WORKING PAPER

Manufacturing employment and equality in South Africa

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TIPS is a research organisation that facilitates policy development and dialogue across three focus areas: Trade and Industrial Policy, Inequality and Economic Inclusion, and Sustainable Growth

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1 Introduction

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In 2014, South Africa remained one of the most unequal countries in the world, an outlier by global standards in terms of both overall inequality as measured by the Gini coefficient and levels of joblessness. For proponents of industrialisation as central to long-term development, this situation raises two questions.

- First, how does manufacturing as presently constituted affect employment and the distribution of income and assets directly and indirectly?
- Second, is the traditional industrial-policy paradigm sufficiently geared to supporting inclusive growth?

The next section of this paper explores the first question. In the event, employment in manufacturing fell from 2008 to 2014, despite (rather slow) growth in production. Ownership in manufacturing was concentrated by international standards, especially in steel and chemicals, while wage inequality was pronounced. In this context, the share of remuneration in value added rose to unusually high levels.

These trends, while worrying, were not the complete picture. They do not tell us how manufacturing indirectly supported job creation or economic equality. These effects range from production of inputs for processing to demand for goods and services from manufacturing workers to technological spillovers and tax and export revenues. Still, the trends within the industry indicate the need for a stronger conceptualisation of how manufacturing affects overall growth and employment.

That, in turn, raises questions about how well traditional industrial policy aims fit in South Africa. The concept of industrial policy has been shaped by East Asian countries that started with relatively high employment levels, largely in smallholder farming. They generally achieved fairly equitable economies and societies in the 1950s, in a context of low productivity and incomes. As a result, measurers to raise productivity translated into higher incomes for most working people, making industrial policy politically and socially sustainable.

In South Africa, in contrast, a similar approach to prioritising productivity and encouraging higher-tech industries seemed unlikely to alleviate joblessness or address workplace inequalities. As a result, it could not head off workplace and community conflict and remained subject to persistent policy contestation. That in turn weakened both policy coherence and the mobilisation of resources for innovative investments.

In sum, the simple linkage sometimes drawn between industrialisation and sustained growth needed to be nuanced to take into account the realities of manufacturing and society in South Africa. In particular, more should be done:

- To understand and reverse the current trend of job losses in manufacturing, including through a shift to light industry and growth in regional markets, and to enhance indirect employment effects; and
- To understand what leads to stark wage inequalities in manufacturing and identify options for addressing them.

2 Manufacturing inequality

The available evidence shows that the 'teens, South Africa remained one of the most inequitable economies in the world. That inequality was underpinned by a combination of high levels of unemployment, unusually inequitable wage systems, and concentrated ownership. Manufacturing mirrored and contributed to this broader picture through slow employment growth, with job losses from 2008 to 2014; relatively unequal payscales; and the dominance of a relatively small number of companies.

While the evidence clearly points to high levels of inequality by international standards, it does not permit an accurate analysis of changes since the transition to democracy.[1] Before 1994, statistics on employment and incomes, including the Census, largely excluded Africans. After the transition to democracy, it took time to develop statistical systems that could generate sound information. As a result, consistent and reliable data are available only from around 2002.

This chapter first reviews overall inequality in South Africa. It then explores in turn its immediate causes – unemployment combined with unusually unequal wage structures and ownership.

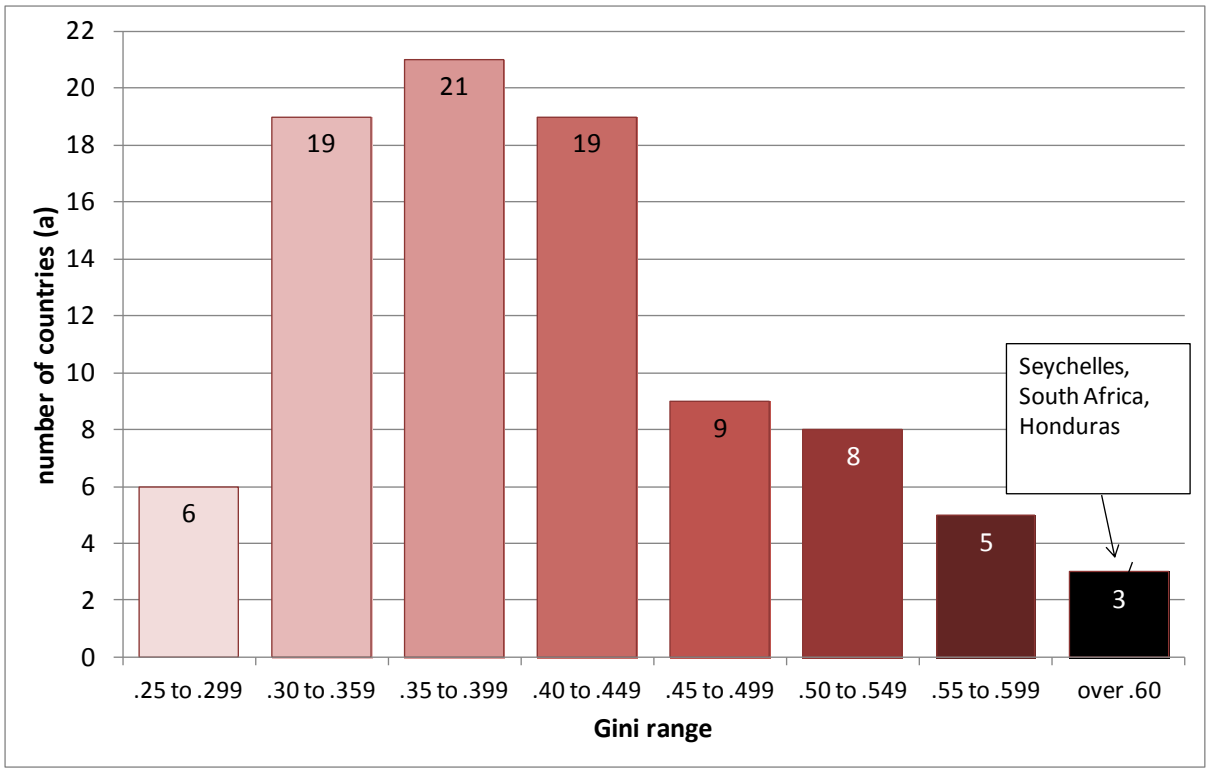
2.1 Overall inequality

Of the 90 countries that reported a Gini coefficient in the World Development Indicators between 2007 and 2011, South Africa had the second highest figure. That is, it had the second worst distribution of income of the reporting countries.

Moreover, South Africa was an outlier. For the 90 reporting countries, the average Gini coefficient (weighted by population) was .41. For South Africa, the Gini reported in 2009 was .63. As the following chart shows, only three of the 90 countries in the group reported coefficients in this range.

