Challenges and Complexities of the South African Economy

Fiona Tregenna, Arabo Ewinyu, Arkebe Oqubay and Imraan Valodia

SARChI Industrial Development Working Paper Series
WP 2021-02

May 2021

science & innovation
Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

National Research Foundation

SARChI
SARChI Chair:
Industrial Development

UNIVERSITY OF JOHANNESBURG

Challenges and Complexities of the South African Economy

DSI/NRF SOUTH AFRICAN RESEARCH CHAIR IN INDUSTRIAL DEVELOPMENT

Fiona Tregenna

Arabo Ewinyu

Arkebe Oqubay

Imraan Valodia

SARChI Industrial Development Working Paper Series

WP 2021-02

ISBN 978-1-77630-380-9

May 2021

About the South African Research Chair in Industrial Development (SARChI-ID)

The DSI/NRF South African Research Chair in Industrial Development conducts research, builds capacity and undertakes public and policy engagement in the field of industrial development. Activities focus on research projects; training and supervision of graduate students; hosting postdoctoral fellows and research visitors; and various projects, often in conjunction with partners, such as conferences, workshops, seminars, training courses, and public and policy engagements. SARChI Industrial Development is hosted at the University of Johannesburg, where it operates as a centre located in the College of Business and Economics.

Funding acknowledgement

The South African Research Chairs Initiative (SARChI) was established in 2006 by the then Department of Science and Technology (DST), now known as the Department of Science and Innovation (DSI), and the National Research Foundation (NRF). The Chairs are all designed to attract and retain excellence in research and innovation at South African public universities. The funding support of the DSI and the NRF through Grant Number 98627 and Grant Number 110691 for the South African Research Chair in Industrial Development has made this working paper series possible.

Recommended citation

Tregenna, F., Ewinyu, A., Oqubay, A. and Valodia, I. (2021). Challenges and complexities of the South African economy. SARChI Industrial Development Working Paper Series WP 2021-02. SARChI Industrial Development, University of Johannesburg.

Disclaimer

The Working Paper series is intended to stimulate policy debate. Working papers express the views of their respective authors and not necessarily those of the South African Research Chair in Industrial Development (SARChI ID), the University of Johannesburg (UJ), the Department of Science and Innovation (DSI) or the National Research Foundation (NRF).

Working Papers can be downloaded from https://www.uj.ac.za/faculties/cbe/SARCID in PDF (Adobe Acrobat) format.

Abstract

This paper discusses key characteristics and core challenges of the South African economy in the post-Apartheid era. South Africa shares some commonalities with other African and middle-income economies, yet has a unique history and some distinctive economic features. South Africa's economic complexities and challenges are discussed here with reference to six comparator countries. We examine South Africa's growth path, considering the low rates of economic growth as well as the lack of structural transformation and the unsustainable and non-inclusive nature of this growth. The 'triple challenges' of poverty, inequality and employment are both a manifestation of the nature of this growth path and a constraint on overall growth. This is also briefly evaluated in the context of the political economy and policy context of growth and development in South Africa. The paper reviews South African economic data, with a focus on microeconomic survey data.

Keywords: growth, poverty, inequality, unemployment, inclusive growth, sustainable growth, structural transformation, economic development, South Africa

JEL codes: E24, I30, O11, O14, O40, O55,

About the Authors

Fiona Tregenna, DSI/NRF South African Research Chair in Industrial Development, College of Economics and Business, University of Johannesburg. Email: ftregenna@uj.ac.za.
Arabo Ewinyu, Research Manager: Public Economy, Southern Centre for Inequality Studies, University of the Witwatersrand. Email: arabo.ewinyu@wits.ac.za.
Arkebe Oqubay, Senior Minister and Special Adviser to the Prime Minister of Ethiopia. Email: arkebe@gmail.com.
Imraan Valodia, Dean: Faculty of Commerce, Law and Management, University of the Witwatersrand. Email: imraan.valodia@wits.ac.za.

Acknowledgements

This is a working paper version of a chapter forthcoming (2021) in the *Oxford Handbook of the South African Economy*, edited by Arkebe Oqubay, Fiona Tregenna and Imraan Valodia.

Contents

List of Tables

List of Figures

1. Introduction

Based on this review of country experiences, we argue that apparel exports cannot contribute to industrialisation unless there is a significant amount of localisation: local firms, local supply chains and linkages to other industries in the domestic economy. While the apparel export sector was the first manufacturing industry in most countries, the stronger industrialising potential came from textile production and not apparel assembly. This is because not only is textile production more capital-intensive and requiring higher technical capabilities, but it also has greater potential linkages to other industries and knowledge spillovers. Creating linkages to chemical industries was particularly important in Northeast Asian countries, more important than agricultural linkages to cotton production. A large, diversified textile base was also important for the competitiveness and upgrading of the apparel sector, as it made it possible for local apparel firms to reduce production costs and lead times, to engage in product development with textile mills, and to innovate in terms of fabric production.

The review shows that the emergence of local firms engaged in apparel exports has more to do with building production capabilities through linkages with foreign firms than with domestic market protection under import-substitution industrialisation policies. Thus, late-late industrialising countries can still use participation in apparel GVCs to build basic production capabilities of local firms. However, changes in apparel global value chains have made it more difficult for competitive local firms to emerge without government industrial policies, as global buyers now capture much more of the wealth that local firms gain from increasing returns in apparel production. Furthermore, global buyers and foreign suppliers in the past supported local firms in learning and building capabilities, but now they have less interest and incentives to support local firm learning processes due to the availability of a large pool of already capable supplier firms. Industrial policies were always necessary for the emergence of large, diversified textile sectors and innovation in man-made fibres, and remain so. However, the extent to which developing a textile sector can drive industrialisation is limited due to the narrow linkages to other industries. In general, apparel and textiles have much less potential for linkages than other manufacturing sectors, such as automobiles and electronics, although the linkage potential in these industries has also declined related to developments in these GVCs.

Nevertheless, the apparel and textile sector is still important as a foundational industry for developing local firms with basic technological capabilities and creating a semi-skilled industrial workforce, leading to cumulative capabilities within the private sector and government through learning in industrial policymaking. Without this foundation, countries and their firms will find it difficult to move into industries that require using more complex technologies, more industrial linkages, and a highly skilled industrial labour force.

The South African economy is unique, yet also shares some characteristics, complexities and challenges with other economies on the continent, and with middle-income countries in other regions. The structure of the economy continues to be shaped by the country's colonial and Apartheid legacy, to which its basic structure and ongoing difficulties can be traced in part.

The persistently low rate of economic growth, and in particular the 'triple challenges' of poverty, unemployment and inequality, have their roots in the Apartheid period, when the economy was deliberately structured as non-inclusive. In addition to the central dimensions of race and class, inequality was also manifested along gender, spatial and other dimensions, with patterns of unemployment and poverty also characterised along similar lines. At the time of democratisation, in 1994, South Africa faced colossal challenges of addressing the high rates of poverty, inequality and unemployment, as well as the broader challenges of raising the rate of economic growth and of transforming the economy. Progress has been uneven. It seems indisputable that different policy choices could have yielded better outcomes in raising growth rates and in dealing decisively with the 'triple challenges'.

The level of inequality and the rate of unemployment are among the highest in the world, together probably the highest, and poverty is extremely high for the country's level of income per capita. While these challenges are shared with many other countries on the continent, and with a number of other middle-income countries, the specific configuration of the triple challenges is specific to South Africa.

