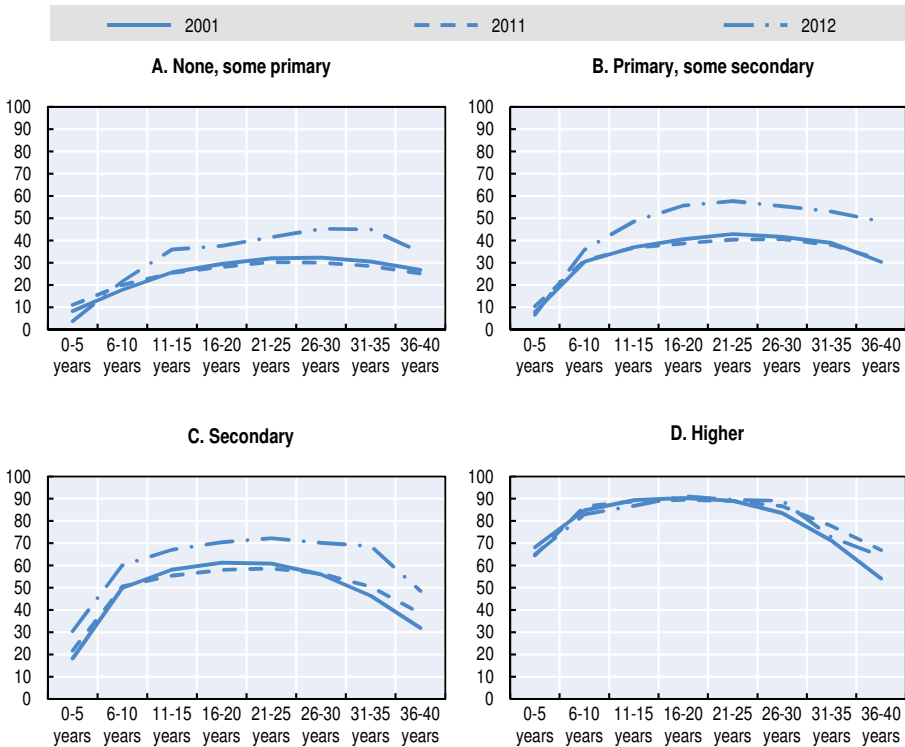
Labour market outcomes included in the analysis are the employment-to-population ratio, the unemployment rate, the rate of paid employment and the log of monthly income of South African-born workers, calculated according to ILO definitions.¹ The analysis in this chapter uses data from the last two South African population censuses conducted, in 2001 and 2011, and the third quarter wave of the South African Labour Force Survey of 2012.

Immigrant workers have either low or high levels of education and experience

Employment-to-population rates of native-born workers (ages 15-64) remained stable between 2001 and 2011, but have increased since 2012 for all but tertiary educated workers and workers with up to five years of work experience. Across all three years, employment rates tend to rise with levels of education, while a decline in employment rates is observed across all education groups at the edges of the experience range – there are relatively fewer employed South African-born workers with few or many years of work experience compared to workers in the middle of the range. This may be because workers early in their careers are more likely to be cyclically unemployed as they look for the right job or continue their education, particularly in the higher education categories, while more experienced workers may start retiring, in some cases before they leave the working-age population (again, particularly those with higher levels of education).

Figure 4.1. **Employment rates increase with levels of education and with moderate experience**

South African-born employment-to-population ratio by experience and education levels, 2001, 2011 and 2012



Source: Calculations based on Statistics South Africa (2002; 2012a and 2012b).

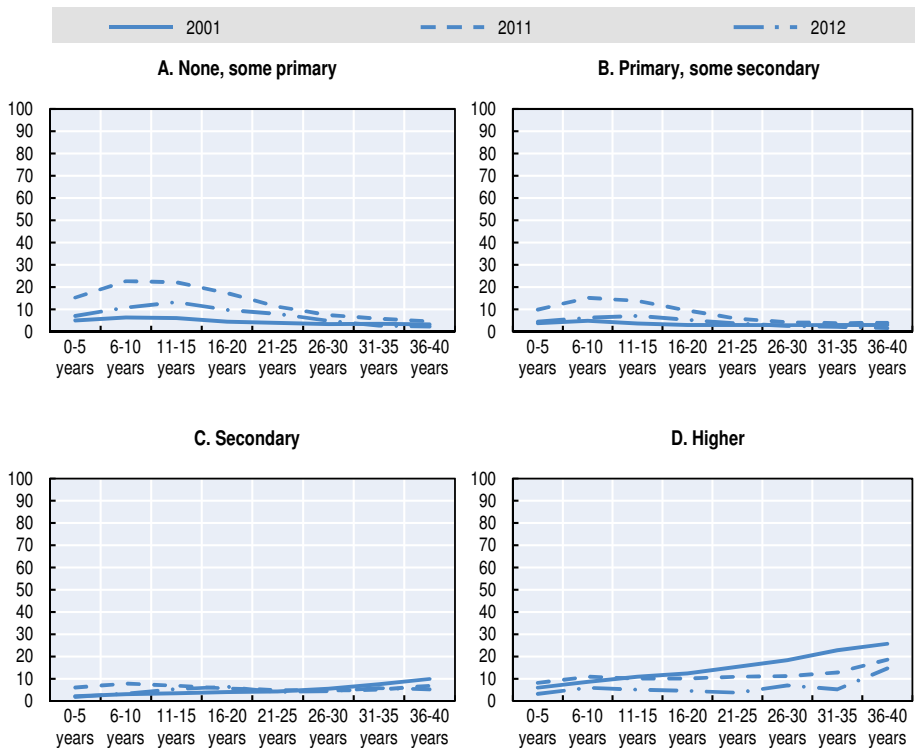
The foreign-born share shown in Figure 4.2 represents the percentage of immigrants among the working-age population in each skill cell per year. As was highlighted in Chapter 3, the share of the foreign-born is highest among workers with a tertiary or higher education and among those with less than a primary level of education and relatively little work experience.

Native-born unemployment rates are highest among workers with the lowest education and the least years of work experience (Figure 4.3). Most notably, the unemployment rate of workers with only some primary education and up to five years of work experience is over 80% in 2012. Completing secondary education, with up to five years of work experience, reduces the unemployment rate to just over 50%, and completing tertiary education reduces it further to just over 20%. As work experience increases, unemployment rates drop drastically among lower education groups. The unemployment rate among

workers with some primary education and between 36 and 40 years of work experience is just over 30% in 2012. Again, with education the unemployment rate drops drastically, to just over 8% for a worker with 36-40 years of experience and a tertiary or higher level of education. Over time, unemployment rates have decreased most among workers with lower levels of education. Only among tertiary educated workers with very little experience do unemployment rates rise over time.

Figure 4.2. Migrants are overrepresented among the extremes of the skill spectrum

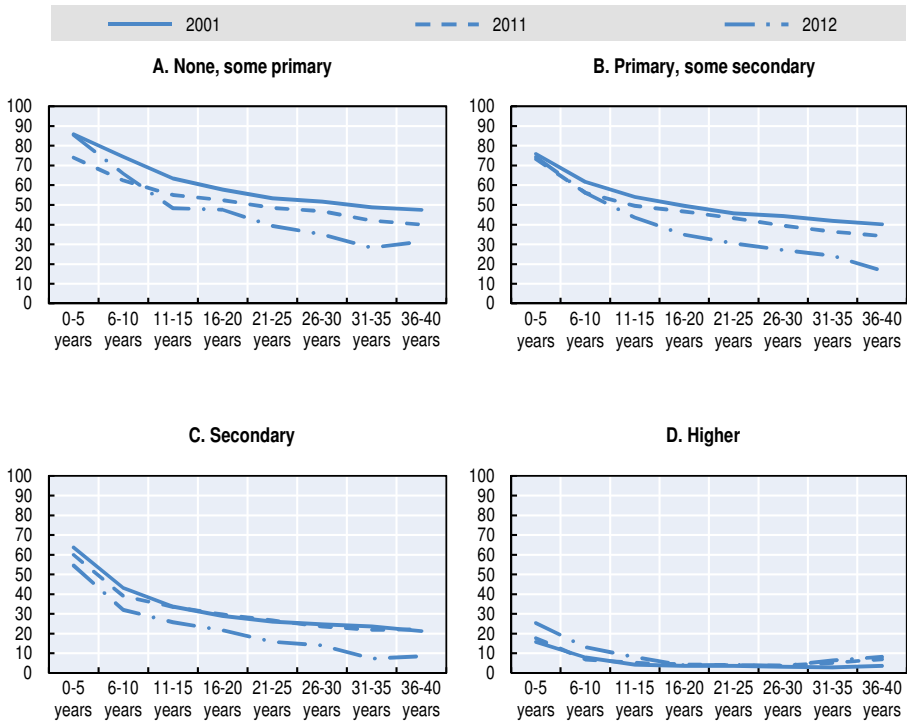
Non-native share of working age population by experience and education levels, 2001, 2011 and 2012



Source: Calculations based on Statistics South Africa (2002; 2012a and 2012b).

The rate of native-born paid employment has declined slightly over the three census waves for workers with a primary education or less. This time trend is not as apparent among secondary and higher educated workers, though among these workers in all years the share of paid employment falls considerably with increasing experience. Figure 4.4 seems to suggest that many, particularly tertiary educated, workers do not stay in paid employment until retirement, and paid employment is not the same as a stable job.

Figure 4.3. **Unemployment is highest among workers with little experience**
 South African-born unemployment rate by experience and education levels, 2001, 2011 and 2012



Source: Calculations based on Statistics South Africa (2002; 2012a and 2012b).

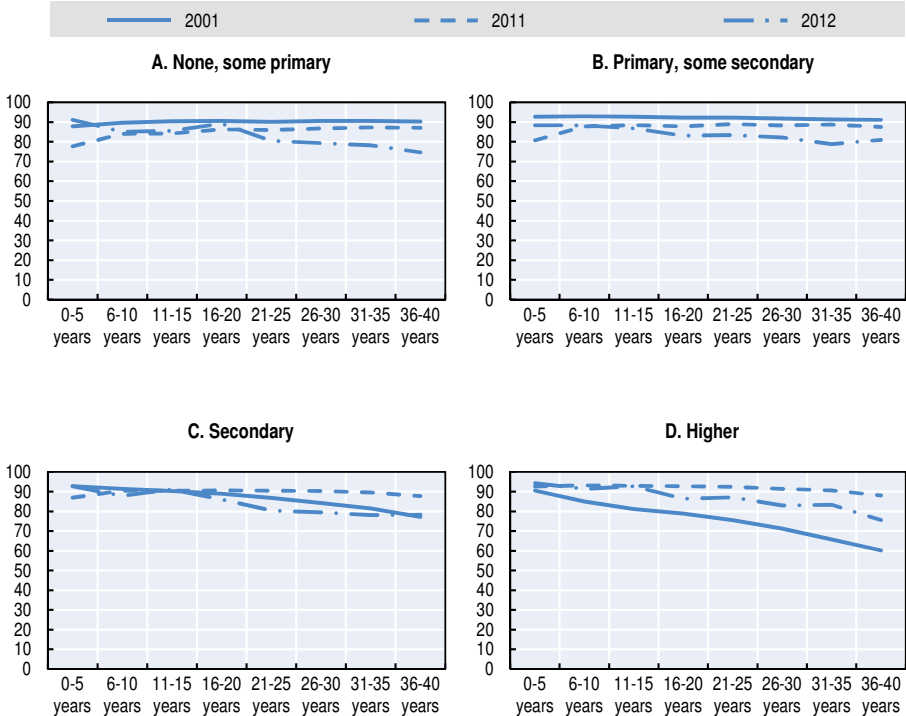
Since paid employment rates do not give a clear indication of the quality of jobs in South Africa, income could be used as another indicator of the quality of jobs wage workers find. Figure 4.5 shows monthly income (in real 2005 ZAR) of South African-born workers by levels of education and experience for each of the two census waves. Between the two waves, incomes barely changed for workers with less than a secondary education (and less than 20 years of experience), while income growth for those with higher education levels at each level of experience stagnated. Particularly among tertiary educated workers, wages fell considerably. Whether or not this truly reflects a deterioration of the quality of jobs at higher skill levels, it does suggest a slight reduction in income inequality between skill levels. In both waves, income increases with education and with experience.

