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EDWARD COTTLE

The transformation of the construction sector in South Africa since apartheid: social inequality and labour

A transformação do setor da construção na África do Sul desde o apartheid: a desigualdade social e laboral

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Prof. Dr. Marcelo Weishaupt Proni – Orientador

Dissertação de Mestrado apresentada ao Programa de Pós-Graduação em Desenvolvimento Econômico, área de concentração: Economia Social e do Trabalho do Instituto de Economia da Universidade Estadual de Campinas para obtenção do título de Mestre em Desenvolvimento Econômico, área de concentração: Economia Social e do Trabalho.

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Abstract

The main objective of this thesis was to study the transformation of the construction sector in South Africa over the period 1994-2013; to investigate to what extent the construction sector has been able to transform apartheid social inequalities and what has been the impact on construction companies and the labour force. The construction sector has undergone significant transformation and marked expansion since the end of apartheid in South Africa. During apartheid the construction sector, like most other economic sectors, was constrained by sanctions and racial policies which curbed its growth. An important reality after the demise of apartheid is the lack of redress of inherited backlogs in social and economic infrastructure, especially in the delivery of social services, including housing, water and electricity. The consequence of state policies of black ownership together with the growing internationalisation of South African construction Multi-National Corporations (MNCs) has increased monopolisation and social inequality within the sector. The massive public works expenditures, including the 2010 FIFA World Cup, have also assisted in the process of increasing the concentration and centralisation of capital, including a massive increase in the reserve army of labour. State policies have been ineffective in overcoming the legacy of apartheid capitalism as the labour market stratification post-1994 maintained the cheap black labour system inherited from apartheid. The sector is renowned for its preferred choice of precarious employment relations. Construction workers are largely black, unskilled and semi-skilled; are casual, part-time, self-employed or employed on limited duration contracts mostly by sub-contractors or labour brokers with little work benefits and limited possibilities of accessing formalised skills training. The transformation of the South African construction sector has as its main beneficiaries the MNCs that also benefited under Apartheid. The trade unions, locked into their reformist "business unionism" approach, have become weaker and, as a consequence, have not been able to defend the living standards of workers. The policy choices of the government and the ineffectiveness of the trade unions have produced more social inequalities within which a continued racialised labour force, and the bulk of vulnerable and disadvantaged African workers in particular, finds itself working under deteriorating employment conditions.

Keywords: apartheid, construction sector, transformation, workers, trade unions, inequality, South Africa.

Resumo

O principal objetivo desta dissertação foi estudar a transformação do setor da construção na África do Sul durante o período 1994-2013, investigando em que medida esse setor foi capaz de transformar a desigualdade social do *apartheid* e qual foi o impacto sobre as empresas construtoras e sobre a força de trabalho. O setor da construção passou por uma transformação significativa e forte expansão desde o fim do *apartheid* na África do Sul. Até 1994, o setor da construção, como a maioria dos outros setores da economia, estava constrangido por sanções e políticas raciais que cercearam seu crescimento. Uma constatação importante após o fim do *apartheid* é a falta de reparação de pendências herdadas da infraestrutura social e econômica, especialmente na prestação de serviços sociais, incluindo a habitação, água e eletricidade. Em consequência de políticas estatais de propriedade negra, junto com a crescente internacionalização das corporações multinacionais no setor da construção, aumentou a monopolização e a desigualdade social dentro do setor. Os enormes gastos de obras públicas, incluindo a Copa do Mundo FIFA 2010, também contribuíram para o processo de elevação da concentração e centralização do capital, incluindo um aumento maciço do exército de reserva de mão de obra. Políticas de Estado têm sido ineficazes para superar o legado do capitalismo excludente e a estratificação do mercado de trabalho pós-1994, mantendo a oferta de mão de obra negra barata herdada do *apartheid*. O setor é conhecido pelas relações de trabalho precárias. Trabalhadores da construção civil são em grande parte negros, não qualificados e semiqualificados. E são regidos por contratos esporádicos, de duração limitada, por tempo parcial. Na sua maioria, são trabalhadores subcontratados ou trabalhadores com poucos benefícios trabalhistas, com possibilidades limitadas de acesso à formalização e à qualificação. A transformação do setor de construção sul-africano continua tendo como principais beneficiárias as multinacionais. Os sindicatos, fechados em sua abordagem reformista ("sindicalismo de negócios"), tornaram-se mais fracos e, como consequência, não têm sido capazes de defender o padrão de vida dos trabalhadores. As opções políticas do governo e a ineficácia das estratégias sindicais resultaram na manutenção de elevadas desigualdades sociais, associadas com uma força de trabalho ainda marcada pelo racismo, com a maior parte dos trabalhadores africanos – vulneráveis e desfavorecidos – trabalhando sob condições precárias de emprego.