In other respects, challenges facing the South African economy are common to many middle-income and African countries. The ongoing dependence on natural resources and the ways in which South Africa's historical dependence on mining has shaped the current economic structure, is shared with some other countries on the continent, and to some extent with various other middle-income economies. So, too are the macroeconomic challenges of a balance of payments constraint, and the labour market challenges of generating sufficient levels of employment. More broadly, the low rates of economic growth and the failure to 'catch up' with advanced economies, are characteristic of countries stuck in a 'middle-income trap' (Gill and Kharas, 2015). South Africa has failed to attain the rates of productivity growth, technological progress and, ultimately, of sustained high growth in income per capita that would be necessary to close the gap with advanced economies (Andreoni and Tregenna, 2020, 2021).

In this paper, we frame key economic issues of the South African economy by reflecting on some of its central challenges and complexities. We discuss South Africa with reference to six relevant comparator countries. These include four significant middle-income countries from other regions of the world: Malaysia, Turkey, China and Brazil. The latter two are also included in the Brazil, Russia, India, China and South Africa (BRICS) grouping, with Brazil in particular sharing some pertinent common characteristics with South Africa. We include India, a major low-income developing country that is also a member of BRICS. Our final comparator country is Botswana, a neighbouring country with both commonalities and differences with South Africa. Of course, any selection of comparator countries is necessarily limited, especially when the same set of comparators are used for a range of issues, as here. Each country has its own unique history, political economy, resource endowments, geopolitical position, level of economic development, and so forth; these and many more country-specific factors are essential to understanding its own characteristics and indicators. In this paper, these diverse

countries are utilised as simple comparisons for some of South Africa's economic indicators and trends.

We begin, in section 2, with the key issue of growth. We first discuss the rate of economic growth and then some aspects of the 'nature' of this growth, in terms of investment, the sectoral composition of the economy and structural change, innovation and technology intensity, and environmental sustainability. In section 3, we focus on the inclusivity of growth and the 'triple challenges' of poverty, inequality and unemployment. Next, section 4 briefly reflects on these challenges in the context of South Africa's transition and political economy. Some key sources of economic data in South Africa, in particular microeconomic data, are reviewed in section 5.

2. Economic growth in South Africa

2.1 The rate of economic growth

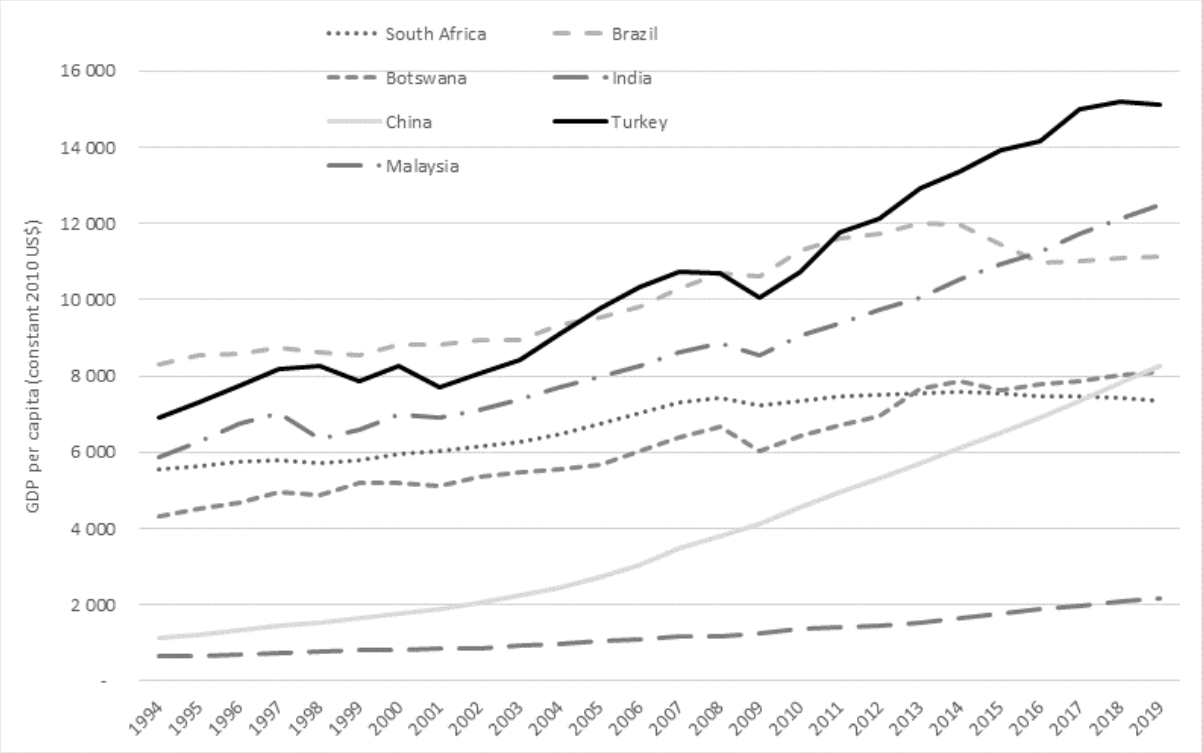
During the post-Apartheid period, the South African economy has grown at low rates. Figure 1 compares gross domestic product (GDP) per capita in South Africa with that in our comparator countries, from the time of democratisation in 1994 until 2019. This shows that South Africa did experience some economic growth between 1994 and 2006, but at a low rate.

The period of (weakly) expansionary growth in the democratic era coincided with growth in sub-Saharan Africa, driven largely by global demand for commodities and fuelled by strong growth in East Asia, primarily China (Fedderke, 2014). Consequently, many African economies experienced positive growth rates over a similar period. Rising global demand for commodities in the 2000s improved South Africa's terms of trade. Hence, it is apparent that growth in the early post-Apartheid years was driven by world demand for commodities rather than by structural shifts in the economy that would result in greater competitiveness and a transformation of productive resources to ensure sustained high growth rates.

The global financial crisis in 2007/2008 marked the beginning of a slowdown in the rate of growth and, thereafter, growth has either plateaued or declined. As shown in Figure 1, most of the comparator countries experienced a decline in their growth coinciding with the global financial crisis, yet recovered better than South Africa did. In contrast, the South African economy never really recovered from this crisis. This can be understood in terms of the underlying structural weaknesses of the economy and the failure to put in place a solid foundation for sustainable growth.

Relating the growth performance of South Africa to the comparator countries over the full post-Apartheid period, Table 1 shows South Africa to have had the lowest growth in income per capita (see the ratio between GDP per capita in 2019 and 1994), followed closely by Brazil. Botswana and China initially had lower income per capita, but overtook South Africa.

Figure 1: GDP per capita in South Africa and comparator economies, 1994–2019



Source: World Bank World Development Indicators (WDI).
Note: GDP per capita data are in constant 2010 US$.

Table 1: GDP per capita in South Africa and comparator economies, 1994–2019

	GDP per capita			Compounded annual growth rate, GDP per capita	
	1994	2019	2019/1994	1994–2006	2007–2019
South Africa	5 563.50	7 345.96	1.32	1.95	0.05
Botswana	4 332.03	8 092.97	1.87	2.81	1.97
Brazil	8 311.56	11 121.74	1.34	1.39	0.65
China	1 116.03	8 254.30	7.40	8.78	7.46
India	639.27	2 151.73	3.37	4.68	5.18
Malaysia	5 861.75	12 486.68	2.13	2.89	3.15
Turkey	6 889.37	15 125.39	2.20	3.44	2.9

Source: World Bank WDI.
Note: GDP per capita data are in constant 2010 US$.