Real monthly income of South African-born workers fell between 2001 and 2011, particularly among workers with secondary and higher levels of education. Income increases considerably with levels of education, though relative differences between workers with less than a secondary education

are small, regardless of experience level. Average incomes more than double between workers with a secondary education or less, and more than double again for those with a tertiary or higher level of education. For workers with at least a secondary level of education, increasing experience also appears to be more important for increasing levels of income.

Figure 4.4. **Paid employment rates decrease slightly among more experienced workers**

South African-born paid employment rate by experience and education levels, 2001, 2011 and 2012



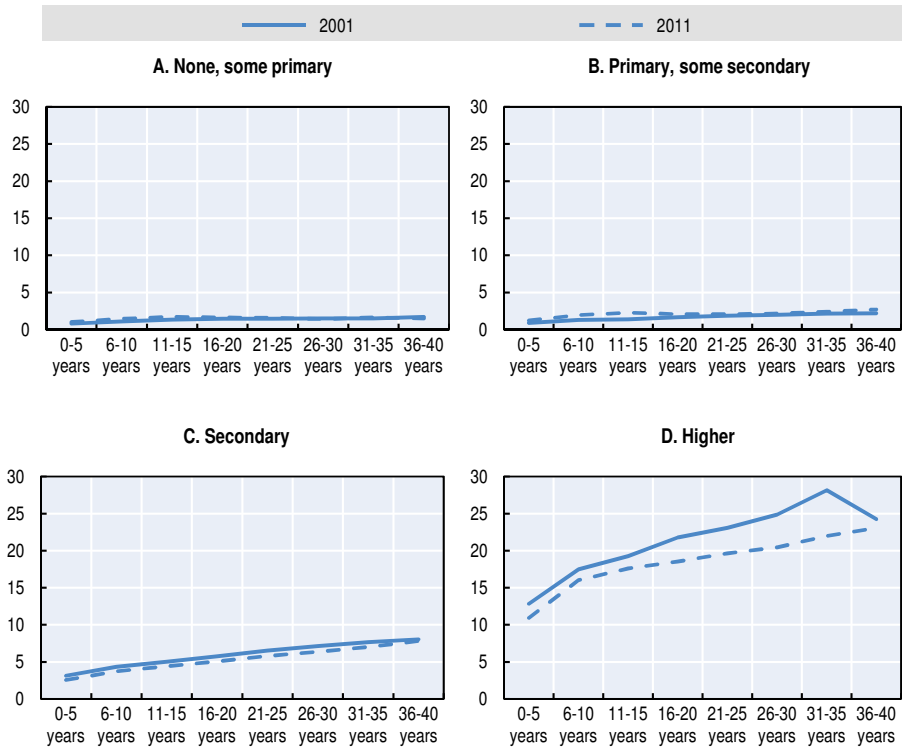
Source: Calculations based on Statistics South Africa (2002; 2012a and 2012b).

Foreign-born workers do not impact South African-born workers' labour market outcomes at the national level

The analysis assesses the labour market effect of immigration on South African-born men and women, across three survey years and grouped by skill cell, at the national and regional levels, then at the national level for men and women separately. In addition, the analysis looks at impacts of the most recent migrants only. Table 4.3 presents the foreign-born share of the economically active population per skill cell on each labour market outcome. Regression coefficients can be found in Table 4.A2.1.

Figure 4.5. **Income of South African-born workers increases with education and experience**

Monthly income of South African-born workers by experience and education levels, 2001 and 2011



Source: Calculations based on Statistics South Africa (2002 and 2012b).

The correlation between the immigrants' share and the pooled employment rate of native-born workers is insignificant, suggesting that overall, the presence of immigrants in a skill cell does not have an effect on native-born employment rates at the national level, and does not affect men and women differently. At the regional level, however, the presence of foreign-born workers in a skill cell is correlated with a reduced employment rate and an increased wage of South African-born workers. This finding implies that regional differences in the labour market effects of immigration are important, and might be due to the relocation of native-born workers between regions. Conversely, the unemployment and paid employment rates of South African-born workers are unaffected by the presence of foreign-born workers under any specification. Finally, the monthly income of South African-born women at the national level is related positively with the share of foreign-born women in a skill cell. It does, however, warrant repeating that the number of respondents who indicated receiving no income in 2001 is disproportionately high, even among wage workers, making interpretation of the findings of that year uncertain.

Table 4.3. Foreign-born workers do not have an impact on South African-born workers, but new immigrants do

Summary of results of regressions of several South African-born labour market outcomes and foreign-born share

Variables	All workers National	All workers Regional	Men	Men (controlling for women)	Women	New immigrants
Employment rate of South African-born workers	0	-	0	0	0	+
Unemployment rate of South African-born workers	0	0	0	0	0	-
Paid employment rate of South African-born workers	0	0	0	0	0	0
Monthly income of South African-born workers	0	+	0	0	+	+

Note: The table reports the sign of the immigrants' share variables from regressions where the dependent variable is the mean South African-born labour market outcome for an education*experience group at a particular point in time. 0 = no significant effect; + = a significant positive effect; - = a significant negative effect.

Source: Calculations based on Statistics South Africa (2002; 2012a and 2012b).

The final specification of all four models uses a sample in which immigrant shares are composed of only those immigrants who have been resident in the region for the past ten years. This assumes that any foreign-born worker who entered the South African labour market before that time would have been sufficiently integrated to no longer have the same impact as a newer immigrant. Under this specification, a different set of relationships is observed. The relationship of the share of newly-arrived immigrants with the employment rate of South African-born workers in a skill cell is positive, while the relationship with the unemployment rate of South African-born workers is negative. This suggests that South African-born employment is increasing in cells with more new immigrants. At the same time, there is a positive relationship with monthly income, meaning that “established” workers have higher incomes in cells when more immigrants arrive. This could be due to several reasons, such as spillover effects of new skills brought by immigrant workers, or increased specialisation of native-born workers in the presence of more immigrant labour (Peri, 2014).

Newly-arrived immigrants' positive impacts on labour market outcomes might hide inequalities

Evidence presented in this chapter suggests that foreign-born workers do not have any measurable positive or negative effect on labour market outcomes of native-born workers considered as one group at the national level. However, women in skill cells with a higher share of foreign-born women do appear to earn higher incomes at the national level. This could be due to the increased participation of native-born women in the labour market due to immigrant women taking over childcare and household services (Furtado, 2015; Peri, 2014, see also Chapters 3 and 5).

At the regional level, a higher share of immigrant workers has a negative effect on employment rates of native-born workers, suggesting that opportunities for workers of a given skill level differ considerably between regions. In other

words, local effects of migration might exist on the employment rates of competing workers, most likely in border regions, which are not strong enough to be visible at the national level, or are compensated for by interprovincial flows of South African-born workers in response to increasing immigration shares. Furthermore, a significant and positive regional effect is observed when considering the impact on real wages of South African-born workers – a one percentage point increase in the share of immigrants is associated with an almost 1% increase in the real wages of the native-born workers (Table 4.A2.1).

There was a large shift in occupational and sectoral distributions of immigrant workers between 2001 and 2011. By 2011, foreign-born employment in agriculture and even more so in industry (including mining) decreased, and more foreign-born workers became employed in the growing service sectors of the economy. While a more elaborate time series analysis would help shed light on the changes of the impact of immigration over time, a lack of nationally representative data at regular time intervals makes empirical testing of such changes difficult. The analysis therefore looked at possible effects of the most recent immigrants as a proxy for examining the short-term effects of migration, and found that employment rates and wages are highest in those cells which contain the largest share of new immigrants.

The effects of new immigrants suggest that they might be responding more actively to labour market needs. Although these results indicate an improvement in employment rates and in the quality of employment of South African-born workers as a result of the presence of immigrants, being in paid employment and receiving a relatively higher wage does not imply one has a stable, decent job. Furthermore, similar to the argument in Chapter 3, the reduction in immigrants' average wages (and the rise of those of South African-born workers) between 2001 and 2011, suggests that the groups' relative positions on the labour market are shifting. This means that workers might not be perfectly substitutable within skill cells, which might in turn dilute any competitive effect of the migrant share per skill cell at the national level.

Conclusions

The analysis in this chapter aimed to quantify some of the effects of immigration on the South African labour market based on a widely used skill-cell approach developed in Borjas (2003) and used by, among others, Facchini, Mayda and Mendola (2013), and De Brauw and Russell (2014). The impact of immigration on labour market outcomes of native-born workers using this approach was assessed by examining several labour market outcomes of South African-born workers in relation to the proportion of economically active immigrants with comparable levels of skill. In line with some of the findings of previous research (see Facchini, Mayda and Mendola, 2013), foreign-born workers do not displace native-born workers at the national level.

The chapter was able to address the impact of immigration on native-born wages which, according to certain methodologies, has been found to be negative in previous research. However, in the case of South Africa, this effect is neutral at the national level, while being positive at the regional level and when solely considering new immigrants and women.

At the national level, increased immigration does not have any effect on native-born labour market outcomes, while a negative impact on native-born employment rates is witnessed at the regional level. This suggests that regional differences might obscure more localised labour market effects of immigration. Borjas argues that impacts get diffused across regions, through internal immigration, capital reallocation or other adjustment processes, assuming (implicit in the skill-cell approach) that workers within skill cells are perfectly substitutable. Critics have argued that this assumption leads to a potential overstatement of immigration's adverse effects (Bodvarsson and Van den Berg, 2013).

Furthermore, the effects of immigration seem to lessen with time spent in South Africa. While new immigrants positively affect employment rates and wages and negatively impact unemployment rates of native-born workers, these effects become insignificant as immigrants attain characteristics that allow them to integrate better into the labour market.

In terms of policy interventions, if certain regions bear more of the burden of an increased labour force due to immigration, it seems that policies encouraging less concentration of foreign-born workers might be beneficial for native-born workers. The same argument would apply to maximise the positive employment impact of newly-arrived immigrants. At the same time, there is a continued need to ensure labour protection for the most precarious workers, including immigrant workers, in order to not undermine or challenge minimum conditions for all workers.

Notes

1. Monthly income is defined as total personal income in real 2005 ZAR from all sources of income in the previous 12 months. For both censuses, income data have been recoded to the midpoints of the broad intervals which were recorded in the original data. The top interval has been recoded to the lowest possible value (i.e. 204 801 for 204 801+).

References

- Barnes, H., R. Gutierrez-Romero and M. Noble (2006), "Multiple imputation of missing data in the 2001 South African census", *CASASP Working Paper*, No. 4.
- Barone, G. and S. Mocetti (2011), "With a little help from abroad: The effect of low-skilled immigration on the female labour supply", *Labour Economics*, Vol. 18/5, pp. 664-675.