[1] Efforts to evaluate trends since 1994 essentially rely on divergent or inadequate data sources to try to piece together a picture. In a paper for the OECD, Leibbrandt et al (2010) make rather sweeping statements about trends in inequality based on a combination of academic surveys of under 10 000 households each for 1993 and 2008 and the official 2004 General Household Survey of over 30 000 households. While the paper assesses whether the surveys used comparable questions on income, it does not evaluate their reliability or the comparability of their sampling methods. In the event, the 1993 survey developed a sampling framework based on the very incomplete 1990 Census, which excluded the "independent" Bantustans. That made the weighting of the study more difficult. In addition, it likely under sampled the high income group. Bhorat et al (2009) and Bhorat and Westerhuizen (2010) use the official Income and Expenditure Surveys for 1995 and 2005 to conclude that income distribution worsened from 1995 to 2005. While these surveys purport to form a series, they used very different methodologies, which makes comparability difficult. As Bhorat *et al* point out, for instance, the 1995 survey apparently underestimated income from informal employment in poor households. (Bhorat *et al* 2009, p. 19) Again, the main concern is that the 1995 survey may well have failed to capture realities for Africans in particular. Van den Berg et al (2006) use the All Media and Products (AMPS) survey, which is a private survey for marketing purposes, to conclude that the overall income distribution remained essentially unchanged from 1994 through the mid-'00s. While AMPS has reported continuously since before 1994, the paper does not assess the representivity of its sample or the accuracy of responses, especially for very poor African households that have traditionally been excluded from marketing efforts in South Africa.

Number of countries with Gini coefficient in 5% ranges, from .25 to over .6, 2007 to 2011



Source: Calculated from World Bank, World Development Indicators, figures for Gini coefficient by country, latest figure from 2007 to 2011. Data downloaded from databank.worldbank.org in April 2014.

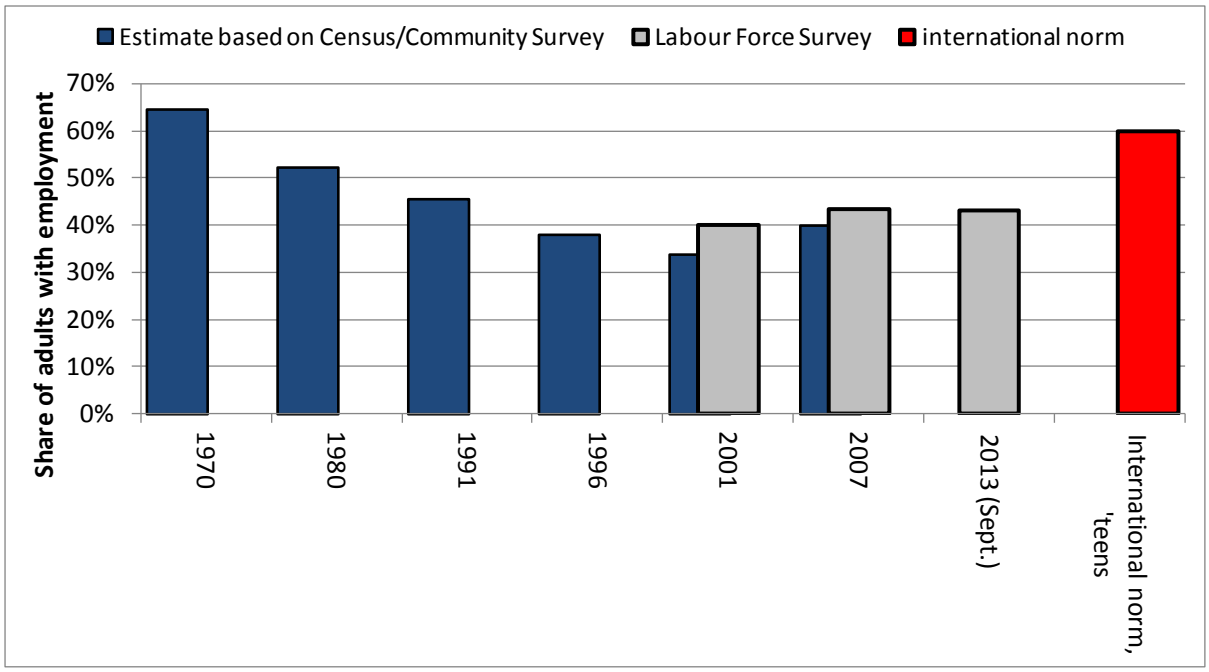
The immediate factors behind South Africa's profound inequalities lay in low levels of employment, unusually inequitable pay scales, and concentrated ownership, all of which were entrenched by apartheid. The following sections consider how each of these factors appeared in manufacturing.

2.2 Employment and manufacturing

The preferred measure for joblessness is the employment ratio, which Statistics South Africa also calls the absorption rate. It measures the share of working-age individuals who say they are employed. In contrast, the unemployment rate defines as unemployed only those who do not have a paid job but want one. As a result, while it provides important information about the unmet demand for paid work, it is not particularly helpful in understanding household incomes.

At the time of the transition to democracy, in 1994, the employment ratio was just under 40%, compared to an international norm of around 60%. Since then, job growth has been relatively strong, at around 2,5% a year. As a result, the total number of people in employment climbed from about nine million in 1994 to just over 15 million, although as noted the data for the 1990s are contested. By 2008 the employment ratio climbed to 45%. The Great Financial Crisis saw the loss of a million jobs, however, and pushed the employment ratio back down to 40%. Employment returned to over 15 million at the end of 2013, but the employment ratio remained at around 40% as a result of population growth.