Palavras-chave: apartheid, setor de construção, trabalho precário, sindicalismo, desigualdade, África do Sul.

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List of Abbreviations

ANC	African National Congress
BCAWU	Building, Construction and Allied Workers' Union
BEE	Black Economic Empowerment
BIFSA	Building Industries Federation of South Africa
BWI	Building and Wood Workers' International
CAWU	Construction and Allied Workers' Union
CIDB	Construction Industry Development Board
COSATU	Congress of South African Trade Unions
DPW	Department of Public Works
EPWP	Expanded Public Works Programme
GEAR	Growth, Employment and Redistribution Strategy
GDP	Gross Domestic Product
JSE	Johannesburg Stock Exchange
LDC	Limited Duration Contract
LRS	Labour Research Service
MTEF	Medium Term Expenditure Framework
NACTU	National Council of Trade Unions
NUM	National Union of Mineworkers
NUMSA	National Union of Metalworkers of South Africa
RDP	Reconstruction and Development Programme
SACP	South African Communist Party
SAFCEC	South African Federation of Civil Engineering Contractors

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Chapter 1

Why study the Construction Sector in South Africa?

1.1 Introduction

South Africa's construction sector has undergone significant transformation and marked expansion since the period of Apartheid when it was constrained by sanctions and racial policies which curbed its growth.

In 1994 the first democratically elected government of South Africa led by the African National Congress (ANC) developed the Reconstruction and Development Programme (RDP), a redistributive economic policy as its main policy instrument, with the stated intention of directing the 'progress of the transformation strategy'. The development strategy had as its key link, "an infrastructural programme that will provide access to modern and effective services like electricity, water, telecommunications, transport, health, education and training for all our people" (South Africa Republic, 1994:6).

The reasons for infrastructure as the key link of the transformation strategy were well articulated in the White Paper on Reconstruction and Development which states that (South Africa Republic, 1994:7):

> Our history has been a bitter one dominated by colonialism, racism, apartheid, sexism and repressive labour practices. The result is that poverty and degradation exist side by side with modern cities and a developed mining, industrial and commercial infrastructure. Our income distribution is racially distorted and ranks as one of the most unequal in the world. Women are still subject to innumerable forms of discrimination and bias, rural people and youth are marginalised. A combination of lavish wealth and abject poverty characterises our society.
>
> The economy was built on systematically enforced racial division in every sphere. Rural areas were divided into underdeveloped Bantustans and well-developed, white-owned commercial farming areas; towns and cities were divided into townships without basic infrastructure for blacks and well-

> resourced suburbs for whites. Segregation in education, health, welfare, transport and employment left deep scars of inequality and economic inefficiency. Violence has had a devastating effect on our society and the need to restore peace and a sense of community security, is paramount.
>
> In commerce and industry very large conglomerates dominated by whites, control large parts of the economy. Cheap labour policies and employment segregation have concentrated skills in white hands. Workers are poorly equipped for the rapid changes taking place in the world economy. Small and medium-sized enterprises are underdeveloped, while highly protected industries lower investment in research, development and training. The informal sector and 'survival sector' include many of South Africa's women workers, who are underpaid and exploited.

South Africa's newly democratically elected government initially sought to embark on a massive roll-out of social and economic infrastructure that would not only secure economic growth but transform South African society into one that was able to effectively address the basic needs of its citizens and thereby contribute to overcoming the legacy of Apartheid which created an unequal society based on racial and extreme income inequality.