- Becker, G. S. (1975), *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 2nd ed., National Bureau of Economic Research, New York.
- Blau, F.D. and L.M. Kahn (2013), "The feasibility and importance of adding measures of actual experience to cross-sectional data collection", *Journal of Labour Economics*, Vol.31/S1, University of Chicago Press, pp. S17-S58.
- Bodvarsson, Ö. B. and H. Van den Berg (2009), *The Economics of Immigration: Theory and Policy*, Springer Press, Berlin.
- Borjas, G. J. (2015), "The Wage Impact of the Marielitos: A Reappraisal", *NBER Working Paper*, No. 21588, DOI:10.1017/CBO9781107415324.004.
- Borjas, G. J. (2006), "Native internal migration and the labour market impact of immigration", *Journal of Human Resources*, Vol. 41/2, Board of Regents of the University of Wisconsin System, pp. 221-258.
- Borjas, G. J. (2003), "The labour demand curve is downward sloping: Reexamining the impact of immigration on the labour market", *Quarterly Journal of Economics*, Vol. 118/4, Oxford University Press, pp. 1335-1374.
- Borjas, G. J. (1999), "Chapter 28 – The economic analysis of immigration", in O. C. Ashenfelter and D. Card (eds.), *Handbook of Labour Economics*, Vol. 3, Part A, Elsevier Science BV, Amsterdam, pp. 1697-1760.
- Borjas, G. J. (1994), "The economics of immigration", *Journal of Economic Literature*, Vol. 32/4, American Economic Association, pp. 1667-1717.
- Borjas, G. J. and L. Hilton (1996), "Immigration and the Welfare State: Immigrant Participation in Means Tested Entitlement Programs", *Quarterly Journal of Economics*, Vol.111/2, pp. 575-604.
- De Brauw, A. and J. R. D Russell (2014), "Revisiting the labour demand curve: The wage effects of immigration and women's entry into the US labour force, 1960-2010", *IFPRI Discussion Paper*, No. 01402, Washington, DC.
- Facchini, G., A. M. Mayda and M. Mendola (2013), "South-South migration and the labour market: Evidence from South Africa", *IZA Discussion Paper*, No. 7362, Bonn.
- Fauvelle-Aymar, C. (2015), "Immigration and the South African labour market", *MiWORC Working Paper*, No. 2, African Centre for Migration & Society, University of the Witwatersrand, Johannesburg.
- Friedberg, R. M. and J. Hunt (1995), "The impact of immigrants on host country wages, employment and growth", *Journal of Economic Perspectives*, Vol. 9/2, American Economic Association, pp. 23-44.
- Furtado, D. (2015), "Immigrant labor and work-family decisions of native-born women", *IZA World of Labor*, No. 139, DOI: 10.15185/izawol.139.
- Hanson, G. H. (2008), "The economic consequences of the international migration of labour", *NBER Working Paper*, No. 14490, Cambridge, Massachusetts.
- Kerr, S. P. and W. R. Kerr (2011), "Economic impacts of immigration: A Survey", *NBER Working Paper*, No. 16736, Cambridge, Massachusetts.
- Longhi, S., P. Nijkamp and J. Poot (2010), "Joint impacts of immigration on wages and employment: review and meta-analysis", *Journal of Geographical Systems*, 12(4), pp. 355-387.
- Longhi, S., P. Nijkamp and J. Poot (2005), "A Meta-Analytic Assessment of the Effect of Immigration on Wages", *Journal of Economic Surveys*, 19(3), pp. 451-477.
- Mincer, J. (1974), *Schooling, Experience, and Earnings*, Columbia University Press, New York.

- Peri, G. (2014), "Do immigrant workers depress the wages of native workers?", *IZA World of Labor* 2014, No. 42, DOI: 10.15185/izawol.42.
- Sparreboom, T. and A. Albee (2011), *Towards Decent Work in Sub-Saharan Africa: Monitoring MDG Employment Indicators*, International Labour Office, Geneva.
- Statistics South Africa (2012a), "Quarterly Labour Force Survey (QLFS)", 3rd Quarter 2012, Statistical Release P0211 and QLFS 2012 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=1854&PPN=P0211&SCH=5367
- Statistics South Africa (2012b), "Census 2011", Statistical Release P0301/4 and Census 2011 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3839.
- Statistics South Africa (2002), "Key Results" and Census 2001 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3908.
- Yu, D. (2009), "The comparability of Census 1996, Census 2001 and Community Survey 2007", *Stellenbosch Economic Working Papers*, No. 21/09, University of Stellenbosch.

ANNEX 4.A1

Methodology of labour market impact assessment

Following Borjas (2003), skill cells based on education and experience are used to assess how labour market outcomes of South African-born workers of a certain skill level are affected by the proportion of immigrant workers of the same skill level. Accounting for any interactions between education and experience, and changes in these variables over time, the main equation to be estimated becomes:

$$Y_{ijt} = \beta m_{ijt} + e_i + w_j + c_t + (e_i * w_j) + (e_i * c_t) + (w_j * c_t) + u_{ijt} \quad (1)$$

where Y_{ijt} is the labour market outcome for a South African-born worker with education i ($i = 1...4$) and work experience j ($j = 1...8$) for year t . Furthermore:

$$m_{ijt} = M_{ijt} / (M_{ijt} + N_{ijt}) \quad (2)$$

where M_{ijt} is the number of foreign-born workers with education i , work experience j at time t and N_{ijt} is the number of South African-born workers with education i , work experience j at time t . The other explanatory variables are a set of fixed effects that aim to take into account the education level (e_i), work experience (w_j) and the time period (c_t).

The analysis can be extended to include the impact of women on labour market outcomes of South African-born workers (see De Brauw and Russell, 2014), by including the following control variable:

$$w_{ijt} = W_{ijt} / (W_{ijt} + K_{ijt}) \quad (3)$$

where W_{ijt} is the number of women (both South African- and foreign-born) with education i , work experience j at time t and K_{ijt} is the number of men (both South African- and foreign-born) with education i , work experience j at time t .

The analysis can also be adjusted to take into account the regional distribution of immigrants along with their skill distribution (see Facchini, Mayda and Mendola, 2013). The equation to be estimated becomes:

$$Y_{ijt} = \beta m_{ijt} + e_i + w_j + c_t + d_k + (e_i * w_j) + (e_i * c_t) + (w_j * c_t) + (d_k * e_i) + (d_k * w_j) + (d_k * c_t) + u_{ijt} \quad (4)$$

where Y_{kit} is the labour market outcome for a South African-born worker in district k ($k = 1 \dots K$), with education i ($i = 1 \dots 4$) and work experience j ($j = 1 \dots 8$) for year t .

Data is aggregated at the level of skill cells, and regressions are weighted by the size of the economically active population per education*experience*year period.

The sample is restricted to individuals aged 15-64 who take active part in the labour market (i.e. are employed or unemployed), and includes both native-born men and women, jointly and separately at the national level. Borjas (2003) argues in his analysis that work experience cannot be adequately estimated for both men and women in the case of the United States, due to lower female labour force participation rates, particularly among older cohorts. There, changes in the labour force participation rates of men and women between 1960 and 2000 might have had a strong cultural component. However, this is not immediately evident in many developing countries, where income levels for the largest part of the population do not accommodate single-earner households. While in South Africa labour force participation rates of men and women have been slowly converging, in 2011 there was still more than a 7 percentage point gender gap. Furthermore, as argued by De Brauw and Russel (2014), women's labour market experience might also be affected by possible time outside the labour market due to childrearing or other domestic tasks (the responsibilities for which often fall disproportionately on women, see Blau and Kahn, 2013).¹ Therefore, in the analysis in this chapter, women's labour market experience is adjusted downwards by four years (see De Brauw and Russell, 2014).

In Chapter 4, employees are those who work in return for a wage or income per month, per day, or per job. They may receive commission in return for the work or service they perform. The commission may be in the form of money or in-kind payments.

Note

1. Blau and Kahn (2013) further find that including individuals with interruptions of full-time work experience can lead to measurement errors and biased estimates of the returns to experience as well as the quantity of post-school human capital investment. The lack of information on actual work experience can also have serious consequences for analysing differences in the gender pay gap.

ANNEX 4.A2

*Regression results*Table 4.A2.1. **Estimates of effects of foreign-born share on labour market outcomes of South African-born workers, education*experience cells**

Variables	All workers National	All workers Regional	Men	Men (controlling for women)	Women	New immigrants
Employment rate of South African-born workers	0.440 (0.469)	-0.203** (0.080)	-0.064 (0.415)	-0.161 (0.367)	0.485 (0.367)	0.978*** (0.360)
Unemployment rate of South African-born workers	-0.257 (0.295)	0.102 (0.076)	0.006 (0.221)	0.029 (0.214)	-0.449 (0.385)	-0.531* (0.275)
Paid employment rate of South African-born workers	-0.301 (0.280)	0.071 (0.085)	-0.020 (0.250)	-0.034 (0.254)	-0.251 (0.408)	0.117 (0.264)
Monthly income of South African-born workers	2.295 (1.703)	0.949*** (0.256)	0.464 (1.300)	-1.822 (1.127)	4.729** (2.271)	4.097*** (0.944)
R-squared	0.982	0.9872	0.9804	0.9808	0.9762	0.9814

Note: The table reports the coefficient of the immigrants' share variables from regressions where the dependent variable is the mean South African-born labour market outcome for an education*experience group at a particular point in time. Asterisks indicate significance levels (* p < 0.1, ** p < 0.05, *** p < 0.01). Robust standard errors are reported in parentheses. All regressions are based on the same 36 observations per year at the national level and 288 observations at the regional level, and are weighted by the sample size of the education*experience*year cell. All regression models include education, experience, period fixed effects and a full set of two-way interactions. Log monthly income is recorded in the census in broad income categories, recoded here to the midpoint of each category, and the regression in model 4 is based on data from the years 2001 and 2011 only.

Source: Calculations based on Statistics South Africa (2002; 2012a and 2012b).

Chapter 5

Immigration and economic growth in South Africa

This chapter analyses the sectoral economic development of South Africa, which is a major factor in the estimated contribution of immigration to economic growth. In this context, the educational attainment of foreign- and native-born workers is also taken into account. In addition, the chapter estimates the impact of immigration on income per capita based on an econometric model. The chapter's final section offers policy recommendations.

Previous chapters provided the economic and policy context of immigration in South Africa, highlighted the strong historical linkages between immigration and the economic development of the country and examined in particular the labour market position of foreign-born workers. This chapter assesses the contribution of immigrant workers to gross domestic product (GDP), based on labour market and other information.

It is difficult to accurately establish the contribution of immigrant workers to economic output or GDP. The economic activities of immigrant workers are not recorded separately in national account statistics, and their contribution therefore has to be deduced indirectly. In addition, the question is often raised as to whether immigration positively or negatively affects the level of South Africa's real per-capita income. Even though it is known that an expansion of the workforce almost invariably increases a country's total output level (Borjas, 1999), the impact of immigration on GDP per capita theoretically depends on a number of assumptions and the direction of this impact is not determined a priori (Bodvarsson and van den Berg, 2013).

This chapter first estimates the contribution of immigrant workers to the South African economy based on their sectoral distribution and assumptions regarding their productivity. Results suggest that the economic contribution of immigrant workers amounts to 8.9% to 9.1% of GDP, which is just below their share in employment (9.2%). Based on a broad production framework, the chapter subsequently argues that it is likely that migrant workers raise GDP per capita in South Africa. Finally, results from econometric estimates and simulation exercises confirm the positive economic effects of labour immigration in the country.

As the sectoral distribution of workers is a major determinant of the contribution to GDP, this chapter starts with a brief review of sectoral development of the South African economy and the position of foreign-born workers in this regard.

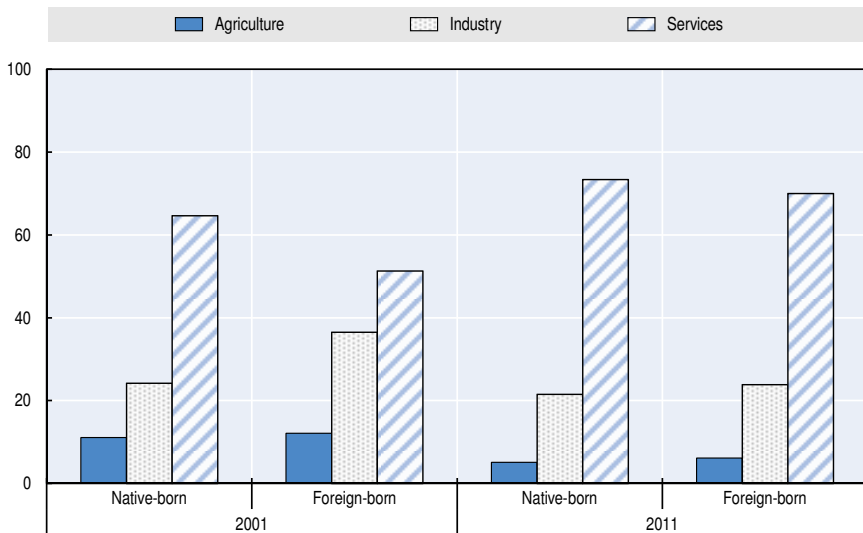
Growing importance of services

South Africa's sectoral employment shares show a steady increase in the importance of the service sectors and of the decline of industry as a source of employment (Figure 5.1). A similar trend can be seen in the shares of sectoral value added to GDP, to which services have been contributing a growing share since the 1980s (see Figure 2.3 in Chapter 2). In contrast to many sub-Saharan African countries, agriculture is thus not the predominant source of

employment in South Africa. The share of workers in agriculture was around 11% in 2001 (12% for foreign-born workers). From 2001 to 2011 the share of employment in agriculture declined by approximately 6 percentage points for both South African-born and foreign-born workers (Figure 5.1). Employment in industry declined slightly for South African-born workers and considerably for foreign-born workers. Consequently, services have become more important as a source of employment for both South African-born and foreign-born workers. The share of workers in services grew from 64% to 73% between 2001 and 2011, but it grew far more for foreign-born workers (18.7 percentage points) than for South African-born workers (8.7 percentage points). The gradual reduction of foreign employment in the mining sector contributed to these trends.