2.2 The nature of economic growth

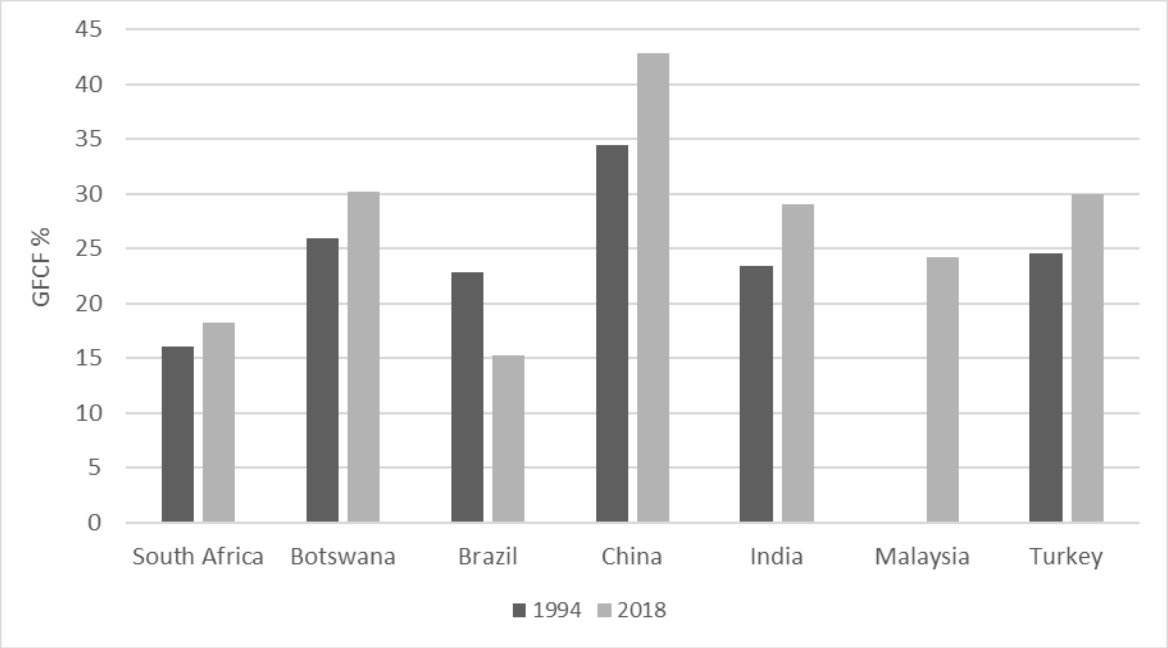
We now review the nature of economic growth in South Africa with a particular focus on the 'quality', composition and characteristics of growth that have fundamental implications for future growth prospects as well as current and future developmental outcomes. Here, we focus on investment; the sectoral composition of the economy and structural change; innovation and technological upgrading; and the environmental sustainability of growth.

2.2.1 Investment

Investment is necessary for economic growth, as it stimulates total demand and catalyses future productive capacity. Broadly, this has strong implications for the sustainability of economic growth and future growth prospects. High rates of productive investment have been one of the hallmarks of growth success stories internationally.

Figure 2 compares gross fixed capital formation (GFCF) as a percentage of GDP in South Africa and the six comparator economies, in 1994 and 2018. At the time of democratisation in 1994, South Africa had the lowest investment rate in this group. At its peak, GFCF surpassed 20 percent between 2007-2009 and again in 2013-2015, before declining. The drop in the investment rate was even more pronounced in Brazil.

Figure 2: Gross fixed capital formation in South Africa and comparator economies, % of GDP, 1994–2018



Source: World Bank WDI.
Note: Data not shown for Malaysia in 1994 due to an apparent break in the series.

2.2.2 Sectoral composition of the economy and structural transformation

The sectoral composition of the economy matters for growth and developmental outcomes. Especially from a structuralist perspective, industrialisation – a shift in composition towards the manufacturing sector – is crucial for growth and for developing countries 'catching up' with the advanced economies of the world (Andreoni et al, 2021; Blankenburg et al, 2008; Oqubay, 2015).

Table 2 shows the sectoral composition of the South African GDP for the key sectors of agriculture, manufacturing and services between 1994 and 2019. Relative to the comparator countries, South Africa in 2019 had the lowest share of agriculture, the median share of

manufacturing, and the second highest share of services. This arises in part from growth in the financial services sector and increased internationalisation of larger South African businesses (Andreoni et al, 2021). Furthermore, the commodity boom of the 2000s attracted short-term capital investors to the Johannesburg Stock Exchange, which accelerated the expansion of the financial services sector. The expansion of the services sector may also be attributed partly to changes in the statistical treatment of workers in the temporary employment services sector, which was classified as belonging to the business services sub-sector (Bhorat et al, 2014; Tregenna, 2010). Over this period, other service sectors such as retail and wholesale, healthcare and telecommunications also witnessed major growth. Between 1994 and 2019, Brazil and South Africa experienced the most deindustrialisation when measured simply in terms of manufacturing share of GDP, as summarised in Table 2 (Andreoni and Tregenna, 2021).

Table 1: Sectoral composition of GDP (%) in South Africa and comparator economies, 1994–2019

	Agriculture (% GDP)		Manufacturing (% GDP)		Services (% GDP)	
	1994	**2019**	**1994**	**2019**	**1994**	**2019**
South Africa	4.2	1.9	19.3	11.8	55.3	61.2
Botswana	3.8	2.0	4.9	5.2	45.4	58.2
Brazil	8.5	4.4	23.2	9.4	43.5	63.3
China	19.5	7.1	N/A	27.2	34.4	53.9
India	26.4	16.0	16.8	13.6	37.5	49.4
Malaysia	13.7	7.3	26.6	21.4	47.9	54.2
Turkey	15.5	6.4	22.1	18.3	48.9	56.5

Source: World Bank WDI.
Notes: N/A means that the data are unavailable for the indicator in the reference year.

2.2.3 Innovation and technological upgrading

Innovation and technological upgrading are crucial for productivity and competitiveness, for avoiding a "middle-income trap", and for long-run economic dynamism and growth (Andreoni and Tregenna, 2020). The increasing uptake of technologies associated with the Fourth Industrial Revolution (4IR) – such as digitalisation and robotisation – present both opportunities and challenges for employment creation and for closing the digital and developmental gaps with advanced economies.

Table 3 presents three indicators – of R&D, innovation and technology intensity, albeit imperfect measures and with incomplete data coverage. Gross domestic expenditure on R&D as a percentage of GDP is indicative of R&D investment and an indicator of intensity; only India ranks lower than South Africa in this. Patent applications are one indicator of innovation. Between 1994 and 2018, the absolute number of patent applications from South Africa declined. While differences in country population size and GDP make comparisons of absolute numbers difficult, we observe that South Africa had the lowest number of patent applications among the comparator countries in 2018, despite having significantly more applications in 1994 than those of Malaysia and Turkey. The third measure shown in Table 3, medium- and high-tech percentage of manufacturing value added, is an indicator of technology intensity in

manufacturing. This reflects the sub-sectoral composition of the manufacturing sector, and is in part an outcome of prior investments in technological upgrading. By this measure, South Africa has the second lowest technology intensity in manufacturing, after Botswana.

These indicators bode poorly for South Africa's future competitiveness, economic dynamism and growth prospects. This points to the need for greater investment in R&D and other forms of innovation, and in technological upgrading.