The construction sector therefore became a key economic sector to give effect to the much desired status of becoming a transformative state. A plethora of policies and legislation specific to the construction sector was passed and the state became the sector's single biggest client in order to transform the sector's capacity to deliver social and economic infrastructure (as will be further elaborated on in section 1.2 and 1.3).

An important outcome of the endeavour to transform the construction sector has been the increased rate of centralisation and concentration of capital. In terms of the labour process increased concentration exists as the mass of the "reserve army of labour"[1] are mobilised to work in the expanded means of production of the construction sector; and thus for the individual capitalist this means an increased portion of social wealth concentrated within the company. As a result of competition, the increased wealth of the construction firms resulted in a larger share of the market leaving weaker firms to either collapse or merge with other firms and thus

[1] By reserve army of labour is meant a pool of unemployed and partially employed labour.

centralisation or monopolisation is achieved (Marx, 1982:776). How this development occurred will be illustrated in Chapter 2.

Thus, when evaluating the success or failure of transformation of the construction sector the present thesis will be focusing on the nature of the concentration and centralisation of capital as a specific outcome of capital accumulation in post-Apartheid South Africa in the period 1994 - 2013 and how state policy and financing have shaped this transformation. As labour is an integral part of the accumulation process, it is further important to examine the nature and extent of the transformation of the relations of production between the capitalist (owner of the means of production) and the worker (owner of labour power) with specific reference to the reserve army of labour. The role of the trade unions, in turn, is imperative to understand the distribution of national income in relation to profit and wages (Kalecki, 1971:7).

The central question that this thesis will investigate is to what extent the construction sector has been able to transform apartheid social inequalities and what has been the impact on construction companies and the labour force?

1.2 Overview of the construction sector

The construction industry in South Africa is divided into three sub-sectors, namely, civil engineering, building and materials manufacturing sector. The latter involves the manufacture of materials for both the civil engineering and building sub-sectors. The building sub-sector involves erection, completion and renovation of buildings and structures. Civil engineering involves the construction of public works such as roads, bridges, dams and other structures excluding buildings. According to the Construction Industry Development Board (CIDB), most work in civil engineering is commissioned by the public sector, which accounts for about 80 per cent of civil engineering works (CIDB, 2008:2).

South Africa's infrastructure backlogs have in part been created by two decades of underinvestment between the 1970s and the 1980s. According to SA Reserve Bank figures, construction contributed only 2,87% of GDP in 1997, a significantly smaller proportion of the national economy than when at its peak of 5,37% in 1975. Construction spending was highest in the civil engineering sector, with almost a two-thirds reduction from the early 1980s, as well as a halving of the non-residential and residential building investment over the same period. Since 1994, Reserve Bank statistics suggest that the civil engineering and non-residential sub-sectors have experienced positive growth (Department of Public Works, 1999:18). In fact, the construction sector experienced a steady increase in construction output from 1990 through 1994 when former state president FW de Klerk came into power and promised significant political reforms including the release from prison of Nelson Mandela. From 1994, the annual change in construction output continued to show growth by a further 0,7% in 1995 as the new government started implementing the Reconstruction and Development Programme (RDP). As a result of the decentralisation of the RDP projects in 1996 to related departments, mainly the Department of Public Works and the Department of Housing, annual change in construction output increased to 2,5% (Dlamini, 2012:4). Government started to increase investment during the 1990s which rapidly increased around 2003.

In 1982 there were about 450,000 construction workers employed in the construction sector. By the 1990s, 200,000 jobs were lost thereby halving formal employment in this sector (LRS, 1999:1). The South African construction industry has faced long-term decline for several decades due to economic recession and high interest rates. With an unpredictable pattern of growth and contraction in the sector, employers responded to falling profits by using labour brokers and subcontractors. Subcontracting became an integral part of the construction sector production processes (ibid).