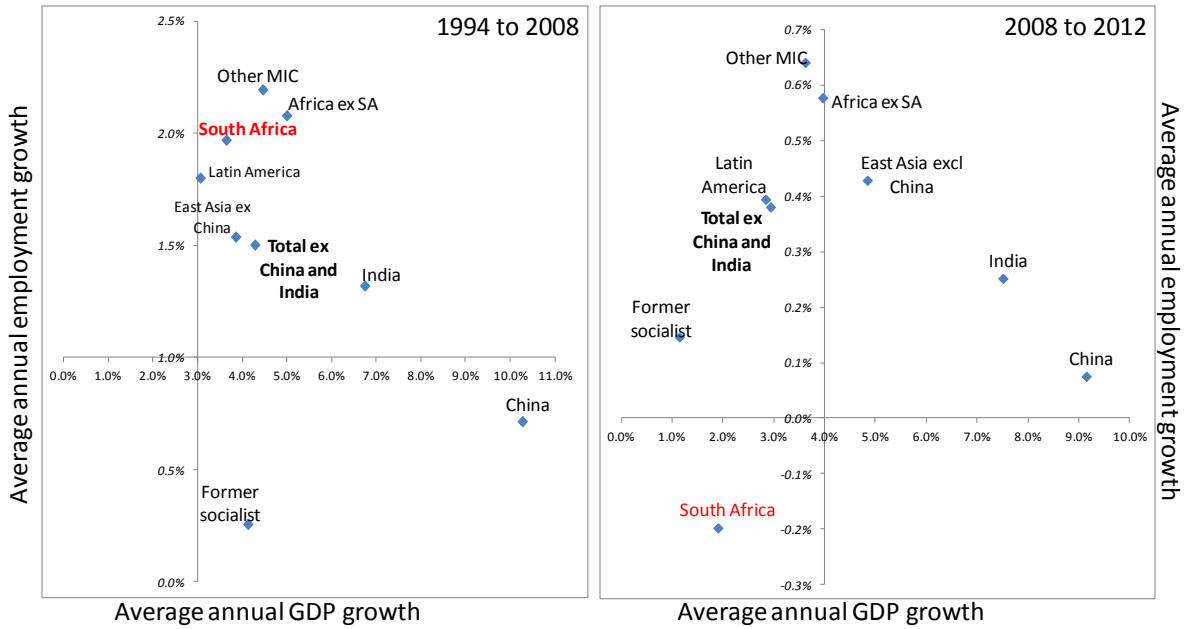
Employment ratio from 1970 (a) to 2013



Note: (a) Before 1996, the Census did not fully cover Africans, providing only a large survey in 1970 and excluding those in the TBVC from 1980. Furthermore, the estimates assumed that virtually all adults in the former Bantustans were employed as subsistence farmers if not otherwise. The figures here therefore represent estimates based on reinterpretations of the available data in line with more standard definitions for employment. *Source:* Calculated from Statistics South Africa. Census data for relevant years for RSA, Bophuthatswana, Ciskei and Venda. Downloaded from interactive data site (Nesstar facility) in August 2010; DBSA, data on population and employment in the RSA and TBVC, kindly provided in August 2010. International norm from ILO. 2010. Key Indicators of the Labour Market. Downloaded from www.ilo.org in June 2011.

As the following charts show, using a characterisation originated by Professor Gabriel Palma, from 1994 to 2008 South Africa was more or less at the norm for GDP growth, and better than the norm for job creation. Job losses in 2008 combined with a sharp economic downturn and relatively slow recovery meant that from 2008 to 2012, it lagged other middle-income economies in both regards. Employment surpassed 2008 levels only at the end of 2013.

Comparison of employment and GDP growth for various middle-income country groups, 1994 to 2008 and 2008 to 2012 (a)

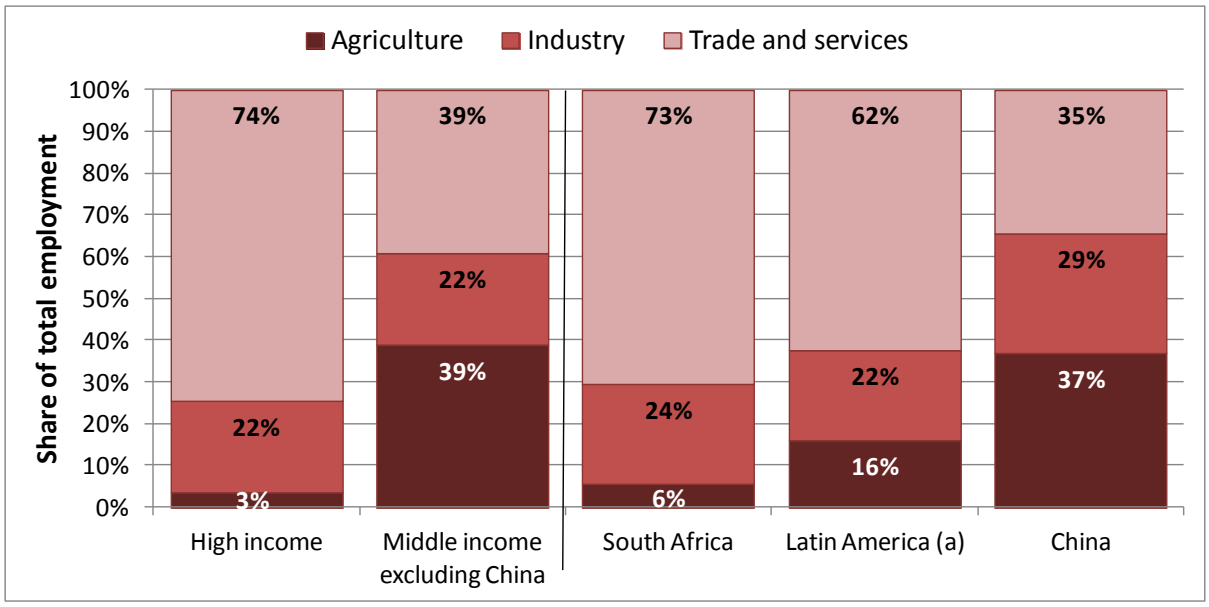


Notes: (a) MIC refers to middle income countries. I am grateful to Professor Gabriel Palma for this graphic approach, which he utilised in an input at the Competition Commission conference in Johannesburg in September 2014. (b) The data for all countries were standardised to ensure similar age ranges and definitions of employment in the original source, the ILO's Key Indicators for the Labour Market (KILM). The result was that employment in 1994 for South Africa was reported at over 10 million, compared to national estimates of around 9,4 million. Furthermore, the employment figures for 2008 and 2012 are both lower than in national sources. For this graph, the national data for South Africa are used. *Sources:* Except for South Africa, calculated from World Bank. World Development Indicators. Series on GDP in constant 2005 US dollars and on population, employment ratio and share of population of working age. Downloaded from databank.worldbank.org in September 2014. For South Africa, for 1994, 1995 data was used from Business Trust, *Employment and Unemployment in South Africa.* Johannesburg. Page 27. For 2008 and 2012, Statistics South Africa. Labour Market Dynamics 2008 and 2012. Series on employment status. Electronic database.

The unemployment gap after 1994 could be understood in terms of the employment structure left by apartheid policies, particularly pushing people off their land. From this standpoint, the key difference between South Africa and other middle-income economies emerged in the very small share of employment in agriculture, at under 10%, although 30% of the population lived in the rural areas. As a group, middle-income economies averaged almost 40% in agricultural employment.

The shortfall in agriculture was partially compensated by an unusually large share of services and retail employment. In contrast, employment in industry in South Africa was more or less at the norm for middle-income countries. Some 24% of employment was in industry, which includes mining as well as manufacturing, compared to an average of 22% for middle-income countries as a group.