Figure 5.1. **The service sector has become more important as a source of employment**

Employment by broad sector and nativity status (%), 2001 and 2011

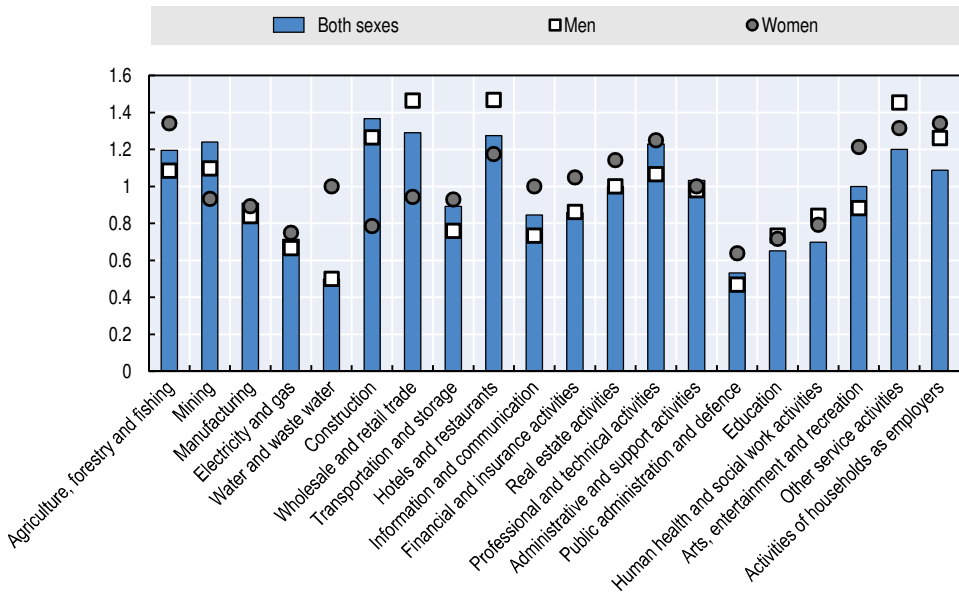


Source: Calculations based on Statistics South Africa (2002; 2012).

South African-born and foreign-born workers are not distributed equally across economic sectors. Despite their reduced employment shares particularly in agriculture and mining, foreign-born workers are still overrepresented in these sectors as well as in construction, wholesale and retail trade, accommodation and food service, professional activities, other service activities, and activities of households as employers (domestic work) (Figure 5.2). In 2011, employment in wholesale and retail trade and construction taken together accounted for almost a quarter of foreign-born workers (24.1%), which was mostly driven by foreign-born men. The share of foreign-born workers employed in the mining sector dropped from 14.9% in 2001 to 3.6% in 2011, with a corresponding drop in the ratio between foreign- and South African-born workers from 4.7 to 1.2 (Box 5.1).

Figure 5.2. **Immigrant workers are most overrepresented in the construction, trade, hospitality and professional sectors**

Ratio of foreign-born and South African-born sectoral employment shares, 2011



Note: A ratio of one indicates that the number of foreign-born employed in a sector, expressed as a proportion of all foreign-born employed, is the same as the proportion of the native-born employed in this sector. Ratios exceeding one indicate “overrepresentation” of foreign-born workers in a sector.

Source: Calculations based on Statistics South Africa (2002; 2012).

Box 5.1. **Downscaling of immigrant employment in mining and continuing immigrant employment in agriculture**

Data from work visas and the corporate sector (see also Chapter 2) confirm the substantial downscaling of mining as a sector of employment of migrant labour in South Africa. Massive retrenchments in the mid-1990s affected South African miners, particularly from the Eastern Cape, as well as migrant workers from neighbouring countries. With the rising gold prices of the early 2000s, there was renewed expansion of the industry, as well as new developments particularly in platinum. However, this time the priority was given to hiring South Africans for political as well as economic reasons. Attempts by the South African Government to entrench a policy of “South Africans first” in legislation and speech played a role, but also the dismantling of the regional hiring system and labour cost imperatives after the mid-1990s crisis.

At the economic side, mine managers and labour brokers have come to consider that hiring unemployed low- and semi-skilled South Africans in the immediate vicinity of mine sites may be more cost-effective than relying on regional supplies. This is a

Box 5.1. Downscaling of immigrant employment in mining and continuing immigrant employment in agriculture (cont.)

radical change from the views that dominated labour supply to the mines throughout the 20th century. The loss of jobs in mining, particularly in gold, has resulted in the strict preference for local labour.

Recruitment in mining remains mostly organised by the Employment Bureau of Africa (TEBA) in charge of the screening, recruitment and placement of foreign mine workers in South Africa since its creation in 1902. Today, TEBA relies on 400 permanent staff and 150 temporary staff who operate out of the 68 TEBA offices in Botswana, Lesotho, Mozambique, South Africa and Swaziland and with an additional network of 25 offices that have been established on mine property. Beyond the initial labour procurement mandate and in line with the development of long-term career employment, TEBA has diversified its service offer towards cash transfers and post-employment services (pension and provident funds, collation and audit of documentation, electronic money transfer with uBank, and community development programmes). It thus relies on a 1.3 million-worker database that it constantly seeks to update and has more recently created new services. One such service is the Labour Placement Service (LPS) developed to respond to the “greater emphasis [placed] on recruiting employees from settlements in urban areas”, that is South Africans or foreigners already in South Africa. Another service encourages skilled workers to apply for registration in a skills database of artisans. In 2012, it serviced about 312 000 workers, of which about 68 000 were foreign-born. As it processes all immigration permits on behalf of the mining conglomerates, TEBA remains the main interface between the mining sector and the Department of Home Affairs.

The migrant labour system in South African mines has relied on the compulsory deferred pay system for years. It was severely criticised by the group of experts who drafted the Green Paper on International Migration (Hough et al., 1997) but has survived unchanged for Lesotho and Mozambique. This system is critical in ensuring the circularity of workers, by binding their remuneration to their return and allowing the governments that send them to tax this inflow of foreign exchange.

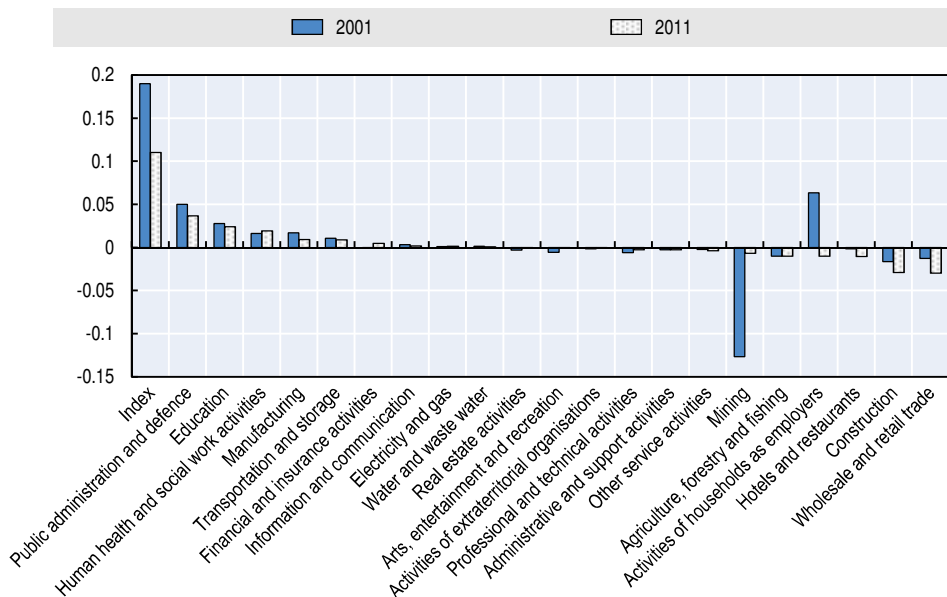
Commercial farming has been the largest employer of seasonal labour. With the 2002 reform of the immigration legislation, the sector has retained privileged access to foreign labour through the same corporate permits as the mining sector. There are also several waivers in favour of commercial farming in the Immigration Act of 2002, which follows recommendations made in the 1999 White Paper on International Migration. However, undocumented employment has remained dominant in agriculture. In a 2007 report, the Department of Labour noted that the primary employers were farmers in border areas with Lesotho, Mozambique and Zimbabwe, with the emergence of long-distance

migrant labour in the fruit and wine industry of the Western Cape (Department of Labour, 2007). Estimates ranged from 50 thousand to 80 thousand Mozambicans and from 7 thousand to 8 thousand Zimbabweans fluctuating on a seasonal basis (ibid.). Critical aspects in terms of duration and conditions of employment, reliance of the sector on foreign labour, impact on local workers' wages, social rights, and benefits' portability remain largely under-researched.

Recent research points to increased numbers of immigrant workers in domestic work (Jinnah and Kiwanuka, 2015; see also Figure 5.3). While the South African Domestic and Services Allied Workers Union (SADSAWU) has adopted a national strategy, protection remains limited in practice in a sector characterised by high levels of decent work deficits for all workers, and in particular immigrant workers.

Figure 5.3. **Sectoral distributions have become more equal mostly due to changes in mining and domestic work**

Index of dissimilarity and absolute value of the differences in sectoral employment of native- and foreign-born workers, 2001 and 2011



Note: The column "Index" represents the index of dissimilarity for the years 2000 and 2010. The remaining columns represent the differences between the native-born and foreign-born sectoral employment shares. The native-born sectoral employment share is calculated by dividing the number of native-born workers in each sector by the total number of native-born workers across all sectors. The same calculation is performed for foreign-born workers to derive the foreign-born sectoral employment share.

Source: Calculations based on Statistics South Africa (2002; 2012).

One way of summarising differences in sectoral distributions between South African-born and foreign-born workers is to calculate an index of dissimilarity (see Annex 3.A1 for methodological details). As the index decreased

from 0.18 in 2001 to 0.11 in 2011, sectoral distributions have become slightly more equal over the period on this measure. This equalisation was largely driven by the massive reduction of foreign-born employment in mining and a considerable increase of foreign-born employment in domestic work. The disproportionate growth of foreign-born workers in the construction and retail trade sectors over the period had the opposite effect (Figure 5.3).

Broad assessments of the contribution of migrant workers to economic growth

Information on the sectoral employment distributions of South African-born and foreign-born workers, together with average sectoral labour productivity calculated across all workers in each sector, can be used to assess the contribution of the two groups to economic growth. Taking this information into account, the contribution of the foreign-born population to GDP in 2012 (9.11%) was marginally lower than the commensurate share in employment (9.16%, see Figure 5.4). The reason is that foreign-born workers are more likely than native-born workers to be active in sectors with lower productivity such as agriculture, construction and trade, and less likely to work in higher-productivity sectors such as manufacturing.