However, the changes within the construction sector were not unique to South Africa. According to the ILO, "'outsourcing' of labour through subcontractors and other intermediaries is now the norm in most countries" (ILO, 2001:1). And unlike most developed economies women also form part of the unskilled workforce where in India women make up about 30% of the workforce (ILO, 2001:13) and in South Africa constitute about 10% of the workforce. Significant changes in the labour process in many countries indicate that direct employment of the workforce has declined, while the proportion of workers employed through subcontractors and intermediaries, on temporary and casual terms, has increased. Furthermore in South Africa, Kenya, Mexico and possibly also in Brazil the "outsourcing of labour by formal sector firms has also been accompanied by a shift in production from the formal to the informal sector" (ILO, 2001:17-19). As will be demonstrated later, through the case of South Africa, the changes in the production process were integrally linked to a strategy by construction MNCs to overcome the crisis of profitability.

The post-1994 period in the South African economy is characterised, perhaps most powerfully, by the fact that the economy recorded one of its longest periods of positive economic growth in the country's history. From 1993 until 2013, South Africa GDP growth rate averaged 3,2 % reaching an all-time high of 7,6% in 1996.[2] Until the last quarter in 2008 South Africa had seventeen years of positive economic growth. In 2006 the construction sector in South Africa recorded 13,3% growth, the highest growth of all sectors in the economy. The industry has experienced significant growth during the 2000/08 period, with a concomitant increase in both formal and so-called informal employment. Company profit increases in general were growing at a faster rate than compensation to employees, and income inequalities were widening on a racial basis (LRS, 2009:4). In 2013 the construction sector recorded a total employment of 1,204,000 in both formal (820,000) and informal (384,000) employment. The construction sector's annual contribution to gross domestic product (GDP) was 2,9% in 1994 and 3,1% in 2013 averaging at 2,3% of GDP over a 20 year period. Save for 1999 and 2000, the construction sector had 18 years of positive growth (Statistics South Africa, P0441: 2013).

Figures from Statistics South Africa illustrate that before-tax profit in the construction industry was 11,704,000 million in 2011, up 21% from 2007, R9,649 million, up 143% from

[2] See, Trading Economics: http://www.tradingeconomics.com/south-africa/gdp-growth.

R3,968 million in 2004, when a similar large-scale survey was previously conducted (Statistics South Africa, P5001: 2004, 2007, 2011). Over the past 20 years construction workers on the other hand experienced a real annual average decline in wages from 1994-2013 of -2 percent.

In order to understand the nature of the transformation of the construction sector we shall have to pay attention to the policy measures adopted by the state to intervene in the construction sector.

1.3 The evolution of construction sector policy

Formal apartheid officially ended with the first democratic elections held on 27 April 1994 with an overwhelming victory for the African National Congress. The development of South Africa's post-apartheid construction architecture started as early as May 1994 as an outcome of a meeting between the Construction Industry Development Board of Malaysia and the newly appointed special advisors to the South African Minister of Public Works. Towards the end of 1995, the Department of Public Works (DPW) released a position paper for consideration by government, entitled "Establishing an enabling environment to ensure that the objectives of the RDP and related initiatives by Government are realised in the Construction and Allied Industries" (Department of Public Works, 1999:8). This was followed by a "Captains of Industry Initiative" that in 1996 provided extensive research into the criteria for an "enabling environment for the construction industry development" and, subsequently, a construction stakeholder forum to debate the development agenda of government was established (CIBD, 2004:9).

As an outcome of this process the Green Paper was released for public comment in November 1997. The policy process resulted in an engagement between the government departments and industry sectors, a process that had been led and facilitated by the Inter-Ministerial Task Team on Construction Industry Development. The Inter-Ministerial Task Team was at the time drawn from industry and government, and supported by a Public Works Secretariat, which engaged intensively in consultation with industry stakeholders. Brian Bruce was the chairperson of the Inter-Ministerial Task Team and later became the first Chairperson of the Construction Industry Development Board (Department of Public Works, 2007:9; CIBD, 2004:6). Bruce was, at the time, the Chief Executive Officer of Murray and Roberts (M&R) one of the largest construction companies in South Africa (ibid).