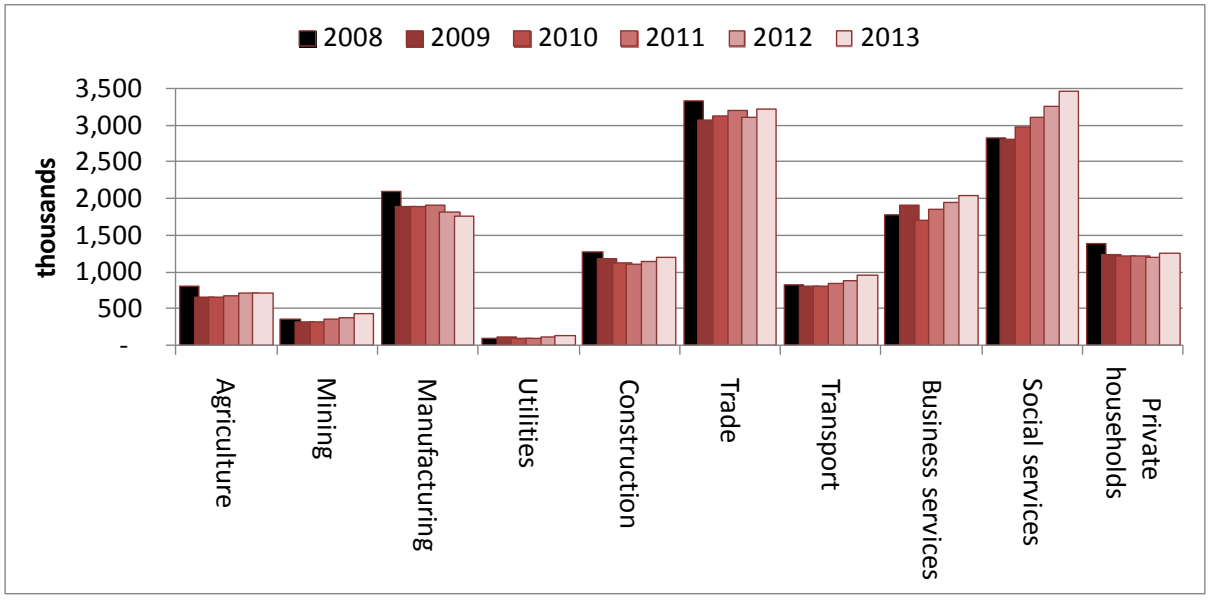
Employment by sector, South Africa and other middle-income economies, 2010



Note: (a) Data for 2011. *Sources:* Except for South Africa, calculated from World Bank. World Development Indicators. Series on middle and high income economies, percentage employment in agriculture, industry (includes construction, logistics and mining as well as manufacturing). Downloaded from databank.worldbank.org in April 2014. For South Africa, calculated from Statistics South Africa. Labour Market Dynamics 2010. Series on employment by main industry. Electronic database. Downloaded from www.statssa.gov.za in April 2014.

While overall employment recovered after 2008, manufacturing employment continued to decline from 2008 through 2014. It was the only sector that continued to lose jobs after the third quarter of 2010. As a result, its share in total employment dropped from 14% in 2008 to 12% in 2012.

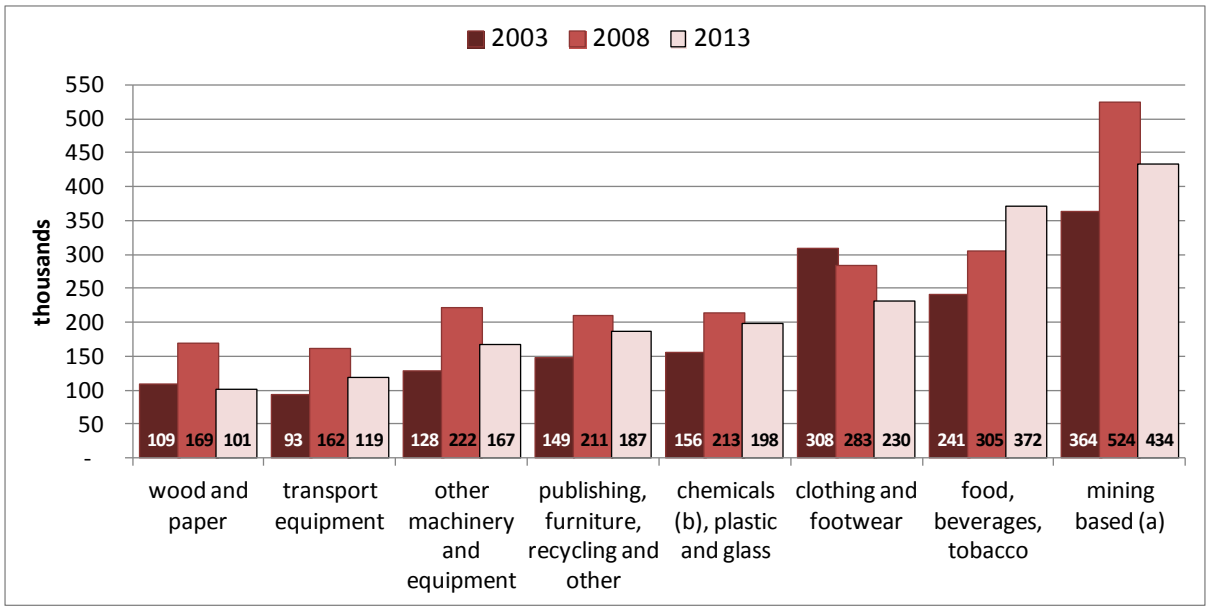
Employment by sector, fourth quarter, 2008 to 2013, in thousands



Source: Statistics South Africa. Quarterly Labour Force Survey trends from 2008 to 2014. Table on employment by industry and gender. Excel spreadsheet downloaded in April 2014.

By subsector, the biggest job losses in manufacturing from 2008 to 2014 emerged in commodity-based manufacturing – that is, metals, heavy chemicals and the wood/paper value chain. Only agro processing saw employment gains in this period.

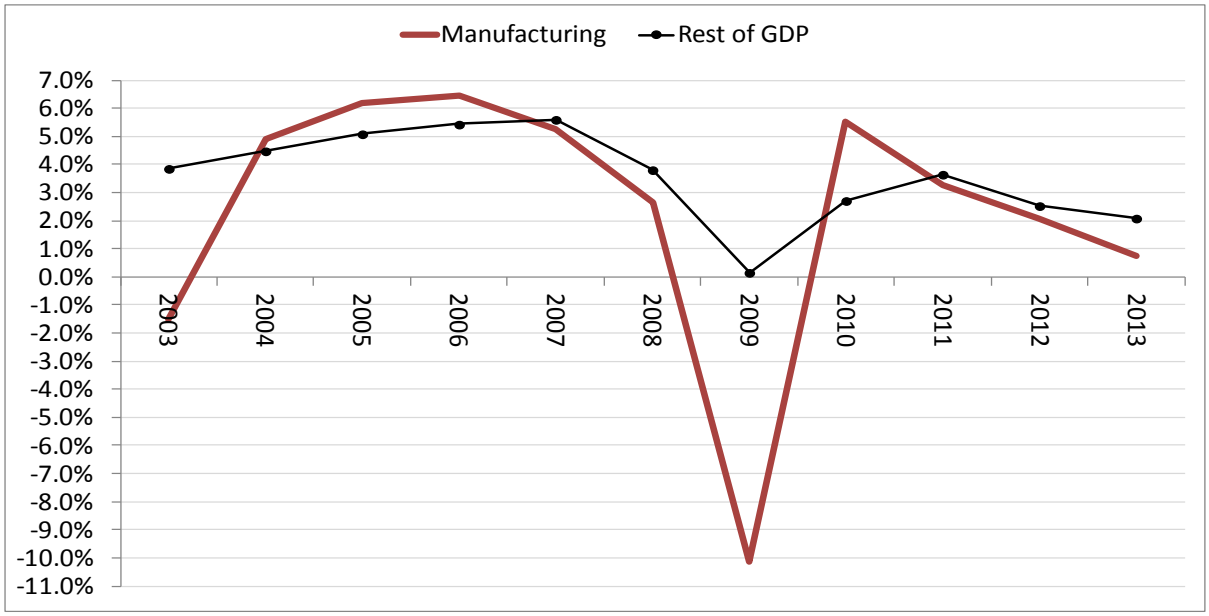
Employment by manufacturing industry, 2008 to 2013



Notes: (a) Non-metallic minerals, metals and fabricated metal products, petroleum and basic chemicals. (b) Excludes heavy chemicals and petroleum. *Source:* Statistics South Africa. Labour Force Survey. September 2013, and Labour Markets Dynamics, 2008 and 2013. Series on employment by detailed industry. Electronic databases.