Table 2: Selected measures of R&D, innovation and technology intensity in South Africa and comparator economies, 1994–2018

	Gross domestic expenditure on R&D % of GDP		Patent applications, residents		Medium- and high-tech % of manufacturing value added	
	1994	**2017**	**1994**	**2018**	**1994**	**2018**
South Africa	N/A	0.83	935	657	30.23	24.43
Botswana	N/A	N/A	N/A	N/A	7.30	7.76
Brazil	N/A	1.26	2 269	4 980	49.79	35.02
China	N/A	2.15	11 191	1 393 815	35.52	41.45
India	N/A	0.67	1 588	16 289	41.80	41.47
Malaysia	N/A	1.44	223	1 116	48.73	44.01
Turkey	N/A	0.96	151	7 156	27.88	32.15

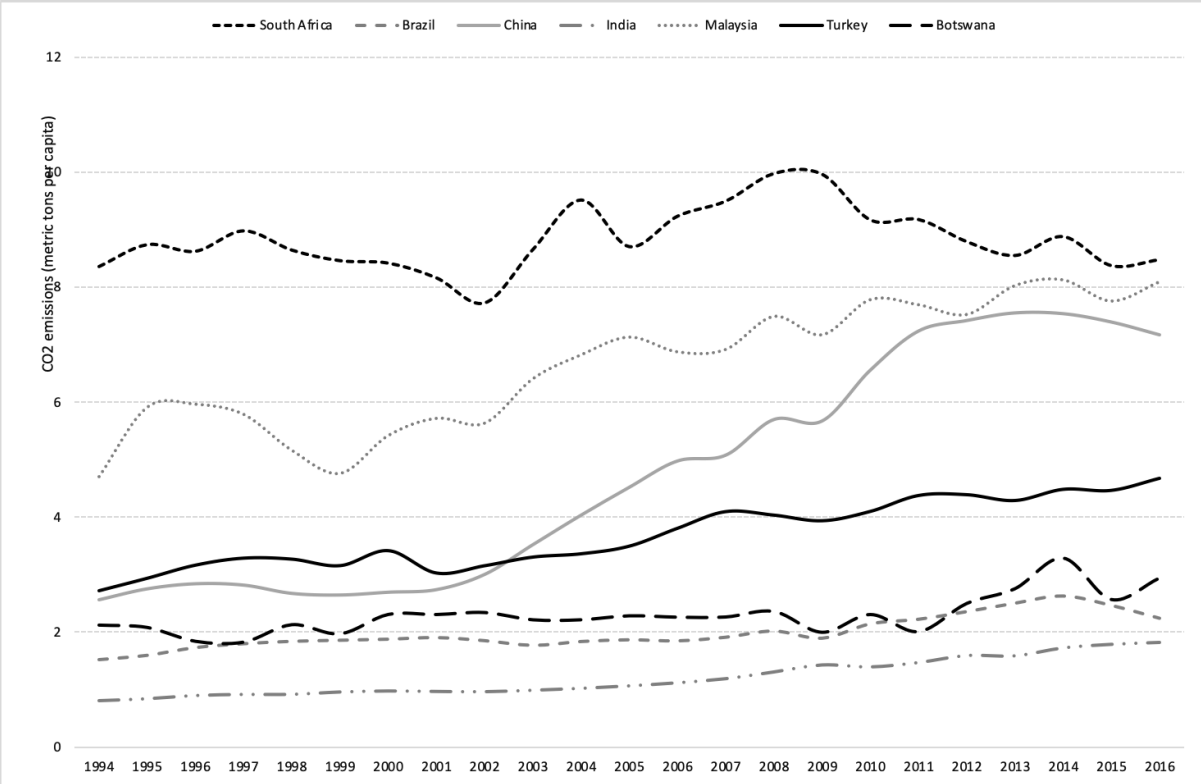
Source: World Bank WDI, UNESCO.

Notes: N/A means that the data are unavailable for the indicator in the reference year. In the case of gross domestic expenditure on R&D as a percentage of GDP, no data is available for these countries for 1994 or a similar period, so countries are compared for 2017.

2.2.4 The environmental sustainability of economic growth

Over the post-1994 period, we observe that not only has growth been low and not inclusive, but it has also been unsustainable. Sustainability could be considered in various dimensions; here we consider environmental sustainability. One key indication of the environmentally unsustainable growth path in South Africa is the economy's heavy dependence on coal as a source of energy. Figure 3 shows that South Africa's CO_2 emissions per capita are the highest among the comparator countries.

Figure 1: Carbon dioxide emissions (metric tons per capita) in South Africa and comparator economies, 1994–2016



Source: World Bank WDI

3. The 'triple challenges' of poverty, inequality and unemployment

3.1 The inclusivity of economic growth

It seems clear that South Arica's growth path has not been inclusive. To begin with, we compare the rates of growth in employment and GDP. In the 2000s, the period coinciding with South Africa's highest rate of economic growth, employment growth lagged GDP growth. This worsened in the 2008/2009 recession following the global financial crisis, as employment contracted more than did GDP.

Over the 2000s, growth in the labour force far exceeded the growth of employment, with an associated significant rise in unemployment. This is the case whether unemployment is defined broadly or narrowly[1], and implies that employment growth was insufficient to absorb the rapidly expanding supply of workers, thereby highlighting the inability of the economy to create jobs at the same pace at which the labour force has been growing (Oosthuizen and Bhorat, 2005).

[1] The narrow definition of unemployment corresponds to the official unemployment rate that is calculated by expressing the share of unemployed individuals as a proportion of the total employed workers. The broad or expanded definition also includes 'discouraged' work seekers.

Employment shifts at the occupational level indicate a bias towards high-skilled workers compared to the demand for unskilled and semi-skilled workers. This is further compounded by the lack of racial and gender transformation in the more skilled and managerial occupations, which remain male and white twenty-five years into democracy. Furthermore, women and African workers in general remain over-represented in the lower-skilled and more precarious types of employment.

The triple challenges are clearly structurally interconnected. For instance, labour market income is by far the largest determinant of income inequality. This arises from the significant proportion of individuals in households that lack access to any labour market income (see also Cramer et al, 2020; Tregenna, 2011 and Tregenna and Tsela, 2012). Tregenna (2012) shows how fundamental distribution is to different poverty outcomes.

Table 4 shows key statistics on unemployment, poverty and inequality, discussed further below. Each of these have very clear racial and gender dimensions. These international comparisons also throw the severity of South Africa's triple challenges into stark relief. South Africa has the highest unemployment and poverty rates in 2018 and is the most unequal of these countries. While comparison of poverty rates across countries is always fraught and should be interpreted with caution (even when using a common poverty line as here), it is striking that South Africa's headcount poverty rate is higher than that of a country such as India with significantly lower income per capita. South Africa has not experienced the improvement in poverty observed in the other countries during this period.

Table 3: Headline measures of unemployment, poverty and inequality in South Africa and comparator economies, 1994–2019

	Labour force participation rate (% of total population)		Unemployment (% of total labour force)		Headcount poverty (% of population)		Gini index (equivalised)	
	1994	2019	1994	2019	1994	2018	1994	2017
South Africa	59.56	60.08	30.14	28.18	33.35	19.28	60.8	62.5
Botswana	61.99	73.32	21.20	18.19	33.48	13.43	57.6	N/A
Brazil	66.96	70.39	6.22	12.08	16.52	4.42	54.1	47.9
China	84.06	75.61	2.90	4.32	52.60	0.27	35.2	41.2
India	60.25	52.15	5.63	5.36	47.36	8.67	41.7	N/A
Malaysia	64.03	67.93	3.62	3.32	1.66	0.01	43.5	N/A
Turkey	56.98	58.08	8.58	13.49	2.95	0.04	43.1	40.2

Source: World Bank WDI; World Bank POVCAL; Standardized World Income Inequality Database (SWIID), Versions 8-9.

Notes:

1. Poverty line of PPPUS$1.9/day.
2. The Gini index is equivalised, using a square root scale, on the household disposable (post-tax, post-transfer) income.
3. N/A means that the data is unavailable for the indicator in the reference year.

3.2 Unemployment

As shown in Table 4, South Africa's labour force participation rate (LFPR) has remained stagnant over an extended period of time. This likely reflects the combination of new entrants into the labour force and the exit of the 'discouraged' unemployed workers.