Following on the engagement of the Construction Green Paper of 1998, a workshop "Planning for Construction Industry Development" comprised of 60 public and private stakeholders adopted a resolution to:

- Establish a Construction Industry Development Board;
- Establish a Register of Contractors;
- Schedule Public Sector spending through the Medium Term Expenditure Framework (MTEF) process;
- Support programmes to develop the Emerging Sector; and
- Achieve other outputs which readily impact on industry performance.

This process resulted in the White Paper, “Creating an Enabling Environment for Reconstruction, Growth and Development in the Construction Industry” of 1999 (Department of Public Works, 1999:10). The White Paper identified its strategic aim “of a construction industry policy (which) is to establish an enabling environment in which the objectives of reconstruction, development and growth are realised in the industry”. It further elaborated that:

> Our vision is of a construction industry policy and strategy that promotes stability, fosters economic growth and international competitiveness, creates sustainable employment, and addresses historic imbalances as it generates new industry capacity for industry development.

After the White Paper’s launch, the Task Team reached the following milestones: (CIDB, 2004:10)

- The Construction Education and Training Authority was established in 2000 to give effect to skills development that is accessible, equitable and promotes the sustainable formation of the industry's skills base. The skills framework includes the levying of one percent of payroll through the Skills Development Levies Act of 1999;
- Six Councils regulating the built environment professions and the overarching Council for the Built Environment was established in 2001 to promote greater coordination, development of the professions and their enhanced contribution to national development;
- The Public Finance Management Act was passed in 1999 and three-year Medium-Term Expenditure Framework (MTEF) budgeting was introduced to enable multi-year project planning and expenditure;
- The Construction Industry Development Board (CIDB) was established in 2001 to provide the necessary leadership for an enabling regulatory and development framework that enhances the role of stakeholders in industry growth, delivery, performance and transformation.

The CIDB as an organisation places no real emphasis on the importance and role of labour or other civil society organisations. While labour is invited as part of the stakeholder meetings, there is no labour representative on the board which means that labour has very little strategic influence within the organisation. From the onset, Black Business accused the organisation of upholding the status quo within the industry and catering to the large, white-owned companies that existed before 1994 (McCutcheon, 2003:8).

Based upon the Broad Based Black Economic Empowerment Act (Act no. 53 of 2003) a Construction Sector Charter on Black Economic Empowerment was gazetted in 2007 to redress the historical "racial income and social service inequalities […] in which the vast majority of South Africans remain excluded from ownership, control and management of productive assets and from access to training in strategic skills". The key targets to be met within a seven year period (to December 2013) was a 30% ownership held by black people with 30% voting rights and 10% economic interest held by black women with 10% black women having voting rights.

On the side of labour policy and legislation the then Minister of Labour, Membathisi Mdladlana, himself the former President of the South African Democratic Teachers' Union, launched an investigation in 2004 into the construction sector as the first step in promulgating a national civil engineering sectoral determination to set employment standards and minimum wages in the sector or areas where there were no bargaining councils (Ministry of Labour, Press Release: 20 January 2004). In terms of the Basic Conditions of Employment Act (Act no. 75 of 1997), the Sectoral Determination 2: Civil Engineering Sector sets the terms and conditions of employment covering the following areas: minimum wages of all employees, year-end-bonus, annual leave, hours of work, inclement weather, severance packages, family responsibility leave, maternity leave, sleep out allowance and cross border allowances. Since 2014 a civil engineering bargaining council has been set up for centralised bargaining.

In principle, the Labour Relations Act 66 of 1995 favours voluntary collective bargaining. Currently, there are six regional bargaining councils in the building industry, namely, Cape Building Industry Bargaining Council, the North and West Boland Building Industry Bargaining Council, the Kimberly Building Industry Bargaining Council, The Bloemfontein Building Industry Bargaining Council, the Southern and Eastern Cape Building Industry Bargaining Council and the East London Building Industry Bargaining Council. Collective bargaining agreements are therefore legally binding and can be extended to non-parties through a request made to the Minister of Labour (LRS, 2009:1-2).