The fall in manufacturing employment followed a particularly sharp drop in output in 2008/9, with a lacklustre recovery from 2009 to 2013. Manufacturing production grew relatively strongly in the commodity boom of the '00s, rising by 5% a year from 2003 to 2008. In 2009, in the Global Financial Crisis, it contracted by 10% - the sharpest fall of any sector in South Africa. Thereafter, following an initial 5% recovery in 2010, it saw declining growth, dropping to under 1% in 2013. As a result of these trends, the share of manufacturing in total value added fell from 18% of the GDP in 2003 to 10% in 2013.

Percentage change in production in manufacturing and the rest of the economy, 2003 to 2013



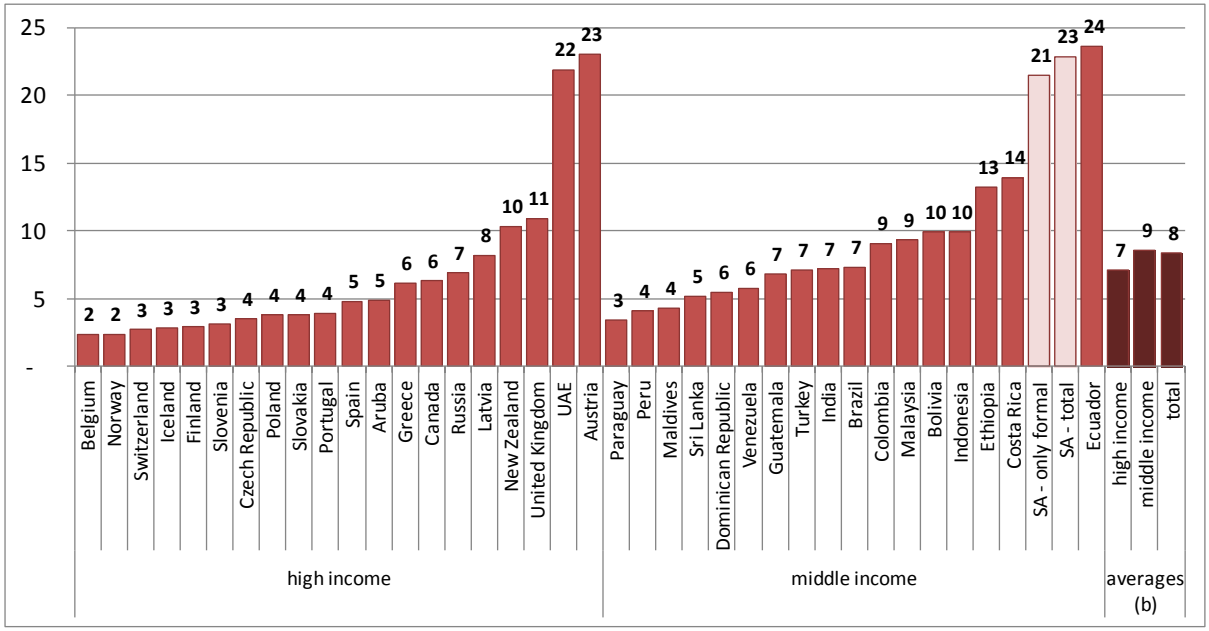
Source: Calculated from, Statistics South Africa. GDP data in excel spreadsheet. Constant rand. Downloaded from www.statssa.gov.za in September 2014.

2.3 Earned incomes

Earned incomes in South Africa overall were unusually inequitable by global standards, and manufacturing itself was more inequitable than the rest of the economy. From the early '00s, the data suggest that the share of remuneration, including for managers, in total value added in manufacturing climbed to high levels by global standards.

The ILO benchmarks inequalities in pay for employees (excluding employers and the self employed) by comparing the pay of the 90th percentile of income earners to the 10th percentile. It published recent reports for only 37 countries, but in this limited sample, South Africa showed much greater pay inequality than the norm, as the following chart shows. The average ratio, weighted by population, was seven for high-income economies and nine for middle-income countries. For South Africa, it was 21 for formal employees only (excluding informal, domestic and farm workers) and 23 for all employees.

Ratio of 10th to 90th percentile of wage earners, employees only, 2009 to 2013 (a)



Notes: (a) Latest data available for countries between 2009 and 2013. (b) Averages weighted by population. *Sources:* Ratios for countries other than South Africa from ILO, ILOSTAT, series on earnings dispersion among employees. Downloaded from www.ilo.org in September 2014. Ratio for South Africa calculated from Statistics South Africa, Labour Market Dynamics 2013, series on employee earnings. Electronic database. Population data for weighted averages from World Bank, World Development Indicators. Series on population for 2012. Downloaded from databank.worldbank.org in September 2014.

Sectoral inequalities are generally lower than for the economy as a whole, where low-wage sectors such as domestic and agricultural work are effectively compared with high-wage, high-skill industries such as the financial sector. Still, manufacturing was amongst the more inequitable sectors. As the following chart shows, the ratio of wage inequality was 19 in manufacturing, making it third most inequitable amongst major sectors.

Ratio of 10th percentile to 90th percentile of wage earnings (employees only) by industry, 2013