The female LFPR in South Africa, which increased from approximately 44 percent in 1995 to 49 percent in 2015 (Casale and Posel, 2002; Mosomi, 2019). This increase is attributed to rising education levels (Casale and Posel, 2002), declining marriage rates (Posel and Casale, 2013) and extensive amendments to labour and employment legislation that institutionalised changes that provided women greater access to the labour market (Posel, 2000; Mosomi, 2019). Still, in the fourth quarter of 2019, the participation rate for female workers was 12 percentage points lower than the male participation rate (Statistics South Africa [StatsSA], 2019). Furthermore, at 31.3 percent, female unemployment remains significantly higher than male unemployment (27.2 percent) (final quarter of 2019; StatsSA, 2019).

Younger workers experience higher unemployment rates relative to older workers. Persistently high youth unemployment rates are a feature of the South African economy, and these figures are unmatched amongst similar middle-income countries. For example, in the first quarter of 2020, 53 percent of workers aged between 15 and 34 were unemployed.

Unemployment trends in the post-apartheid era mirror historic discrimination patterns, as black individuals face higher unemployment rates compared to whites. In line with the structural change in the economy, individuals with a post-secondary qualification have lower unemployment rates, as the current growth trajectory of the South African economy appears to favour a minority of high-skilled workers relative to the masses of unskilled or semi-skilled workers.

3.3 Poverty

Initial inequality affects the overall pace of poverty reduction, regardless of the rate of economic growth. Furthermore, countries experiencing average growth rates and rising income inequality will realise a decline in average poverty levels (Ravallion, 2001). However, this decline will be lower than in similar countries than in those countries experiencing inclusive growth. Initially high inequality rates that later remain stagnant will have the effect of stifling pro-poor growth.

In keeping with global trends, the reference countries, including South Africa, all reduced the share of their population classified as poor over the reference period. In 1994, almost half the population in China and India was classified as poor. In 2019, this proportion had reduced to 0.3 and 8.7 percent respectively. While South Africa also reduced its poverty headcount by almost half, we note that, in 2019, it had the highest poverty rate of all the seven countries. High and persistent inequality rates dampen the likelihood of any pro-poor growth.

Poverty trends in post-apartheid South Africa are both racialised and gendered. Racially, we observe that, although the poverty gap between White- and Asian-headed households and

those headed by Africans has declined, the latter population group is still more susceptible to poverty and continues to face high poverty rates (Leibbrandt et al, 2009). By gender, we note equally that, while female-headed households have realised a significant decline in their poverty gap ratio, these households continue to face poverty rates that are almost twice as high as those headed by males (Leibbrandt et al, 2009).

Ravallion (2001) highlights the fact that ensuring pro-poor growth is closely tied to reducing disparities in access to human and physical capital as the asset-endowment structure of an economy. Failure to reduce these access rates and increase the rates of return from the relevant assets will perpetuate unequal growth.

3.4 Inequality

Inequality in the post-apartheid era has remained high and has even increased (Bhorat and van der Westhuizen, 2012; Leibbrandt et al. 2009; Wittenberg, 2017a; Francis et al, 2020). From Table 4, we observe that inequality increased in South Africa between 1994 and 2019. Additionally, South Africa had the highest level of inequality among the sample of countries across both time periods. Furthermore, we observe that growth in China was accompanied by rising inequality. Conversely, the data show that Brazil and Turkey experienced a period of growth that coincided with lowered inequality.

The findings indicate rising income inequality in African and Coloured households, with no significant change in the levels of inequality among white- and Indian/Asian-headed households in the post-apartheid period (Leibbrandt et al. 2009). 'Within race' inequality is increasing in relevance over time, and the Gini coefficient among Africans has increased significantly (Wittenberg 2017b). The importance of inequality among whites is declining, as this racial group constitutes a smaller proportion of the overall workforce (Wittenberg 2017b).

South Africa's spatial segregation also has a bearing on the observed levels of inequality and poverty. The greatest levels of need and deprivation remain concentrated in the former Bantustans and townships.

Structural shifts within the economy and the relationship between the labour market and poverty and inequality necessitate the discussion of whether access to the labour market, and thereafter the distribution of labour income earned, are a source of rising inequality. Research estimates that labour market inequality accounts for approximately 90 percent of total income inequality (Leibbrandt et al. 2009, 2012).

The South African economy is characterised as being heavily biased towards highly skilled individuals. Hence it is important to consider whether growing differentials between individuals with different skills and education levels are a further source of rising inequality. Wittenberg (2017b) estimates that 25 percent of overall inequality can be attributed to inequality in earnings among individuals with a post-secondary school qualification. Differences in returns to skills highlight existing inequalities in the quality of education

received at well-resourced and under-resourced schools. It is also a reflection of poor outcomes relative to the high budgetary allocation.

4. The challenges of economic development in South Africa

In our view, the central challenges discussed above – the low rate of economic growth and its non-inclusive and unsustainable nature, and the triple challenges of poverty, inequality and unemployment – are integrally intertwined. South Africa has continued along a growth path that fails to utilise the capacity and capabilities of a large section of the adult population, and in which the benefits of economic growth, however inadequate, do not reach this section in any meaningful way.

The extreme levels of poverty, inequality and unemployment in South Africa are not just manifestations of a non-inclusive growth path, but are also constraints to growth itself. The triple challenges bring wasted human resources, a lack of social cohesion, social instability, and poor developmental outcomes, all of which constrain South Africa's economic growth. We do not see any viable path to sustained high rates of economic growth that does not include fundamentally addressing the triple challenges. This suggests that, for policy, addressing the triple challenges is important not just in its own right, but as central tenets of any shift towards higher economic growth. This conceptual approach also points to the inadequacy of simplistic binary trade-offs between equity and efficiency or, for instance, between productivity and employment, in the South African context.

South Africa's growth path needs to be located within an understanding of the underlying political economy dynamics. The nature of South Africa's transition to democracy in 1994 was arguably one in which the majority of South Africans were carried along, yet were not at the heart of the transformation project. Certainly, the economic lives of the majority of South Africans have improved, including through the meeting of basic needs via the provision of infrastructure and services such as housing and sanitation, through the opening up of economic opportunities, and for some through the receipt of social grants. To characterise South Africa's transition as purely elitist would be simplistic and inaccurate, yet elites have certainly been most able to protect and advance their interests.

A series of different economic policies have been implemented in the post-Apartheid era to propel growth and other various outcomes. These have had various shortcomings, not least of which are the divergent incentives of key players such as the state and capital. One of the key challenges in the post-apartheid period is the inability of the various interest groups to cohere around a set of policies which address the key trade-offs and consensus that would bring coherence and action on the policy front. Much of the debate about policy choices is re-enacted in various policy documents, such as the National Development Plan, with very little implementation. At least a part of the implementation challenge is due to the lack of consensus and coherence in policy.

As at the time of writing, it is becoming increasingly clear that the COVID-19 crisis has both exposed and deepened the existing fault lines of the South African economy. This poses new

challenges for an economy that has been characterised as being stuck in a middle income trap and that has failed to catch up to advanced economies, instead falling further behind. As already discussed, the fallout from the 2007/2008 global financial crisis were far reaching and longer lasting in South Africa than was typically internationally. Similarly, the effects of this health and economic crisis are sure to be long lasting. This, and the likelihood of other crises of various sorts in future, bring to the fore the need for South Africa to move on to a different growth path, in which the economy is structurally transformed and is more inclusive and sustainable.