Thus, collective bargaining in South Africa's construction industry is highly fragmented and divided into a civil engineering sector and building sector at a national, provincial and local level.

Chapter 2

The Transformation of the Construction Sector

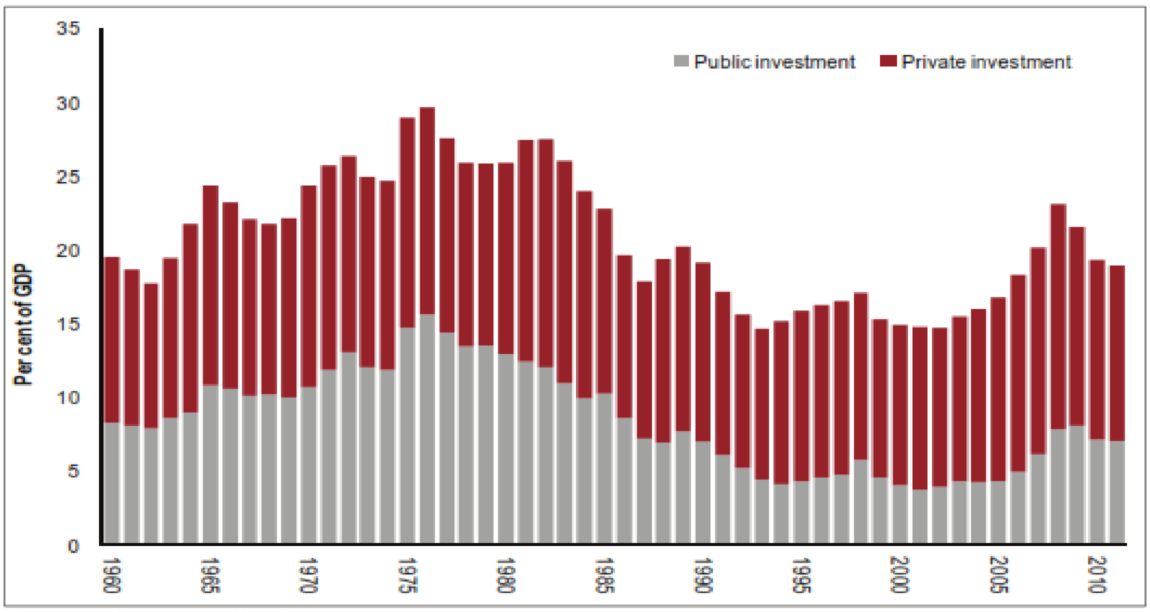
2.1 Overview of the transformation

In terms of the Reconstruction and Development Programme (RDP) the government's commitment to infrastructure investment set out to achieve economic growth and to address the infrastructure backlog emanating from apartheid. The industry was to ensure that it was reaching into every South African community, facilitating the objectives of providing potable water, sewerage disposal, electrification, health, education, housing and productive employment. The industry was pivotal to the extension of transport and communication infrastructure, import and export, industrial development, and an economically active population. It is in the context of these challenges that the government proclaimed the construction industry as a national asset to be developed, maintained and transformed – and gave impetus to these aims through a range of policy, institutional and practical initiatives (CIDB, 2004:6).

Figure 1 (next page) shows that public investment peaked in 1976 and was followed by a decline until 1994. The decline was due to the fact that the apartheid state began to channel more funds into state security to suppress the rising waves of the militant working class struggle that were unfolding against the apartheid-capitalist regime. According to the Twenty Year Review: South Africa 1994 - 2014, delivered by President Jacob Zuma, capital expenditure as a percentage of GDP was higher during apartheid than during the 20 years of democracy. However, the resulting GDP growth was comparatively lower and social infrastructure was generally in bad shape due to skewed racial policies. Furthermore, the state of the inherited economic infrastructure meant that the democratic state could not support faster economic growth (The Presidency, 2014:104).