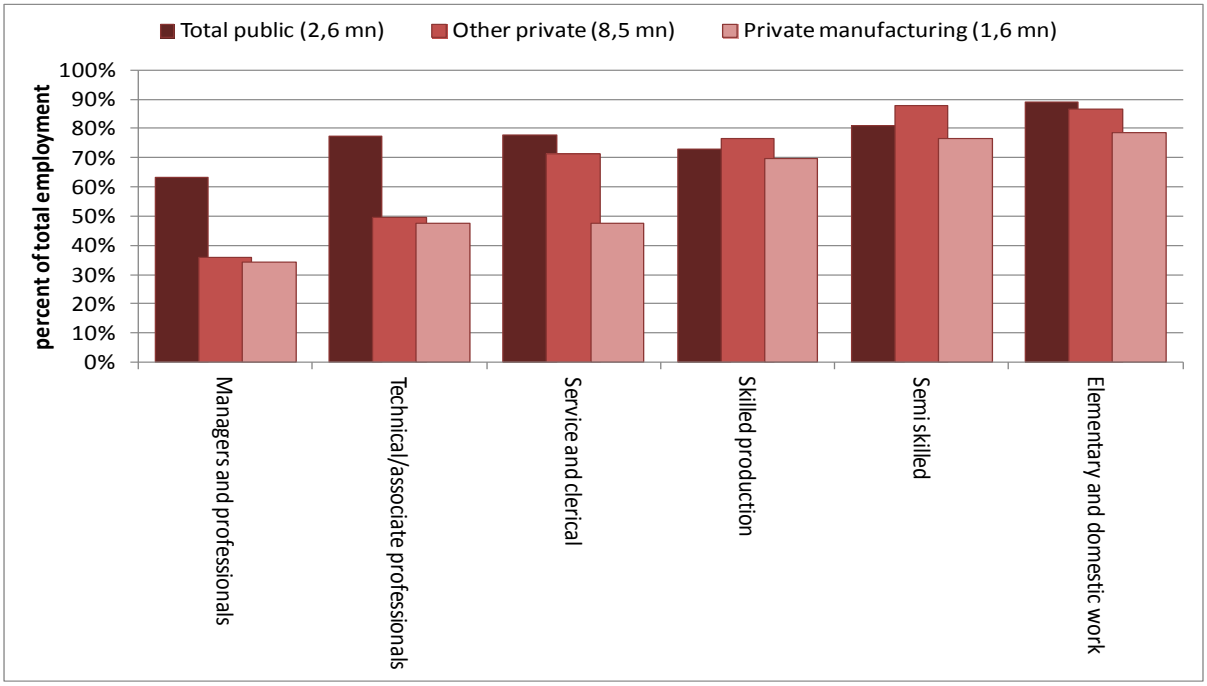
Sector	Wage ratio	Median wage	number of employees (000s)
Agriculture	5.1	1,733	688
Mining	10.7	6,000	411
Manufacturing	19.1	3,588	1,598
Construction	18.5	2,700	861
Trade	14.2	2,900	2,193
Business services	19.0	4,000	1,776
Community and social services	27.7	6,000	3,065
Private households	5.0	1,290	1,226
Utilities/logistics	22.5	4,100	892

Source: Calculated from Statistics South Africa, Labour Market Dynamics 2013, series on employee earnings and main industry. Electronic database.

The unusually stark inequalities in wages in South Africa generally reflected the impact of apartheid work organisation. For decades, work was organised to provide "European" pay for skilled (white) workers, while deskilling and reducing pay for the majority. This system was linked to limitations on education, training and career pathing for most black workers.

The system incorporated racial disparities in job titles, pay and promotions. As the following chart shows, in manufacturing in 2013, 30% of skilled production workers were non-African, compared to 23% in the rest of the private sector and 27% in the public sector. Two thirds of managers in the private sector were non-African.

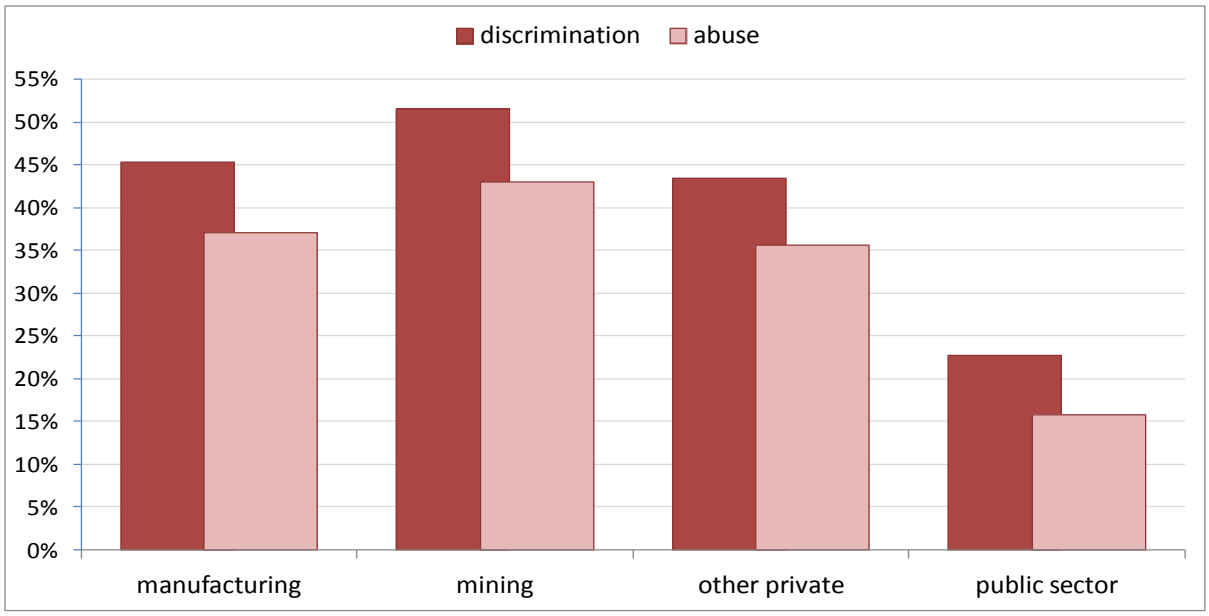
Percentage of Africans employed in manufacturing compared to the rest of the private sector and the public sector, 2013, by occupation



Source: Calculated from Statistics South Africa, Labour Market Dynamics 2013, series on population group, main occupation, nature of employer and main industry. Electronic database.

In 2012, the COSATU Workers Survey included 350 workers in manufacturing unions. In this sample, 45% of African workers said that their employers discriminated against workers based on race, and 37% said black workers were abused on the job. (Calculated from COSATU 2012)

Share of African union members who say that their employers discriminate against or abuse black workers on the job, 2012



Source: Calculated from COSATU, 2012 Workers Survey of Union Members, questions on employer discrimination and abuse. Electronic database.

2.4 Access to assets

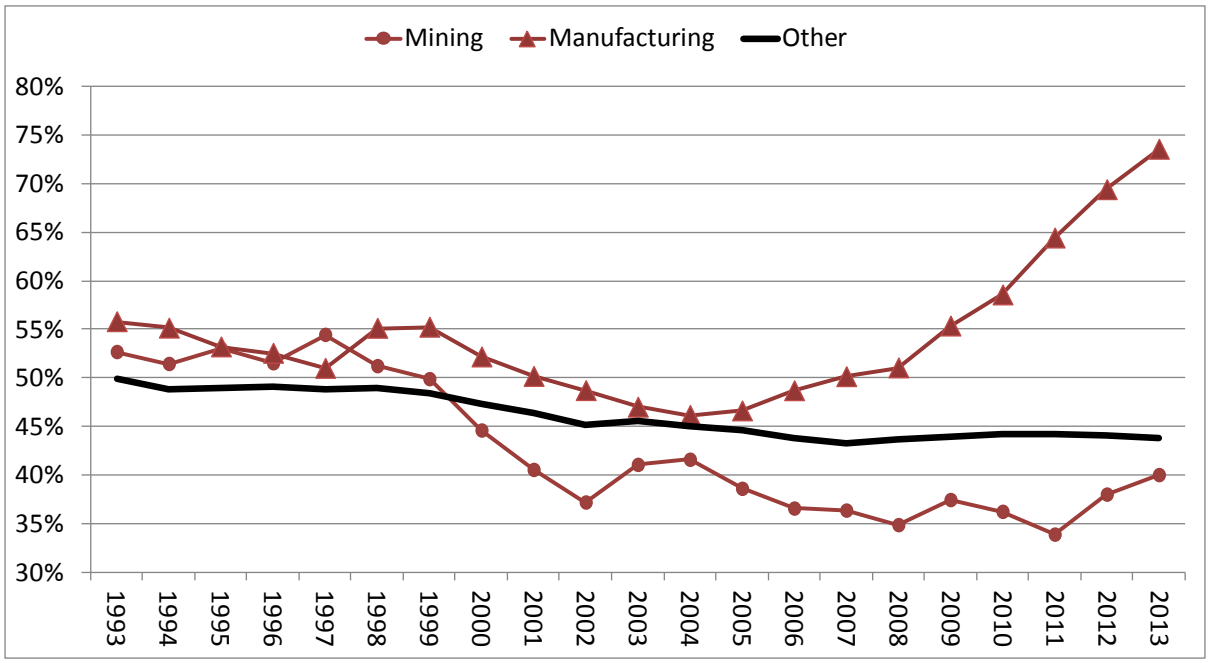
Ownership of productive assets in South Africa was also relatively concentrated, but as is often the case, the data were weak on this topic. While the implications for pricing and productivity have been explored quite extensively (see Fedderke and Shivangani 2008, and Gauteng Province 2009), there has been less analysis of the impact on inequality and employment conditions.