5. A note on South African economic data

This section reviews some key sources of South African economic data that are commonly used in research. South Africa has several household-level datasets that provide detailed information on household demographics, living conditions and access to services, as well as a selection of labour market outcomes. The first nationally representative household survey, administered in 1993, was the Project for Statistics on Living Standards and Development (PSLSD). This questionnaire was administered to approximately 9 000 households in the nine months leading up to the first democratic election in April 1994 (Project for Statistics on Living Standards, 1994). The key objective of the project was to collect data on the living conditions of South Africans in order to enable policymakers to develop relevant policies and strategies to meet the goals identified in the Reconstruction and Development Programme (RDP). In October 1993, StatsSA conducted the first of a series of annualised nationally representative household surveys known as the October Household Surveys (OHS). The OHS was later replaced partly by the Labour Force Survey (LFS), which was administered from February 2000 to the first quarter of 2008, when it was replaced by the Quarterly Labour Force Survey (QLFS). These three surveys are each discussed in further detail below.

Annual iterations of the initial OHS survey often changed their sampling frame in efforts to improve representativeness. The 1993 OHS excluded the former Bantustans of Transkei, Bophuthatswana, Venda and Ciskei, which resulted in under-sampling the total number of Black South Africans relative to others in that year (Yu, 2007). Households in the former Bantustans were included in the 1994 OHS, but sampling of these households was unreliable, as only approximate estimates of population sizes were used and emerging informal settlements were not included in the sampling frame (Yu et al, 2017). Surveys undertaken before 1995 used sampling frames based on the 1991 census. This changed in the 1996 OHS (Yu et al, 2017). In 1998, the sampling frame was again adjusted to adequately cover individuals residing in mining hostels (Statistics South Africa, 2000).

The 1995 OHS coincided with the first Income and Expenditure Survey. In this, Statistics South Africa (StatsSA) utilised a more representative sample that included more of those households that had been omitted in previous surveys. This improved coverage in 1995 makes direct comparison with the previous two OHS surveys difficult, and researchers typically omit these two surveys and commence analysis from 1995.

The first StatsSA master sample was developed in 1999 from the 1996 census. This master sample was relied upon to draw a sample for the 1999 OHS and the first LFS in 2000, until a new master sample based on the 2001 Census was introduced. Transitioning to the master sample in 1999 was significant, as it meant that enumerators would henceforth interview all households residing at the sampled dwelling unit, unlike the previous sampling procedure that mostly ignored any small households (Kerr and Wittenberg, 2013 as cited in Yu et al, 2017).

The LFS followed the OHS and was designed to capture all forms of work more rigorously than its predecessor. This was undertaken by emphasising that all forms of small-scale activities, such as informal work and subsistence agriculture, could be classified as self-employed work, provided that individuals had participated in the activity for even an hour in the previous week. This category of workers would otherwise have been classified as inactive or unemployed in previous surveys (Casale et al, 2005; Yu, 2007). This shift is significant because, until 1996, the OHS did not provide a prompt for respondents explaining what was viewed as work. The majority of these additionally enumerated workers are characterised as working few hours and earning low wages (Wittenberg 2017b). Unlike the OHS, which had independent cross-sections, the LFS was designed to include a rotating panel. This sampling methodology was maintained at the introduction of the QLFS, where selected dwelling units would remain in the survey for four consecutive periods and exit the survey thereafter.

The QLFS replaced the LFS in 2008, partially in response to various criticisms related to the scope, coverage, timeliness and frequency of the LFS survey. Beginning in 2005, StatsSA undertook significant revisions of the LFS. These resulted in changes to the survey questionnaire, methodology, frequency of data collection and utilising automated data capturing and processing systems. The QLFS is administered at the household level to individuals aged 15 and above to collect detailed data on the individual's labour market status. Earnings data from the QLFS is released once a year in the form of labour market dynamics data (LMD).

Sampling issues, as well as other limitations of the data, make comparability across different time periods and surveys difficult. This led to the creation of the Post-Apartheid Labour Market Series (PALMS). This valuable data compilation allows users to use a version of the data that is easily comparable and wherein definitions have been standardised. PALMS is a stacked cross-sectional dataset consisting of 69 household surveys conducted by Statistics South Africa between 1994 and 2019. It also includes the 1993 PSLSD.

In addition to these household surveys, a growing body of research utilises an administrative tax dataset provided by the South African Revenue Service (SARS), which is the country's statutory tax authority, and the National Treasury (NT) in 2015 (the SARS-NT data). This dataset is available to researchers by application and under restricted conditions, and consolidates four sources of tax data (see Arndt et al, 2018; Pieterse et al, 2018), providing rich information on firms' balance sheet variables in particular.

Such administrative data enables researchers to study the reported mismatch between earnings reported in the QLFS and actual earnings (Wittenberg, 2017b). This will have adverse effects on poverty and inequality estimates. Using administrative tax data also enables researchers to understand income dynamics at the upper end of the earnings distribution, as such individuals are either under-sampled in the survey data or, where included, often refuse to provide their earnings. Non-participation is also highest in the more affluent areas (Wittenberg 2017a).

While South Africa enjoys relatively rich microeconomic data at the household level, this is sparse at the firm level. There are no publicly available, comprehensive and recent national firm-level datasets. StatsSA currently provides such data for selected sectors, for example for the manufacturing sector and for certain sub-sectors, but this is not comprehensive.

The Survey of Employment and Earnings (SEE) was a quarterly survey covering a sample of public and private enterprises. Participating firms were all registered for VAT with a minimum turnover of R300 000, indicating that they were within the formal non-agricultural sector of the economy. Information so received is an input for the gross domestic product. This survey was discontinued and replaced by the Quarterly Employment Statistics (QES) in March 2006. The QES is administered to selected industries and provides information on the number of employees and gross salaries paid. The employment estimates received from this firm-level survey will differ markedly from the QLFS data, as the latter includes employees working in the agricultural sector, the self-employed, unpaid family workers and domestic workers. Unlike the QLFS, which sets a minimum age for inclusion of 15 years, the firm survey does not. Further differences also arise in the definition of the formal sector, where the QES includes only those VAT-registered firms with the stipulated minimum turnover (Statistics South Africa, 2020).

The Survey of Employers and the Self-employed (SESE) is conducted by Statistics South Africa (StatsSA). Thus far, SESE surveys have been undertaken in the following years: 2001, 2005, 2009, 2013 and 2017. The survey is undertaken to provide information on the size of the value add within the informal sector, and the information so received is complementary to the QES. Changes in methodology over the years limit full comparability (Statistics South Africa, 2017).

A non-statutory national firm-level dataset is that of the World Bank Enterprise Survey (WBES). One advantage of this survey is its comparability with other countries; these surveys covered 164 000 firms in 144 countries at the time of writing (see https://www.enterprisesurveys.org/en/enterprisesurveys). However, the last survey for South Africa was undertaken in 2007, further back than for most other countries, limiting its current usefulness. A number of other firm-level surveys have been undertaken by universities, research institutions such as the Human Sciences Research Council (HSRC), and other bodies. These tend to be limited to a specific geographic area or sector, typically focus on a particular theme (e.g. innovation), and are generally not publicly available.

The sparsity of representative, comprehensive and current firm-level data has constrained research in this area, which is an important body of economics research in many other

countries. It has also hampered the inclusion of South Africa in cross-country studies employing firm-level data, such as those using the WBES across countries. This weakness has arguably also affected the development of evidence-based policy on firm behaviour. The growing body of research utilising the SARS-NT data illustrates the rich possibilities of novel, policy-relevant research with firm-level data.

Meso-data at the sectoral and sub-sectoral levels is also weak in South Africa. For instance, sectoral data is also provided through subscription to private data service providers, notably Quantec (see https://www.quantec.co.za). Many researchers find the Quantec data useful, since it is standardised and balanced across industries and over time, and provides a wide range of valuable measures. However, while drawing on official sources, this data is not official and utilises imputable and other methods that are not transparent to users.