Figure 5.4. **Immigrants' contribution to growth is lower than would be expected from their employment share**

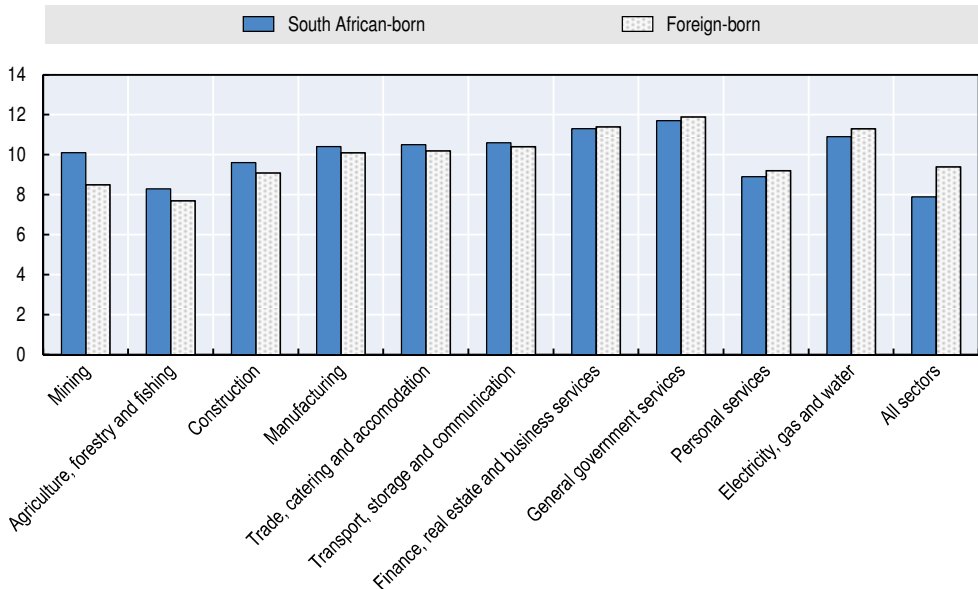


Source: Calculations based on Statistics South Africa (2002; 2012; 2015).

The assessment of the economic contribution of immigrant workers can also take into account additional information regarding the productivity of workers within sectors, based for example on proxies for productivity such as years of education. The average number of years of education of foreign-born workers (9.4) is above that of South African-born workers (7.9), but this varies by sector (Figure 5.5). While foreign-born workers have less years of education in sectors such as agriculture, construction, and manufacturing, foreign-born workers have more years of education in financial and real estate, general government service, and personal service activities. It would be reasonable to assume that these differences affect the productivity of each group of workers, and taking into account average years of education per group per sector results in a slightly lower contribution of foreign-born workers to GDP (8.9%), lower than the commensurate employment share. This reflects the fact that some of the better-educated foreign-born workers are employed in low-productivity sectors such as personal services.

Figure 5.5. **Foreign-born workers are slightly better educated than native-born workers, but not in all sectors**

Years of education of the foreign-born and South African-born employed by sector, 2011



Source: Calculations based on Statistics South Africa (2012).

Immigrant workers are likely to raise income per capita

Another way to assess the impact of immigration on GDP is to decompose GDP per capita into two components: (1) the share of the employed in the total population; and (2) labour productivity (GDP per employed worker).¹ The direct

effect of employing immigrants is an increase in the share of the employed in the total population. Firstly, as was noted in Chapter 3, this is because the employment-to-population ratio of the foreign-born population is higher than that of the native-born (60.8% versus 36.0% in 2011). Secondly, the share of the population that is of working-age is also higher for immigrants than for the native-born (91.7% versus 69.5% in 2011). Furthermore, as demonstrated in Chapter 4, immigration does not seem to reduce employment of native-born workers (at the national level). Taken together, this suggests that immigration would raise GDP per capita in South Africa, unless labour productivity decreased significantly.

To assess the second component, it is useful to consider the contributions from the capital-labour ratio, average human capital per worker and total factor productivity to the level of labour productivity.² As was indicated in the previous section, average human capital per worker is higher for the foreign-born employed. The effect of immigration on the capital-to-labour ratio is not known, but the literature suggests that, in for example Thailand, low-skilled immigration does not necessarily induce investment (Pholphirul, Kamlai and Rukumnuaykit, 2010). Finally, both high-skilled and low-skilled immigration may raise total factor productivity, for example due to efficiency gains through increased specialisation in the labour force. One form of specialisation is that high-skilled native-born workers spend more time on the job while domestic chores are carried out by immigrants (Hanson, 2012). The relatively high share of immigrant workers in domestic work points in this direction in South Africa (Figure 5.2).

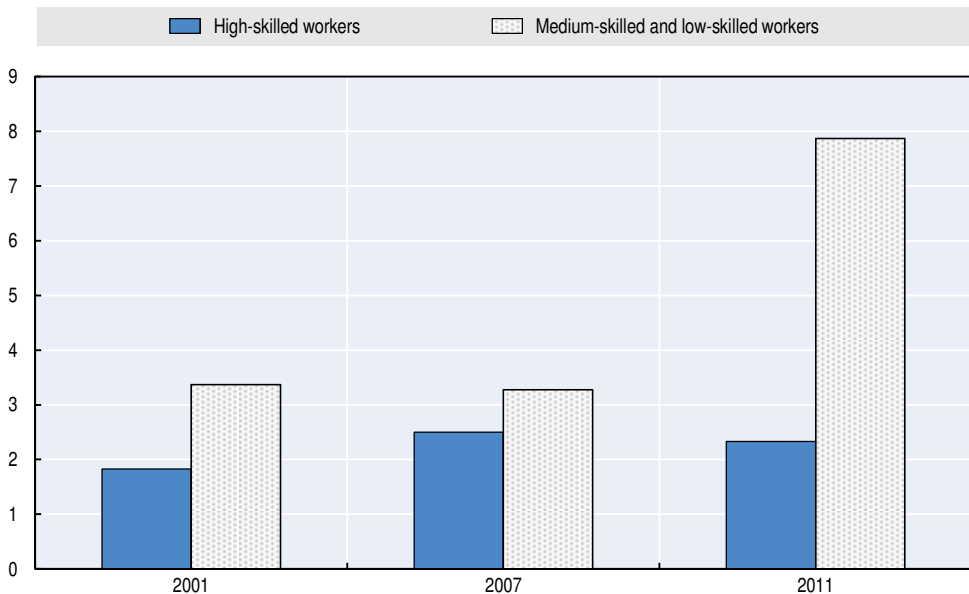
Given the uncertainties with regard to the effect of immigrant labour on labour productivity, the overall effect of migrant labour on GDP per capita is not certain. Nevertheless, the large difference between the native- and foreign-born shares of the employed in the population makes a positive effect of immigration on GDP per capita likely. The next section presents the effect of immigration on GDP per capita based on estimated production functions and an econometric model.

Empirical assessments confirm the contribution of immigrant workers to economic growth

This section uses conventional production functions in combination with econometric models to demonstrate the contribution of immigrant work to economic growth. In comparison with the production function framework (as used in the previous section), using a model has the advantage of capturing interactions between key variables (i.e. second order effects) of immigrant work on the South African economy. These include the macroeconomic effects of immigrant workers and their families, for example in terms of aggregate demand.

Production functions have been estimated separately for each broad economic sector, while distinguishing between high-skilled workers on the one hand, and medium-skilled and low-skilled workers on the other.^{3,4} Based on these functions, Figure 5.6 shows the economic contribution, or production, of the foreign-born employed separately for these two groups of workers. The results suggest that, in comparison with a situation in which no immigrant workers are employed, production increases considerably due to the additional immigrant workforce. Production attributed to the immigrant workforce expands over time, in accordance with the increasing numbers of immigrants, but also in line with the shift of workers to the relatively productive service sector (see Chapter 3). Due to the different methodology, the estimated contribution of immigrant workers in 2011 is higher than the estimate presented earlier (Figure 5.4), and suggests that the contribution of immigrant workers is above their share in employment.

Figure 5.6. **Both high- and low-skilled foreign-born workers contribute to the economy**
Increase of production which can be attributed to the employment of immigrant workers (%),
2001, 2007 and 2011



Note: Estimates are based on the assumption that employment of high-skilled workers is linked to capital, while in the case of medium-skilled and unskilled workers only labour is taken into account to calculate the contribution of immigrant workers.

Source: Conningarth Economists (2017).

Modelling the contribution of immigrant workers to economic growth

The results of the production function approach (Figure 5.6) are used to simulate situations with and without foreign-born workers in the South African economy, and to compare these situations including second-order macroeconomic effects based on an econometric model. The South African Inforum Model (SAFRIM) is a macroeconomic, dynamic and multi-sectoral model that has been widely used in South Africa. The model is based on input-output relationships at the sectoral level, and details of the model are provided in Annex 5.A1.⁵ SAFRIM has been updated based on macroeconomic and input-output data up to 2015, but this section focuses on the three years for which data on immigrant workers are available: 2001, 2006 and 2011.

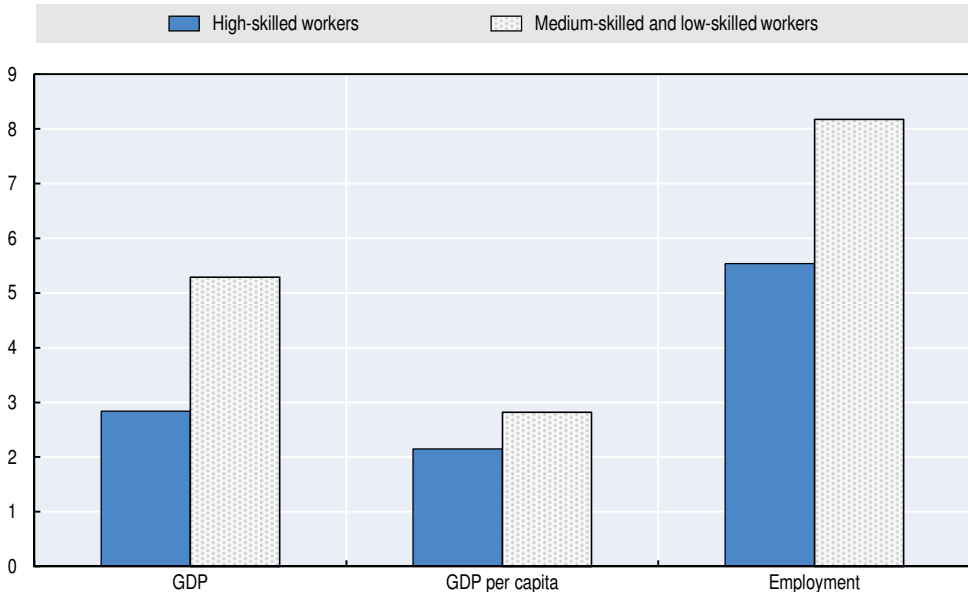
Apart from the numbers of high-skilled and of medium- and low-skilled foreign- and native-born workers, the model also takes into account the earnings of these groups of workers. For most sectors, foreign-born high-skilled workers have higher earnings than native-born workers, while the opposite pattern prevails for medium- and low-skilled workers. Overall, at the national level, foreign-born workers earn on average less than native-born workers, and this contributes to lower unit costs and improves South Africa's competitive position. In turn, this improvement helps explain the relatively favourable impact of immigrant workers in South Africa.

On average, high-skilled foreign-born workers raise GDP by 2.8% (in comparison with a situation without foreign-born workers), and increase GDP per capita by 2.2% (Figure 5.7). In terms of employment, high-skilled foreign-born workers raise the number of employed people by 678 000 (consisting of 462 000 additional native-born workers and 216 000 foreign-born workers). The effects on GDP and employment are greater in the case of medium-skilled and low-skilled workers, which is due to the greater number of workers in these categories. For example, in 2011 high-skilled foreign-born workers numbered 285 000, compared to 895 000 medium- and low-skilled workers. The effect of medium-skilled and low-skilled immigrant workers on income per capita amounts to 2.8%.

The positive impact of immigrant workers on employment is consistent with the findings reported in Chapter 4. Even though there is no measurable impact of the presence of foreign-born workers on native-born employment at the national level, the estimates in that chapter confirmed that new immigrants may have a positive effect on native-born employment levels.

Figure 5.7. Both high- and low-skilled foreign-born workers tend to raise native-born income per capita

Model-based macroeconomic impact of foreign-born workers on GDP, GDP per capita and employment (percentage of production or employment without foreign-born workers)



Note: The table shows the average impact based on three years: 2001, 2006 and 2011.

Source: Conningarth Economists (2017).

Conclusions

The analysis in this chapter highlighted the significant contribution made by immigrants to economic growth in South Africa. Given the sectoral distribution, and taking differences in productivity into account, the current contribution of immigrant workers is estimated to range between 8.9% and 9.1% of GDP. Yet, this is lower than their respective share in employment of 9.2% in 2011, and demonstrates that foreign-born workers are more likely to be employed in relatively low-productivity sectors.