In manufacturing, commodity-based and heavy industries were generally dominated by a few large companies. Steel and heavy chemicals were mostly in the hands of former state enterprises that had been privatised but retained a dominant market position. In addition, the processing of staple foods and beverages was centralised compared to most countries because of the way the apartheid state regulated the value chain before 1994. In contrast, there were more small producers in equipment assembly, other chemicals and plastics as well as clothing and some kinds of food production.

Despite concentrated ownership overall, the share of remuneration in manufacturing value added picked up sharply from the mid-'00s, reaching almost 70% - an unusually high level by global standards – in 2013. As noted, remuneration in manufacturing was very skew, and it is not clear to what extent the increase in overall remuneration benefited ordinary workers or managers.

The trend in remuneration relative to value added suggests that manufacturing employers ended up bearing much of the burden of the Global Financial Crisis in 2008/9. In contrast, in the rest of the economy, the share of remuneration remained almost unchanged at under 45% from 2008 to 2013.

Remuneration (including for management) as percentage of value added, 1993 to 2013, manufacturing, mining and the rest of the economy



Source: Calculated from Statistics South Africa. GDP data to second quarter 2014. Compensation of employees and GDP in current terms. Database in Excel downloaded from www.statssa.gov.za in September 2014.

2.5 Manufacturing equality and employment?

Doubtless industrialisation is crucial for long-run development in South Africa. The available evidence, however, shows that its direct contribution to equality in incomes and assets as well as to job creation, which are equally critical for sustainable growth, has remained limited over the past 20 years. That conclusion does not say anything about the indirect effects, which are probably more important and positive. (See Tregenna 2007) Furthermore, understanding the contribution of manufacturing is hindered by the weakness of data on subsectors within manufacturing as well as information on ownership.

The inequalities in the workplace, specifically in manufacturing, in themselves threatened industrialisation. Month-long disputes in the metals industry in both 2013 and 2014 saw a fall of around 30% in the auto production. Strikes in the platinum mines, too, led to a sharp fall in exports and slower overall economic activity. In the event, the median income for employees in both industries was close to twice as high as the median for the economy as a whole. That suggests that workplace conflict reflected poor middle management, continued discrimination in the workplace and deep workplace and social inequalities rather than simply inadequate pay. (See Makgetla, 2014, forthcoming)

The following section discusses some implications for industrial policy of high inequality and joblessness.

3 Industrial policy and inclusive growth in South Africa

From the 1970s, the dominant paradigm of industrial policy was shaped by interpretations of the experiences of Japan, Korea and Taiwan. Other industrial policies were generally evaluated in terms of their divergence or coincidence with these three economies.

As a consequence, understanding of industrial policy generally focused on accelerating exports of manufactures, historically starting with clothing and moving on to equipment and finally the auto industry. It was expected that growth in output for export markets, which were assumed to be virtually limitless for consumer goods in particular, would swamp the productivity effect, so that employment would grow even as costs fall.

Achieving these outcomes requires a focused industrial policy, driven by an active and responsive state, that can ensure rising productivity and competitiveness. Academic debates centred on how best to shape incentives, the required private and public institutions, and the role of innovation.

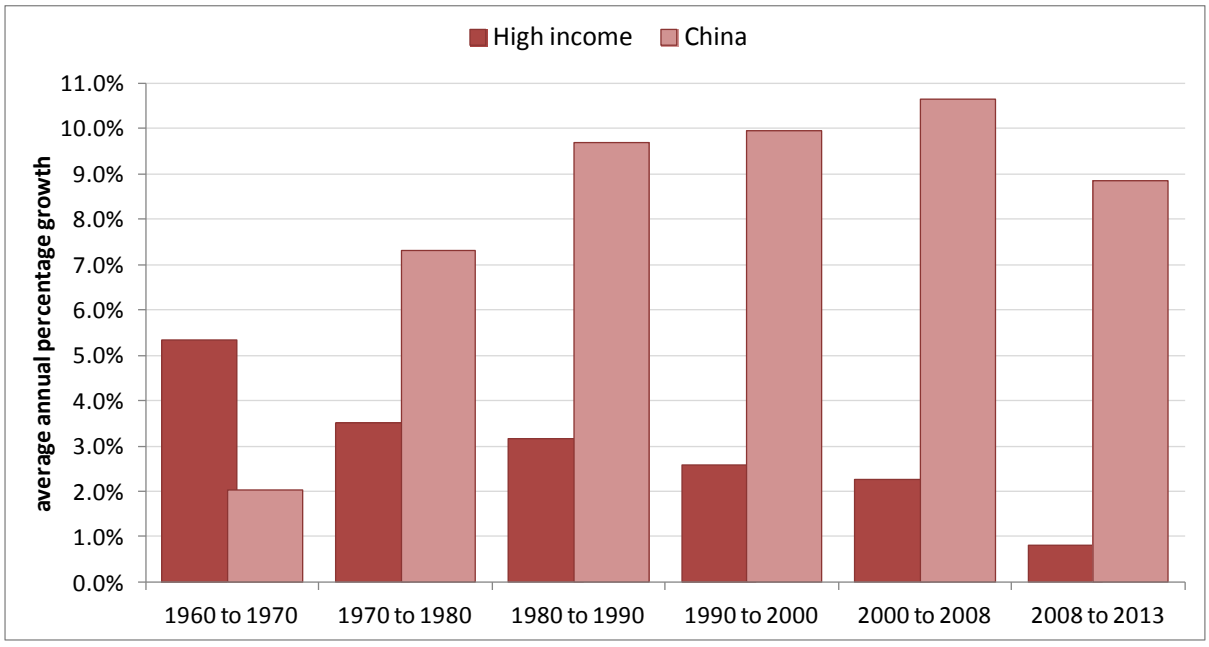
From the early '00s, this industrial policy discourse provided a useful contrast to the (nominal) Washington Consensus. Above all, it underscored the need for a strong and interventionist state even where private investment remains the direct driver of the economy.