Macroeconomic data is relatively straightforward, with reliance on secondary data from official sources and international institutions. The standard national sources of macroeconomic data are the South African Reserve Bank (SARB) and StatsSA. Researchers also utilise data from the World Bank, notably the World Development Indicators (WDI); the International Monetary Fund (IMF); and sources such as Bloomberg.

References

Andreoni, Antonio and Tregenna, Fiona (2020). Escaping the middle-income technology trap: A comparative analysis of industrial policies in China, Brazil and South Africa. *Structural Change and Economic Dynamics*, 54: 324-340.

Andreoni, Antonio and Tregenna, Fiona (2021). 'The middle-income trap and premature deindustrialization in South Africa' in Andreoni, Antonio, Mondliwa, Pamela, Roberts, Simon and Tregenna, Fiona (eds.), *Structural transformation in South Africa: the challenges of inclusive industrial development in a middle-income country*, Oxford: Oxford University Press.

Andreoni, Antonio, Mondliwa, Pamela, Roberts, Simon and Tregenna, Fiona (2021). 'Framing structural transformation in South Africa and beyond' in Andreoni, Antonio, Mondliwa, Pamela, Roberts, Simon and Tregenna, Fiona (eds.), *Structural transformation in South Africa: the challenges of inclusive industrial development in a middle-income country*, Oxford: Oxford University Press.

Arndt, Channing, Davies, Rob, Gavin, Elizabeth and McMillan, Landon (2018). Introduction: Firm level analysis with administrative data, Firm level analysis using administrative record data. *South African Journal of Economics*. 86(S1): p.3-5.

Bhorat, Haroon and van der Westhuizen, Carlene (2012). *Poverty, Inequality and the Nature of Economic Growth in South Africa.* Cape Town: DPRU Working Paper.

Bhorat, Haroon, Cassim, Aalia and Yu, Derek (2014). *Temporary Employment Services in South Africa: Assessing the Industry's Economic Contribution.* http://www.capes.org.za/Research/TES-Economic-Impact-on-SA/

Blankenburg, Stephanie, Palma, Gabriel and Tregenna, Fiona (2008). 'Structuralism' in *The New Palgrave: A Dictionary of Economics*, 2nd ed., Lawrence Blume and Steven Durlauf (eds.), Basingstoke: Palgrave Macmillan.

Casale, Daniela and Posel, Dorrit (2002). The continued feminisation of the labour force in South Africa: An analysis of recent data and trends. *South African Journal of Economics*, 70(1): 156-184.

Casale, Daniela, Muller, Colette and Posel, Dorrit (2005). *'Two million net new jobs': a reconsideration of the rise in employment in South Africa, 1995-2003*. Cape Town, University of Cape Town.

Cramer, Christopher, Sender, John and Oqubay, Arkebe (2020). *African economic development: Evidence, theory, policy*. Oxford: Oxford University Press.

Fedderke, Johannes (2014). South Africa's growth performance. In Bhorat, H., Hirsch, A., Kanbur, R. and Ncube, M. (eds.)., *The oxford companion to the economics of South Africa*. Oxford: Oxford University Press.

Francis, David, Valodia, Imraan and Webster, Edward (2020). Inequality studies in the global South. London: Routledge.

Gill, Indermit S. and Kharas, Homi (2015). *The middle-income trap turns ten*. Washington: The World Bank.

Leibbrandt, Murray, Woolard, Ingrid, Finn, Arden and Argent, Jonathan (2009). *Trends in South African Income Distribution and Poverty since the Fall of Apartheid.* OECD Social, Employment and Migration Working Papers No 101.

Leibbrandt, Murray, Finn, Arden and Woolard, Ingrid (2012). Describing and decomposing post-apartheid income inequality in South Africa. *Development Southern Africa*, 29(1): 19-34.

Mosomi, Jacqueline (2019). 'Distributional Changes in the Gender Wage Gap in the Post-Apartheid South African Labour Market'. WIDER Working Paper 2019/17. Helsinki, UNU-WIDER.

Oqubay, Arkebe (2015). *Made in Africa: Industrial policy in Ethiopia*, Oxford, Oxford University Press.

Oosthuizen, Morné and Bhorat, Haroon. (2005). *The post-apartheid South African labour market*. Cape Town, University of Cape Town.

Pieterse, Duncan, Gavin, Elizabeth and Kreuser, Carl Friedrich. (2018). Introduction to the South African Revenue Service and National Treasury firm-level panel, Firm level analysis using administrative record data, *South African Journal of Economics*. 86(S1): p.6-39.

Posel, Dorrit (2000). Intra-family transfers and the household division of labor: A case study of migration and remittance behavior in South Africa. Unpublished doctoral thesis, UMass Amherst.

Posel, Dorrit and Casale, Daniela (2013). The relationship between sex ratios and marriage rates in South Africa. *Applied Economics*, 45(5): 663-676.

Project for Statistics on Living Standards (1994). *South Africans rich and poor: baseline household statistics*. SALDRU, School of Economics, University of Cape Town.

Ravallion, Martin (2001). Growth, inequality and poverty: looking beyond averages. *World Development*, 29(11): 1803-1815.

Statistics South Africa (2000). Labour Force Survey 2000 September: Metadata. Pretoria: Statistics South Africa.

Statistics South Africa (2017). Survey of Employers and the Self-employed. Pretoria: Statistics South Africa. Stats SA

Statistics South Africa (2019). Guide to the Quarterly Labour Force Survey. Pretoria: Statistics South Africa.

Statistics South Africa (2020). Quarterly employment statistics. Pretoria: Statistics South Africa.

Tregenna, Fiona (2012). 'What are the distributional implications of halving poverty in South Africa when growth alone is not enough?', *Applied Economics*, 44(20): 2577-2596.

Tregenna, Fiona and Tsela, Mfanafuthi (2012). 'Inequality in South Africa: a study of the distribution of income, expenditure, and earnings', *Development Southern Africa*, 29(1): 35-61.

Tregenna, Fiona (2011). 'Earnings inequality and unemployment in South Africa', *International Review of Applied Economics*, 25(5): 585–598.

Tregenna, Fiona (2010). 'How significant is the intersectoral outsourcing of employment in South Africa?', *Industrial and Corporate Change*, 19(5): 1427-1457.

Wittenberg, Martin (2017a). Wages and Wage Inequality in South Africa 1994–2011: Part 1–Wage Measurement and Trends. *South African Journal of Economics*, 85(2), 279-297.

Wittenberg, Martin (2017b). Wages and wage inequality in South Africa 1994–2011: part 2–inequality measurement and trends. *South African Journal of Economics*, 85(2), 298-318.

Yu, Derek (2007). The comparability of the statistics South Africa October household surveys and labour force surveys. *Stellenbosch University Economic Working Paper: 17/2007*.

Yu, Derek and Burger, Rulof and Rankin, Neil (2017). South African employment trends: How reliable are the different data sources? REDI Working Paper 31.