An empirical assessment of the impact of immigrant workers on income per capita cannot be undertaken with certainty. Nevertheless, certain labour market characteristics of the immigrant population, such as the high share of the population that is employed, suggest that the impact of immigrants on the South African economy is likely to be positive. An analysis based on the production function approach confirms the positive effect that an increasing immigrant labour force has on the economy. Based on this approach, the contribution of immigrant workers is estimated at 10.2%, while the SAFRIM model demonstrates that immigrant workers raise income per capita. These results are due to several factors and assumptions, including the higher share

of the employed in the foreign-born population, the lower average remuneration of foreign-born workers, differences in the sectoral distribution and differences in levels of education and skills of foreign-born workers in comparison with native-born workers.

Notes

1. GDP per capita can be decomposed as follows:

$$\frac{GDP}{POP} = \frac{GDP}{EMP} * \frac{EMP}{POP} = \frac{GDP}{EMP} * \frac{EMP}{WAPOP} * \frac{WAPOP}{POP}$$

where POP is the population, WAPOP is the population of working age and EMP is employment.

2. On the basis of a standard Cobb-Douglas production function, labour productivity can be decomposed as follows (Aleksynska and Tritah, 2015; Jaumotte, Koloskova and Saxena, 2016):

$$\frac{GDP_t}{EMP_t} = \alpha \ln HC_t + (1-\alpha) \ln \frac{K_t}{EMP_t} + \ln A_t$$

where HC_t is human capital per worker, $\frac{K_t}{EMP_t}$ is the capital-to-labour ratio, A_t is total factor productivity and α is the labour share in a period t .

3. In order to arrive at reasonable estimates of the Cobb-Douglas production function, broad sectoral functions had to be estimated for the primary, secondary and tertiary sectors, respectively (sectoral estimates were not feasible). Even then, some estimates were not fully satisfactory, but nevertheless appeared sufficiently reliable in the context of the current study (Conningarth Economists, 2017).
4. Levels of skills are defined in accordance to major occupational groups (see Chapter 3).
5. SAFRIM is based on the so-called Inforum model developed by the Inforum group of the University of Maryland; this group is a satellite of the international input-output association. Countries involved in this group include China, France, Germany, Japan, Russia, South Africa, the United States and others.

References

- Aleksynska, M. and A. Tritah (2015), "The heterogeneity of immigrants, host countries' income and productivity: A channel accounting approach", *Economic Inquiry*, Vol. 53/1, pp. 150-172.
- Bodvarsson, Ö. B. and H. van den Berg, (2013), *The Economics of Immigration: Theory and Policy*, 2nd ed., Springer-Verlag New York, New York.
- Borjas, G. J. (1999), "Chapter 28 – The economic analysis of immigration", in O. C. Ashenfelter and D. Card (eds.), *Handbook of Labour Economics*, Vol. 3, Part A, Elsevier Science BV, Amsterdam, pp. 1697-1760.
- Conningarth Economists (2017), *Assessing the Economic Contribution of Labour Migration in South Africa by a Dynamic Multisectoral Macroeconomic Model*, Pretoria.
- Department of Labour (2007), "Labour migration and South Africa: Towards a fairer deal for migrants in the South African economy", *Labour Market Review* (ed.), Government of South Africa, Pretoria.

- Hanson, G. H. (2012), "Immigration and economic growth", *Cato Journal*, Vol. 32/1, Cato Institute, pp. 25-34.
- Hough, M. et al. (1997), "Draft green paper on international migration", *Government Gazette*, No. 18033, Task Team on International Migration, Pretoria.
- Jaumotte, F., K. Koloskova and S.C. Saxena (2016), "Impact of migration on income levels in advanced economies", *IMF Spillover Notes*, No. 8. Washington, DC.
- Jinnah, Z. and M. Kiwanuka (2015), "Doing the dirty work?", *MiWORC Research Report*, No. 10, African Centre for Migration & Society/University of the Witwatersrand, Johannesburg.
- Pholphirul, P., J. Kamlai and P. Rukumnuaykit (2010), *Do Immigrants Improve Thailand's Competitiveness?*, World Bank, Washington, DC.
- Statistics South Africa (2015), P0441 – Gross Domestic Product (GDP), Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=1866&PPN=P0441&SCH=6123.
- Statistics South Africa (2012), "Census 2011", Statistical Release P0301/4 and Census 2011 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3839.
- Statistics South Africa (2002), "Key Results" and Census 2001 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3908.

ANNEX 5.A1

Methodological information

The South African Inforum Model (SAFRIM), which has been used in this chapter to assess the macroeconomic contribution of labour immigration, is multi-sectoral. It is based on the Inforum model developed by the University of Maryland (see www.inforum.umd.edu/) and has been adapted for South Africa by Conningarth Economists. This annex summarises the main relationships in the model, based on Conningarth Economists (2017).

SAFRIM depicts the behaviour of the economy in a dynamic sense, capturing the workings of major markets and their interrelations. An important feature of this model is its bottom-up approach in that macroeconomic aggregates are built up from detailed activities at an industry or product level rather than first being estimated at the macroeconomic level, and then simply “distributed” across economic sectors. It differs from many applied general equilibrium models in that it simulates the growth trajectory of an economy over time.

Figure 5.A1.1 graphically depicts the model, which consists of the production block, the price-income block and monetary variables, and the accountant. In the production block, final demand and intermediate demand add up to total demand, which forms the basis for production on a sectoral basis. The components of final demand are private consumption, government consumption, fixed investment, inventory change and foreign trade. Intermediate demand is calculated for each sector by making use of an input-output coefficient matrix.

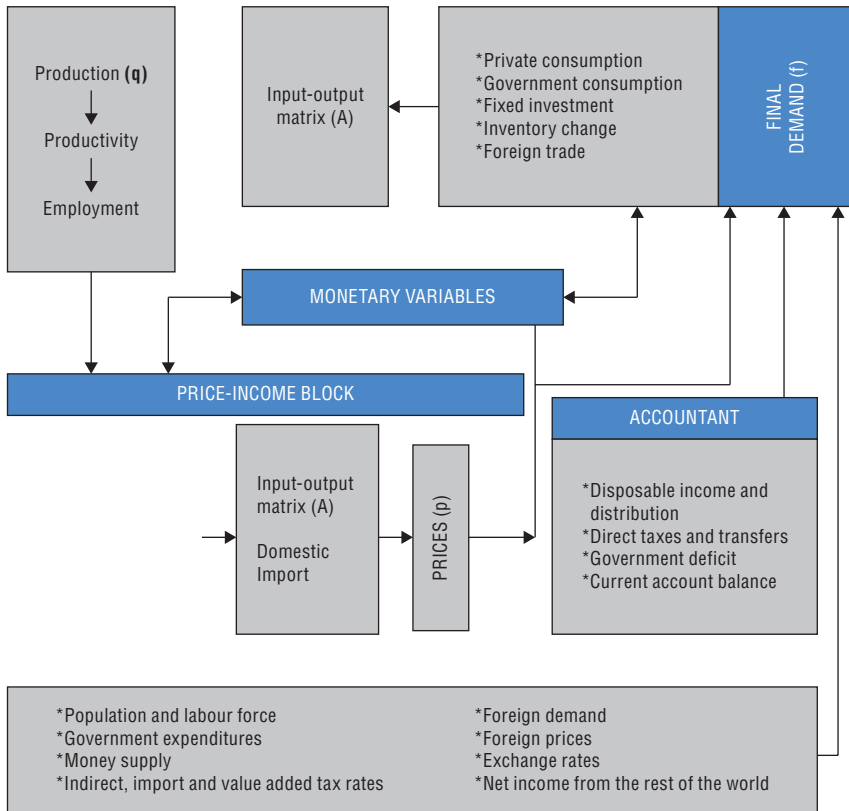
Productivity and employment are endogenously determined in the production block. The number of workers is determined as the sectoral output divided by the labour productivity coefficient. The latter is a function of the capital stock, the business cycle and technology.

Private consumption expenditure is the largest single expenditure component of GDP, which depends on personal disposable income, interest rates, the business cycle and preferences. Personal disposable income is calculated by subtracting taxes on income and wealth from gross disposable income.

Consumption expenditure by general government includes the current expenditure on salaries and wages and on goods and other services of general government. General government includes central government, provincial governments, and local governments and is exogenous.

Gross fixed capital formation (i.e. gross domestic fixed investment) adds additional assets to the capital stock in the economy. This additional capital stock (after allowing for depreciation), plus increases in labour, serve as the main production factors that facilitate increased output. Gross fixed capital formation occurs when sectors make investment decisions regarding the acquisition of certain types of assets, e.g. residential buildings, non-residential buildings, civil structures, transport equipment, machinery and other equipment. It depends on interest rates, output per sector, the business cycle and depreciation. Gross fixed capital formation and the change in inventories add up to gross capital formation.

Figure 5.A1.1. Structure of the South African Inforum Model (SAFRIM)



Source: Conningarth Economists (2017).

Exports are a function of world demand and international relative prices, while imports depend on international relative prices, intermediate output and final domestic demand.

Activity in each sector is linked to primary cost elements, namely remuneration of labour, gross operating surplus and net indirect taxes paid by the sector. These costs add up to gross value added at factor cost at the national level. Adding production taxes and subtracting production subsidies from the aggregate results in gross value added at basic prices.

Price levels and inflation are determined in the price-income block. The cost-price relationship within each industry is based on the technical structure (i.e. input-output relationships), together with the cost elements listed in Figure 5.A1.1 (i.e. remuneration of labour and capital, and taxes). Finally, the accountant of the model compiles the national accounts based on sectoral data, and conversely connects macroeconomic variables with sectoral outputs.

Chapter 6

Immigrants' contribution to public finance in South Africa

This chapter analyses the impacts of immigration on public finances in South Africa for the years 2001 and 2011. The chapter first presents the structure of the government budget, followed by the estimation of the share of taxes and revenues attributable to foreign- and native-born individuals. To conclude, it presents estimates of the net fiscal impact of immigration of the average immigrant and native-born person.

Fiscal impact is often discussed in the context of assessments of the costs and benefits of migration. For example, immigration may be thought to generate high costs for the public sector without creating similar tax revenues. In OECD countries, it has been found that the direct fiscal impact of immigration is often limited (OECD, 2013), but such research is not available in developing countries. This chapter seeks to provide evidence on this question by comparing the net fiscal contribution of the average foreign-born and native-born individual in South Africa. The methodology used here follows the one developed by Dustmann and Frattini (2014) in their analysis of the direct fiscal impact of immigration in the United Kingdom. In particular, the contributions of immigrant and native-born populations to the different expenditure and revenue elements are estimated, as described in the individual sections, and then added up.

The chapter starts with a brief overview of fiscal revenues and expenditures in South Africa. Then, the share of taxes paid and benefits received by immigrants are estimated. Based on these estimates, the final section presents the estimated net fiscal contributions of foreign- and native-born individuals. It is found that in both 2001 and 2011, the impact of immigrants on public finance is positive. The net contribution of immigrants also exceeds that of native-born individuals in both years, although the difference was much smaller in 2011 than in 2001.

The estimates presented in this chapter are based on a number of assumptions. Therefore, results should be interpreted with care. Attention should focus on the direction of the estimates, rather than on specific numbers.

Fiscal revenues and expenditures in South Africa

Tax revenue in South Africa consists of taxes on income and profits; payroll and workforce taxes; taxes on property; domestic taxes on goods and services; and taxes on international trade and transactions. Budget reviews prepared by the South African National Treasury show that in both 2001 and 2011, total tax revenue amounted to close to 25% of gross domestic product (GDP) (Republic of South Africa, 2004 and 2013). This is considerably below the average for OECD countries of around 34%, but above the ratio of tax to GDP in most countries for which comparable data are available in Africa (OECD/ATAF/AUC, 2016). Personal income tax, corporate income tax and value added tax accounted for around three-quarters of total tax revenue in 2001 and almost 79% in 2011 (Table 6.1A).

The main elements of government expenditure include education, general public service, social protection, health, economic affairs, local government and public order (Table 6.1B). As expenditure exceeds revenue in 2011, it is likely that the net per capita fiscal contribution is negative in this year for native-born people. The same need not be true for immigrants, given the relatively small size of this group.