That said, in the '00s South Africa faced a very different situation from that of East Asia half a century ago, when the concepts of industrial policy and the developmental state emerged. We can understand the differences in terms of the international economic and political context and regional position, as well as the nature of the domestic economy. We describe them here in schematic form.

In international terms, Asia profited from booming demand for consumer goods in the U.S., Europe and Japan from the 1950s. It also benefited economically from high U.S. spending on the Korean and Vietnamese wars from the mid 1950s through the early 1970s. Moreover, to encourage anti-communist allies, the U.S. and Europe provided relatively easy access to their markets for manufactures to East Asian economies through the 1980s.

In contrast, for most of the 1990s and then after 2008, economic growth in the global North was uncertain at best. The Chinese economy grew rapidly, but the country imported mostly raw materials rather than manufactures. As of 2014, moreover, the long term prospects for global growth appeared relatively bleak.

Average annual growth rate, high-income economies and China, 1960 to 2013



Source: Calculated from World Bank. World Development Indicators. Series on GDP in constant 2005 US dollars. Downloaded from databank.worldbank.org in September 2014.

South Africa also faced the challenge of being a latecomer to global markets, as its economy opened up from 1989 with the transition to democracy. As a result, it had to compete with established manufacturing exporters in Asia, and faced constraints on manufactured and agricultural exports to the global North.

In the event, from 1994 imports of manufactures from China in particular surged in the South African market, while South Africa's share in global manufactured exports stagnated. From 1995 to 2013, South Africa's share in world manufactured exports fell from 0,33% to 0,29%. Its exports to China climbed almost 40-fold, but its exports of manufactures to China rose half as fast. South Africa's biggest single export to China in the 'teens was unbeneficiated iron ore. (Calculated from UNCTAD 2014, series on manufactured goods and total exports by South Africa and world)

South Africa also had less developed regional partners than found in East Asia. The ratio of GDP per capita between South Africa and the countries of the Southern African Development Community (SADC) was 7,5 to one in 2011. In contrast, China's GDP per capita was lower than the average for East Asia and the Pacific, while Brazil's was just 1,5 times the rest of Latin America and the Caribbean. (Calculated from World Bank 2014, series on current GDP and population for relevant countries)

In short, South Africa could not count on booming export markets in the global North or the region to drive industrialisation. At the same time, on the domestic scene, high levels of unemployment and inequality made it harder to ensure shared benefits from productivity gains. That in turn hindered efforts to mobilise broad political support for industrial policies.

East Asia had close to full employment from the 1950s. Tenure reform after World War II meant that established smallholders could keep a larger share of their crop, but did not require new market institutions or agricultural practices. Their income was often supplemented but not displaced by manufacturing employment, which permitted an initial low-wage strategy.

More broadly, by 1960, the East Asian economies were characterised by relatively equitable income distribution and social cohesion, by class, ethnicity and within workplaces. Equality resulted both from tenure reform and also from substantial investments in education and infrastructure (see Campos and Root, 1996), which as described in the literature appear to have resembled the proposals in the Reconstruction and Development Programme.

Relatively equitable economies with low levels of unemployment provided a sound basis for industrial policy in several ways. Local markets for mass-produced manufactures were relatively strong, providing a domestic base for growth. Equally important, workers and communities experienced the benefits of growth directly. That made it possible to mobilise a national coalition around industrial strategy and to secure workplace peace.

In this context, it was also easier for government and business to agree on the efforts required for long-term national development. Moreover, given the relatively weak development of mining and agriculture, it was relatively easy to prioritise support for manufacturing. In these circumstances, the state could discipline business without facing threats of capital flight or stirring fears about property rights or excessive over-regulation.

In contrast, the South African economy after 1994 was characterised by:

- Very high unemployment, especially in the rural areas, since colonialism and apartheid effectively replaced African smallholder agriculture with concentrated estate production.

- Unusually deep inequalities by class, within workplaces, and by race, with a well-established and prosperous mining industry accounting for over half of exports.
- Constrained local markets, since poor households could not afford to buy manufactures, especially equipment or clothing, on a substantial scale, while high-income households, which accounted for around half of all consumption, often preferred imports and services.
- Workplace conflict in key industries that, in 2013 and 2014, led to prolonged strikes on a scale sufficient to reduce overall GDP growth.
- Continued domination of industry by white-controlled and increasingly foreign companies, which made it difficult for the state to support national business consistently for both political and ideological reasons.

In these circumstances, efforts to discipline or even incentivise business were often interpreted by business leaders and the media as a threat to private ownership and the market-driven economy. Poor communication and mistrust between the state and business tended to undermine the effectiveness of industrial policy, which often suffered from poorly informed initiatives from the state combined with unconstructive responses from business partners.

In contrast to East Asia, too, the South African state had to bring about shift from dependence on mining, rather than simply aiming to build up manufacturing. In the event, few mining-based economies have shifted to manufacturing as the lead export or employment sector in the past 50 years.

The vast differences in starting position for South Africa compared to the paradigmatic countries in industrial policy point to the need systematically to supplement traditional industrial policy prescripts.

From conventional industrial policy, South Africa could take the understanding that:

- Manufacturing is critical to long-run growth and development, although it may not be the dominant source of employment;
- A strong and efficient state is needed that can take the risks associated with thinking ahead of the market, which means accepting some failures will inevitably occur, while minimising those risks through expertise and responsiveness;
- Industrial policy must bring sufficient visible benefits to the majority to ensure broad political and social support; and
- Government must take a strategic approach to business in order to build trust while continuing to strive for changes in the economy. Achieving this aim requires a realistic vision, consistency and accountability, and a fundamental respect for the fact that in the long-run, business has to make profits.

At the same time, the following realities in South Africa required innovative responses.

- Given new global conditions, manufacturing by itself was unlikely to scale up enough to solve the unemployment challenge. Rather, industrial policy had to include efforts to maximise employment multipliers. That included not only stimulating employment in supplier and user industries, but also through growth in the labour force; the use of tax revenues; and the diffusion of innovation. Hirschman (1981) and Tregenna (2007) discuss the range of possible linkages and multipliers outside the value chain.
- If export markets for manufactures were likely to remain relatively slow growing and closed, then it became more important to find ways to generate new kinds of domestic and regional

demand. The answer was not simply import substitution as understood in the 1960s and '70s. Rather, the challenge was to identify viable products that could raise living standards and improve productivity for which there might be no demand as a result of deep income inequalities and narrowly focused production. The roll out of solar water heaters in the 'teens provided a case in point.

- In this context, support for the development of regional markets became particularly important. Key blockages to trade in southern Africa included weak infrastructure, discordant and often time-consuming regulations and market institutions. It was also important to consider how to develop mutually beneficial value chains in the region.
- Finally, the experiences of 2013/4 in particular demonstrated that the benefits of economic policies must be more equitably spread in order to permit sustained growth. That in turn required more equitable workplaces, especially in manufacturing, as well as broader ownership of productive assets.

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