Appendix

Table 4: An overview of micro-datasets in South Africa (household and labour force)

Dataset	Details of the Dataset	Periods available	Producing Agency
Project for Statistics on Living Standards and Development (PSLSD)	The PSLSD was a World Bank-sponsored Living Standards Measurement Survey covering approximately 9 000 households, drawn from a representative sample of South African households. The PSLSD covered demographic, economic, education, and health data of enumerated households.	1993/94	Southern Africa Labour and Development Research Unit (SALDRU) at the University of Cape Town
KwaZulu-Natal Income Dynamics Study (KIDS)	Drawing on the nationally representative 1993 PSLSD, households in Kwazulu-Natal province were re-surveyed from March to June 1998 for the Kwazulu-Natal Income Dynamics Study. Combining these two survey datasets yielded a panel dataset. The dataset continues information on household demographics, household environment, education, income, expenditures and remittances, employment and other labour characteristics, agricultural activities, health, and anthropometry.	1993, 1998, 2004	School of Built Environment and Development Studies - University of KwaZulu-Natal (UKZN)
October Household Survey (OHS)	This was the first annual sample survey that collected household and labour market information at the national level. The scope of the OHS includes: employment, unemployment, informal sector, internal migration, services available by type of dwelling, access to health and social services, safety and well-bring of household, households by average household size and type of dwelling, level of education, quality of life, health statistics, vital statistics.	1994 - 1999	Statistics South Africa
South Africa Population Research Infrastructure Network (SAPRIN)	SAPRIN combines three longitudinal datasets from the following Health and Demographic Surveillance Systems (HDSS): • MRC/Wits University Agincourt HDSS in Bushbuckridge District, Mpumalanga, established in 1993; • the University of Limpopo DIMAMO HDSS in the Capricorn District of Limpopo, established in 1996; • the Africa Health Research Institute HDSS in uMkhanyakude District, KwaZulu-Natal, established in 2000. A significant contribution of these data is to provide regular and updated longitudinal data on the status of South Africa's poorer and rural communities. Individual level data on the following are collected: health care utilisation, marital status, labour market and education status as well as a record of household assets.	various start dates until 2017	Department of Science and Innovation (DSI) & the South African Medical Research Council (SAMRC)

Dataset	Details of the Dataset	Periods available	Producing Agency
Income and Expenditure Survey (IES)	The IES is a survey administered to a nationally representative sample of households in order to update the basket of goods and services required for the compilation of the Consumer Price Index. While the main variable is expenditure, the IES also provides additional insights on household income and other individual and household characteristics.	1995, 2000, 2005/6, 2010/11	Statistics South Africa
National Census	The first census in post-apartheid South Africa was held in 1996. The data that existed prior to this were not nationally representative. The main objective of the census is to collect sufficient information on living conditions and access to basic services which then helps government and other departments to allocate resources.	1996, 2001, 2011	Statistics South Africa
Time Use Data	Time Use surveys seek to provide information on how different South Africans spend their time to provide nuanced information on paid and unpaid labour, a gendered breakdown of work, subsistence work, casual work and work in the informal sector. The Survey collects household and demographic data on two people, ten years and older, selected as respondents within each household. The questionnaire also include a diary in which respondents record the different activities they perform in the day.	2000, 2010	Statistics South Africa
Labour Force Survey (LFS)	The LFS was a biannual rotating panel household survey designed to measure the dynamics of employment and unemployment in South Africa. It measures a variety of issues related to the labour market, including unemployment rates (official and expanded),	2000-2007	Statistics South Africa
General Household Survey	This survey replaced the OHS. It is an annual household survey which measures the living conditions of South African households to provide information on development trends. The GHS collects data on the following key service delivery related themes: education, health, and social development, housing, access to services and facilities, food security and agriculture	2002 - 2018	Statistics South Africa
Cape Area Panel Study (CAPS)	CAPS is a longitudinal study of the lives of youths in metropolitan Cape Town, South Africa. The first wave of the study collected interviews from 4 800 randomly selected young people aged between 14 and 22 in the period August - December, 2002. The study collects data across the following outcomes: schooling, employment, health, family formation and intergenerational support systems.	2002-2009	Population Studies Center in the Institute for Social Research at the University of Michigan, the Centre for Social Science Research, SALDRU and the Research Program in Development Studies at

Dataset	Details of the Dataset	Periods available	Producing Agency
			Princeton University.
Community Survey	The Community Survey is held between each Census to obtain data at the national, provincial and municipal levels to measure progress and outcomes on the following indicators: education, health, sanitation, water supply, housing and transport as well as other demographic indicators. Information collected from these surveys informs Integrated Development Plans and infrastructure investment budgeting.	2007, 2016	Statistics South Africa
Living Conditions Surveys (LCS)	The LCS is a national household survey of over 32 000 individuals that provides detailed information on household's living circumstances, as well as their income and expenditure patterns. Data collected are also used to update the consumer price index (CPI) basket of goods and services.	2008/9, 2014/15	Statistics South Africa
Tax data	These are anonymised panel data at the firm or individual level. This data is created by merging various administrative tax data, namely: company income tax, employee data from employee income tax certificates, value added tax and customs records.	2008 - 2016	United Nations University World Institute for Development Economics Research (UNU-WIDER), National Treasury, and the South Africa Revenue Services
Quarterly Labour Force Survey (QLFS)	The QLFS is a household survey that collects data on a quarterly basis on the labour market activities of individuals aged 15 years or older. Earnings data for the QLFS series is released once a year as the Labour Market Dynamics data.	2008 - present	Statistics South Africa
National Income Dynamics Study (NIDS)	NIDS data was initiated in 2008 to enable the South African Presidency to intensively track dynamic changes in the well-being of South Africans. The first wave of the data tracked approximately 28 000 individuals across 7 305 households. The movements of household members as they enter or exit the initial household or establish their own households will be captured in subsequent waves of the panel study. At the time, it was the first national panel study to document a sample of households in South Africa and report on changes in income, expenditure, assets, access to services, education, health and other measures of well-being. Data is collected every two years and so far, five waves have been collected.	2008 - 2017	Southern Africa Labour and Development Research Unit (SALDRU) based at the University of Cape Town's School of Economics
Gauteng-City Region Observatory Quality of Life Survey	This biennial data measures the quality of life, socio-economic circumstances, attitudes to service delivery, psycho-social attitudes, value-base and other characteristics	2009 - 2017/18	Gauteng-City Region Observatory

Dataset	Details of the Dataset	Periods available	Producing Agency
Post-Apartheid Labour Market Series (PALMS)	PALMS is a stacked cross sectional dataset created and updated by the DataFirst team that collates different labour market data from various sources and release it in a comparable and reliable format. The data consists of microdata from 69 household surveys conducted by Statistics South Africa between 1994 and 2019, as well as the 1993 PSLSD. The Statistics South Africa surveys include the annual OHS, the bi-annual LFS, including the smaller LFS pilot survey from February 2000, and the QLFS. While the data is at individual level, household level variables may be created using the provided unique household identity variable.	1993 - 2019	DataFirst, University of Cape Town
National Income Dynamics Study - Coronavirus Rapid Mobile Survey (NIDS-CRAM)	NIDS-CRAM is a rapid assessment survey that investigates the socio-economic effects of the national lockdown instituted by the South African government in March 2020 in response to the Coronavirus pandemic. The sampling frame for NIDS-CRAM is Wave 5 of NIDS which was collected in 2017. Continuing sample members and temporary sample members older than 18 years as at April 2020, when wave 1 of the NIDS-CRAM fieldwork was undertaken, were re-interviewed, at the time of the NIDS-CRAM wave 1 fieldwork in April 2020 were re-interviewed. Respondents were interviewed using Computer Assisted Telephone Interviewing (CATI), with data collection repeated over several months. NIDS-CRAM is a component of a broader study called the Coronavirus Rapid Mobile Survey (CRAM) which aims to inform policy using rapid reliable research on income, employment and welfare in South Africa, in the context of the global Coronavirus pandemic.	2020 -	University of Stellenbosch, University of Cape Town and University of the Witwatersrand

The South African Research Chair in
Industrial Development (SARChI)
31 Henley Road, Auckland Park,
Johannesburg, South Africa

General enquiries:
Koketso Manyane-Dlangamandla
Email: koketsom@uj.ac.za
Tel: +27 011 559 7454