Table 6.1. Over a ten year period, total government expenditures increased more than total tax revenue

Tax revenue and expenditures, 2001 and 2011

A. Revenue		
	2001	2011
Total tax revenue (million ZAR)	260 070	754 598
Personal income tax (%)	34.8	33.2
Corporate income tax (%)	16.3	20.1
Value added tax (%)	23.5	25.3
Other taxes (%)	22.5	19.8
Social security (%)	3.0	1.6
All (%)	100.0	100.0
B. Expenditure		
	2001	2011
Total government expenditure (million ZAR)	224 849	954 191
Economic affairs and agriculture (%)	13.5	12.3
General public service (%)	7.9	15.2
Defence (%)	7.8	3.6
Public order (%)	13.2	9.4
Economic services and environmental protection (%)		0.6
Local government, housing and community amenities (%)	4.5	10.7
Health (%)	13.9	12.3
Recreation and culture (%)		0.8
Education (%)	24.7	20.2
Social security (%)	14.5	14.8
All (%)	100.0	100.0

Source: Calculations based on Republic of South Africa (2004 and 2013).

Revenue estimates of native-born individuals and immigrants

Tax payments of foreign- and native-born individuals are estimated based on the 2001 and 2011 population censuses (Statistics South Africa, 2002 and 2012). Accordingly, South Africa had 44.8 million inhabitants in 2001, and just above 1 million individuals were born outside the country (2.3%). By 2011, the population had increased to 51.7 million,¹ and the number of foreign-born people had risen to 2.2 million (4.3%). Based on their reported income information in the population censuses, individuals' income tax payments were estimated taking into consideration the basic tax rules on income tax thresholds and rates (see Annex 6.A1, Tables 6.A1.1 and 6.A1.2), as well as social

security contributions. Subsequently, the estimated total income tax revenue for 2001 was 101 billion South African rand (ZAR), which is considerably higher than the National Treasury outcome of ZAR 90 billion. This may well be partly explained by the fact that census data do not include individual incomes, but rather show in which bracket each individual's income lies.

Immigrants appear to pay relatively more income tax

Table 6.2 shows the results on the relative contribution of groups of people classified by country or region of birth in 2001, as well as their relative contributions based on the total as reported by the National Treasury. Native-born South Africans constitute 93% of the taxable population, but contribute less than 87% of total income tax. All groups of foreign-born people pay relatively more, and the per capita estimates demonstrate that immigrants born in South Africa and in the Southern African Development Community (SADC) have the lowest individual contributions, followed by the Asian-born, non-SADC African-born, European-born and others, respectively.

Table 6.2. The income tax payment share of foreign-born individuals exceed their population share

Estimates of income tax for the native-born and immigrants, 2001

Region of birth	Amount (million ZAR)	Amount (%)	Share of reported Treasury outcome (million ZAR)	Population size (%)
South Africa	87 900	86.7	78 347	93.0
SADC	4 160	4.1	3 708	3.3
Rest of Africa	651	0.6	580	0.3
Europe	7 060	7.0	6 293	2.8
Asia	621	0.6	554	0.4
Other	1 020	1.0	909	0.3
Total estimates	101 412	100.0	90 390	100.0

Source: Calculations based on Statistics South Africa (2002 and 2012), and Republic of South Africa (2004).

Using a similar estimation procedure for 2011, Table 6.3 shows that the estimate for 2001, ZAR 200 billion, is considerably lower than the National Treasury outcome of ZAR 250 billion. This underestimate may again be explained at least in part by the margin of error in the census data. Results in Table 6.3 demonstrate that, in comparison with 2001, the contributions of most groups have converged with their shares in the population. In particular, the contribution of the South African-born population has become closer to its population share, although the contributions of the other groups have remained relatively high. In absolute terms, the contribution of SADC-born people overtook the contribution of the European-born, but the latter group's per capita contribution was larger. It is noteworthy that the relatively low contribution of the native-born to income tax is also evident from other datasets

such as the 2010/11 National Income Dynamics Study. This study was not used in the analysis of income tax in this chapter because of the low proportion of respondents who reported their countries of birth.

Table 6.3. All foreign-born contributions to income tax rose, except those of European origin

Estimates of income tax for the native-born and immigrants, 2011

Region of birth	Amount (million SAR)	Percent	Share of reported Treasury Outcome (million SAR)	Population size (%)
South Africa	179 000	89.5	224 074	92.6
SADC	8 410	4.2	10 528	3.4
Rest of Africa	1 600	0.8	2 003	0.7
Europe	7 250	3.6	9 076	2.1
Asia	1 650	0.8	2 065	0.6
Other	2 120	1.1	2 654	0.6
Total estimates	200 030	100.0	250 400	100.0

Source: Calculations based on Statistics South Africa (2002 and 2012), and Republic of South Africa (2013).

Although the population census contains information on incomes, there is no detail on social security contributions. Workers and employers in South Africa contribute to various forms of social protection such as pension, health insurance and unemployment insurance, but the information needed to allocate contributions to the native-born or foreign-born is not available. The social security revenues reported for 2001 (ZAR 7.8 billion) and 2011 (ZAR 11.9 billion) are therefore allocated to the two groups on the basis of their shares in the population. However, this method of estimation has its limitations as it assumes that native- and foreign-born individuals have equal access to these programmes, which in reality may not be the case.

Information is also lacking on several other taxes on income, profits and property that would allow for a meaningful division of contributions between native- and foreign-born individuals, so contributions have again been calculated on the basis of population shares. Both income tax and other contributions to government revenue are summarised on a per capita basis in Table 6.8 in the last section of this chapter.

The pattern of value added payments is similar to income tax payments

A three-step procedure was implemented to estimate immigrant and native-born individuals' contributions to value added tax (VAT) receipts. This procedure is prompted by the fact that population census data do not contain information on household expenditure which can be utilised to estimate VAT payments. Therefore, census data are combined with Income and Expenditure Survey (IES) data for a given year, and consumption expenditure is imputed

following Elbers, Lanjouw and Lanjouw (2003) and Alderman et al. (2003). In the first step, the procedure estimates a household consumption function based on IES data for each province but only using variables that are available in both IES and population census data. Remittances are crudely taken into account by dividing the value of total remittances in 2001 and 2011 proportionately across immigrants. In the second step, the procedure predicts total household consumption using the estimated coefficients from the first step and household characteristics from the population census data. In the third step, the procedure computes household VAT payments as 14% of household consumption expenditure.

The estimates shown in Table 6.4 suggest that in 2001 native-born individuals contributed 89.1% of VAT receipts in South Africa. For immigrants we distinguish between pure and mixed households, where the former are defined as households in which both spouses are born outside South Africa while mixed households are defined as those in which one spouse is born abroad and one in South Africa. The results indicate that European-born immigrants contributed 5.5% of VAT in 2001 and SADC-born immigrants contributed 4.0%, while other groups had lower contributions. Similar to the pattern with regard to personal income tax, the contribution of European-born immigrants declined over time, while the native-born contribution increased by 2.7 percentage points in 2011, with smaller increases for most other groups. At least part of these shifts is due to the composition of immigration flows, which witnessed a slight increase in immigration from SADC and a corresponding decrease from Europe.

Table 6.4. Contribution to value added tax rose for all foreign-born individuals with the exception of European-born individuals

Estimates of value added tax for the native-born and immigrants, 2001 and 2011

Total VAT	Native-born households (million ZAR)	Immigrant households (million ZAR)	Mixed households (million ZAR)	All households (million ZAR)	Contribution (%)
2001					
All	41 548	2 424	2 676	46 648	
South Africa	41 548			41 548	89.07
SADC		652	1 230	1 882	4.04
Rest of Africa		153	32	185	0.40
Europe		1 246	1 302	2 548	5.46
Asia		186	33	219	0.47
Other		187	78	265	0.57
2011					
All	124 160	9 705	1 367	135 232	
South Africa	124 160			124 160	91.81
SADC		4 659	966	5 625	4.16
Rest of Africa		813	64	877	0.65
Europe		3 390	249	3 639	2.69
Asia		688	66	754	0.56
Other		156	22	178	0.13

Source: Calculations based on Statistics South Africa (2002 and 2012), and Republic of South Africa (2004 and 2013).

Other taxes on goods and services, taxes on international trade and miscellaneous taxes

Apart from VAT, there are other taxes on goods and services, international trade and miscellaneous taxes. As there is no information that would allow an allocation of these taxes between native- and foreign-born individuals, these taxes are allocated on the basis of population shares. Results are summarised in Table 6.8.

Expenditure estimates of native-born individuals and immigrants

In assessing the impact of immigration on public finance, it is useful to make a distinction between pure and congestible goods. Pure public goods do not decline in availability or quality no matter how many people benefit from them. In economic terms, they are non-rivalrous, while congestible goods are rivalrous. Therefore, they can be provided in the same amount and at the same cost regardless of the number of immigrants. Identifying such goods is not always straightforward, since certain apparently pure public goods may in fact be extended when the population grows. For example, while the public administration is classified as a pure public good, it may be expanded for a larger population.

Two calculations are applied to pure public goods. According to the first calculation, expenditures on public goods are equally allocated to native- and foreign-born individuals; this is the average cost scenario. The second calculation uses the marginal cost scenario: expenditures are solely allocated to native-born individuals under the assumption that the total expenditures would have been the same if foreign-born individuals had not arrived. The results of these scenarios are shown in Table 6.5 for 2001 and 2011, and broken down into three main categories of expenditure: economic affairs and agriculture, general public services, and defence. These expenditures according to both the average cost and marginal cost scenarios are summarised on a per capita basis in Table 6.9 in the last section of this chapter.

Congestible goods; health expenditure

Given that congestible public goods are rivalrous in consumption, their provision cost increases with the number of immigrants. Hence costs are distributed among all South African inhabitants (native-born plus foreign-born) in line with their shares in the population. Table 6.6 shows the main categories and sub-categories of congestible public goods in South Africa for the years 2001 and 2011, by place of birth. The per capita costs of these goods are summarised in Table 6.9. Similarly, expenditure on health services, which amounted to ZAR 31.3 billion in 2001 and ZAR 117.5 billion in 2011, are apportioned to the foreign-born and the native-born on the basis of their shares in the population, and per capita expenditures are summarised in Table 6.9.

Table 6.5. The expenditure on public goods only marginally changes between the two scenarios

Expenditure on public goods, average and marginal costs, 2001 and 2011

A. Marginal cost scenario (ZAR)				
	2001		2011	
	Cost per native-born	Cost per foreign-born	Cost per native-born	Cost per foreign-born
Economic affairs and agriculture	692	0	2 407	0
General public services	404	0	2 972	0
Defence	400	0	706	0
B. Average cost scenario (ZAR)				
	2001		2011	
	Cost per capita (native- and foreign-born)		Cost per capita (native- and foreign-born)	
Economic affairs and agriculture	678		2 309	
General public services	396		2 851	
Defence	393		677	

Source: Calculations based on Republic of South Africa (2004 and 2013).

Table 6.6. Expenditure on local government, housing and community amenities increased in importance from 2001/02 to 2011/12

Expenditure on congestible public goods (ZAR million), 2001 and 2011

Expenditure category	2001/02	2011/12
<i>Public order:</i>	29 685	89 900
1. Police services	18 526	60 215
2. Law courts	4 270	13 722
3. Prisons	6 888	15 759
4. Other public order not elsewhere classified		204
<i>Economic services and environmental protection</i>		5 996
<i>Local government, housing and community amenities</i>	10 012	102 280
1. Housing development	4 234	24 699
2. Local government and community development	5 778	52 868
3. Water supply		24 364
4. Housing and amenities, not elsewhere classified		346
5. Research and development and housing and community amenities		3
Total	39 697	198 176

Source: Calculations based on Republic of South Africa (2004 and 2013).

Education expenditure

Expenditure on education, which amounted to ZAR 53.5 billion in 2001 and ZAR 192.9 billion in 2011, was distributed between the foreign-born and the native-born on the basis of their shares at each level of education (Table 6.7). Subsequently, expenditure on education was aggregated across levels of education for the native-born and the foreign-born population, respectively, and thereafter calculated on a per capita basis.

Table 6.7. Of tertiary educated individuals in 2011, one in every twelve was born abroad

Shares of the native-born and foreign-born populations by levels of education, 2001 and 2011

	2001			2011		
	Native-born	Foreign-born	Total	Native-born	Foreign-born	Total
Pre-primary	..	..	..	99.37	0.63	100.00
Primary	99.58	0.42	100.00	99.21	0.79	100.00
Secondary	99.15	0.85	100.00	98.74	1.26	100.00
Post-secondary non-tertiary	96.11	3.89	100.00	96.34	3.66	100.00
Tertiary	90.61	9.39	100.00	92.41	7.59	100.00
Total	99.34	0.66	100.00	98.84	1.16	100.00

Source: Calculations based on Statistics South Africa (2002 and 2012).

Despite the fact that the foreign-born are overrepresented at the tertiary level of education, and expenditure at this level is relatively high, per capita expenditure on education of the foreign-born is lower than that of the native-born. This is due to the low shares of the foreign-born in other levels of education. Overall, per capita expenditure on education amounted to ZAR 3 888 for the native-born in 2011, and the per capita amount was ZAR 1 647 for the foreign-born (Table 6.9).

Net fiscal impact of immigrants and native-born individuals

Immigrants pay more in taxes than the native-born, which is due to the higher contributions of the foreign-born to income tax and value added tax (Table 6.8). For example, in 2011, native- and foreign-born people paid ZAR 4 599 and ZAR 12 445 in income tax, respectively, and ZAR 3 560 and ZAR 7 618 in value added tax, respectively.

Table 6.8. While the estimated revenue per-capita increased for both native- and foreign-born individuals, the latter still contribute 83% more to the public coffers

Estimated revenue per capita, 2001 and 2011

	2001		2011	
	Native-born	Foreign-born	Native-born	Foreign-born
Income tax	1 791	11 736	4 599	12 445
Corporate tax	946	946	2 982	2 982
Other taxes on income and profits	325	325	483	483
Skill development levy	61	61	200	200
Tax on property	103	103	154	154
Value added tax	1 226	6 426	3 560	7 618
Other taxes on goods and services	577	577	1 434	1 434
Taxes on international trade	194	194	671	671
Other	46	46	0	0
Social security contributions	174	174	234	234
Total	5 443	20 588	14 317	26 221

Source: Calculations based on Statistics South Africa (2002 and 2012), and Republic of South Africa (2004 and 2013).

Based on the average cost scenario, the per-capita costs generated by the foreign-born are estimated to be just below those of the native-born. The former stood at ZAR 4 785 and ZAR 16 472 in 2001 and 2011, respectively (Table 6.9), compared with ZAR 4 981 and ZAR 18 713 for the native-born. Under the marginal cost scenario, the cost of pure public goods are allocated to the native-born only, and the per capita cost for the native-born are ZAR 5 010 and for immigrants ZAR 3 318 in 2001. Similarly, under the marginal cost scenario per capita costs are considerably lower for the foreign-born in 2011.

Table 6.9. Public expenditure is higher for native-born individuals in both 2001 and 2011, irrespective of the cost scenario used

Estimated public expenditure per capita, 2001 and 2011

	Average cost scenario				Marginal cost scenario			
	2001		2011		2001		2011	
	Native-born	Foreign-born	Native-born	Foreign-born	Native-born	Foreign-born	Native-born	Foreign-born
Pure public goods	1 467	1 467	5 837	5 837	1 496	0	6 085	0
Congestible public goods	887	887	3 898	3 898	887	887	3 898	3 898
Education	1 199	1 003	3 888	1 647	1 199	1 003	3 888	1 647
Health	699	699	2 312	2 312	699	699	2 312	2 312
Social security payments	729	729	2 778	2 778	729	729	2 778	2 778
Total	4 981	4 785	18 713	16 472	5 010	3 318	18 961	10 635

Source: Calculations based on Statistics South Africa (2002 and 2012), and Republic of South Africa (2004 and 2013).

Table 6.10 shows the net fiscal contributions for both foreign-born and native-born individuals in 2001 and 2011. Using the average cost scenario, the net fiscal contribution of native-born individuals in 2001, at ZAR 462, was much lower than that of immigrants, which stood at ZAR 15 803. The positive net fiscal contributions for both native-born individuals and immigrants were in line with the 2001 budget surplus. In 2011 the net fiscal contribution of the native-born was negative while that of immigrants was positive, and similar results were obtained based on the marginal cost scenario. According to both scenarios the fiscal contribution of the foreign-born was much higher than that of the native-born, in both years of analysis, although the positions converged over time.

One likely reason for the large difference in net fiscal contributions is related to the high levels of inequality in South Africa, which result in the concentration of incomes among few individuals. Another reason is that immigrants from Europe seem to be paying a significant amount of revenue compared to native-born individuals and to immigrants from other parts of the world.

Table 6.10. The net fiscal contribution of foreign-born individuals is more positive than that of native-born individuals

Estimated net fiscal contribution of foreign- and native-born individuals, 2001 and 2011

A. Average cost scenario				
	2001		2011	
	Native-born	Foreign-born	Native-born	Foreign-born
Per-capita public expenditures	4 981	4 785	18 713	16 472
Per-capita public revenues	5 443	20 588	14 317	26 221
Per-capita net fiscal contribution	462	15 803	-4 396	9 749
Per-capita net fiscal contribution % per capita GDP	2	68	-8	17
B. Marginal cost scenario				
	2001		2011	
	Native-born	Foreign-born	Native-born	Foreign-born
Per-capita public expenditures	5 010	3 318	18 961	10 635
Per-capita public revenues	5 443	20 588	14 317	26 221
Per-capita net fiscal contribution	433	17 270	-4 644	15 586
Per-capita net fiscal contribution % per capita GDP	2	75	-8	27

Source: Calculations based on Statistics South Africa (2002 and 2012), and Republic of South Africa (2004 and 2013).

Conclusions

This chapter illustrated that foreign-born individuals can positively affect the fiscal balance of a developing economy. For both 2001 and 2011, foreign-born workers contributed more than they received under the two alternative scenarios. Their per-capita net fiscal contribution amounted to 68% in 2001 and 17% in 2011 in the average cost scenario, and 75% and 27% in the marginal cost scenario for the respective years. In comparison, revenue collection from the native-born population covered slightly more than the value of public expenditure in 2001. This drastically changed in 2011 when the per-capita net fiscal contribution as a percentage of GDP amounted to -8% for native-born individuals. This is largely in line with the overall fiscal balance of South Africa in 2011, which was estimated to be -5.3% (Republic of South Africa, 2011).

To cover core expenditures and reduce the overall fiscal deficit, South Africa is currently borrowing money, reallocating expenditures, improving the efficiency of expenditures, as well as introducing tax policy measures with the aim of increasing revenue (Republic of South Africa, 2017). In addition, the policy recommendations outlined by the new White Paper on International Migration (DHA, 2017), which include the provision of legal migration pathways, better integration as well as the retention of highly-skilled migrant workers (see Chapter 2), will most likely positively affect the contributions made by both the native- and foreign-born populations.

South Africa could maximise the fiscal contribution of foreign-born individuals by creating more opportunities in formal employment and by strengthening tax and contribution payments received from the informal sector (OECD, 2016). A possible increase in income or value added taxation could affect the contribution of immigrants to public finance as these are the two largest revenue components when considering immigrants' total per-capita revenue contribution.

Notes

1. Calculations throughout the chapter are based on a total population of 50.8 million as roughly 900 000 individuals did not state their nativity status in the 2011 Population and Housing Census.

References

- Alderman, H.B., M. Demombynes, G. Makhatha, and N. Özler, B. (2003), "How low can you go? Combining census and survey data for mapping poverty in South Africa", *Journal of African Economies*, Vol.11/2, pp. 169-200.
- DHA (2017), "White Paper on International Migration for South Africa", *Government Gazette*, Department of Home Affairs, Government of South Africa, Pretoria, https://www.gov.za/sites/default/files/41009_gon750.pdf.
- Dustmann, C. and T. Frattini (2014), "The fiscal effects of immigration to the UK", *The Economic Journal*, Vol. 124/580, pp. 593-643, <http://dx.doi.org/10.1111/eoj.12181>.
- Elbers, C., J. O. Lanjouw and P. Lanjouw (2003), "Micro-level estimation of poverty and inequality". *Econometrica*, Vol. 71, pp. 355-364.
- OECD (2016), *Perspectives on Global Development 2017: International Migration in a Shifting World*, OECD Publishing, Paris, http://dx.doi.org/10.1787/persp_glob_dev-2017-en.
- OECD (2013), "The fiscal impact of immigration in OECD countries", in *International Migration Outlook 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/migr_outlook-2013-6-en.
- OECD/ATAF/AUC (2016), *Revenue Statistics in Africa*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264253308-en-fr>.
- OECD/ILO (2018), *How Immigrants Contribute to Developing Countries' Economies*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264288737-en>.
- Republic of South Africa (2017), *Budget Review 2017*, National Treasury, Pretoria.
- Republic of South Africa (2013), *Budget Review 2013*, National Treasury, Pretoria.
- Republic of South Africa (2012), *Budget Review 2012*, National Treasury, Pretoria.
- Republic of South Africa (2011), *Budget Review 2011*, National Treasury, Pretoria.
- Republic of South Africa (2004), *Budget Review 2004*, National Treasury, Pretoria.
- Republic of South Africa (2000), *Budget Review 2000*, National Treasury, Pretoria.
- Statistics South Africa (2012), "Census 2011", Statistical Release P0301/4 and Census 2011 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3839.
- Statistics South Africa (2002), "Key Results" and Census 2001 microdata, Statistics South Africa, Pretoria, http://www.statssa.gov.za/?page_id=3908.

ANNEX 6.A1

*Additional tables*Table 6.A1.1. **Personal income tax rate and brackets, 2001/12**

Taxable income (ZAR)	Tax rate (ZAR)
0-38 000	18% of each 1.0
38 001-55 000	6 480 + 26% of the amount above 38 000
55 001-80 000	11 260 + 32% of the amount above 55 000
80 001-100 000	19 260 + 37% of the amount above 80 000
100 001-215 000	26 660 + 40% of the amount above 100 000
215 001 and above	72 660 + 42% of the amount above 215 000
Rebates (ZAR)	
Primary	4 140
Secondary	3 000
Tax threshold (ZAR)	
Below age 65	23 000
Age 65 and older	39 154

Source: Republic of South Africa (2000).

Table 6.A1.2. **Personal income tax rate and brackets, 2011/12**

Taxable income (ZAR)	Tax rate (ZAR)
0-150 000	18% of each 1.0
150 001-235 000	27 000 + 25% of the amount above 150 000
235 001-325 000	48 250 + 30% of the amount above 235 000
325 001-445 000	75 250 + 35% of the amount above 325 000
445 001-580 000	120 750 + 38% of the amount above 445 000
580 001 and above	168 250 + 40% of the amount above 580 000
Rebates (ZAR)	
Primary	10 755
Secondary	6 012
Tertiary	2 000
Tax threshold (ZAR)	
Below age 65	59 750
Age 65 - 74	93 150
Ages 75 and over	104 261

Source: Republic of South Africa (2012).

How Immigrants Contribute to South Africa's Economy

Immigrants contribute considerably to South Africa's economy. In contrast to popular perception, immigration is not associated with a reduction of the employment rate of the native-born population in South Africa, and some groups of immigrants are likely to increase employment opportunities for the native-born. In part due to the high employment rate of the immigrant population itself, immigrants also raise the income per capita in South Africa. In addition, immigrants have a positive impact on the government's fiscal balance, mostly because they tend to pay more in taxes. Policies focused on immigrant integration and fighting discrimination would further enhance the economic contribution of immigrants in South Africa.

How Immigrants Contribute to South Africa's Economy is the result of a project carried out by the OECD Development Centre and the International Labour Organization, with support from the European Union. The project aimed to analyse several economic impacts – on the labour market, economic growth, and public finance – of immigration in ten partner countries: Argentina, Costa Rica, Côte d'Ivoire, the Dominican Republic, Ghana, Kyrgyzstan, Nepal, Rwanda, South Africa and Thailand. The empirical evidence stems from a combination of quantitative and qualitative analyses of secondary, and in some cases primary, data sources.

Consult this publication on line at <http://dx.doi.org/10.1787/9789264085398-en>

This work is published on the OECD iLibrary, which gathers all OECD books, periodicals and statistical databases. Visit www.oecd-ilibrary.org for more information.



This project is co-funded by
the European Union

OECD publishing
www.oecd.org/publishing



ISBN 978-92-64-08539-8
41 2018 15 1 E 1



9 789264 085398