The post-apartheid government set out to reverse the post-1976 decline in investment and correct the apartheid imbalances. Between 1994 and 1998, public spending was channelled to the immediate priorities identified under the Reconstruction and Development Programme. The post-apartheid period was marked by increased investment in social and housing infrastructure until the early 2000s. With a rapidly growing economy the government shifted focus towards economic infrastructure from the mid-2000s which is encapsulated in the 2006 Accelerated and Shared Growth Initiative for South Africa (AsgiSA).

Figure 1: Public and Private-sector investment as share of GDP, 1960-2011



Source: South Africa National Treasury, 2013 Budget Review

According to the Presidential Review (2014), the RDP provided a framework for "radical social and economic transformation". In terms of social infrastructure the report states that over the past 20 years:

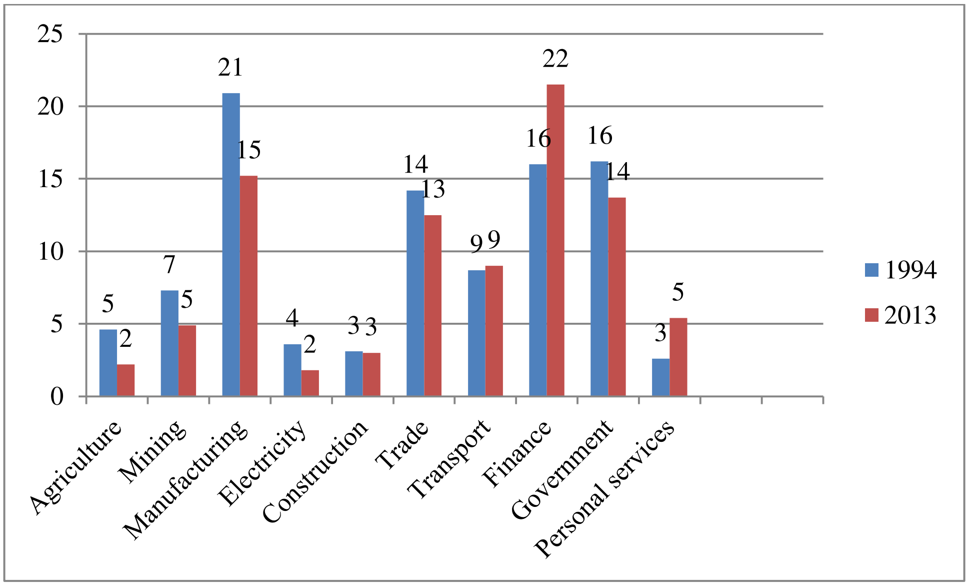
- 2 761 schools have been built;
- More than 1 500 healthcare facilities have been constructed;
- Eighteen new hospitals have been built and more than 400 renovated;
- Sanitation increased from 50% of households in 1994/95 to 83% of households in 2011/12;

- Access to running water increased from 60% of households in 1994/95 to over 95% of households in 2011/12;
- Electricity increased from around 50% of households in 1994/95 to 86% of households in 2012/13;
- About 2,8 million government-subsidised houses and over 875,000 serviced sites were delivered;
- 12,5 million people gained access to accommodation and an asset;
- 56% of all subsidies allocated have been to woman-headed households;
- The proportion of people living in formal housing increased from 64% in 1996 to 77,7% in 2011;
- The value of the formal housing market has increased 13-fold from R321 billion in 1994 to over R4 trillion in 2014;
- The estimated value of the state-subsidised housing market is about R300 billion, representing a threefold increase in the value of investments by the state since 1994, as a result of increasing property values.

In terms of economic transformation the Twenty Year Review states that between 1980 and 1994, the economy grew only 1,2% a year. The share of investment of GDP dropped from 27% in 1981 to 15%in 1993. Public sector investments shrank from 12% to 4% of GDP between 1981 and 1993, while private-sector investment fell from 15% to 10% of GDP. This rapid decline in public investment had a negative effect on economic infrastructure such as rail, ports and power supply.

A series of economic policy documents have focused on sustainable and diversified economic growth. In 1994 the democratic government adopted what can be considered a social democratic policy in the form of the Reconstruction and Development Programme. By 1996, while aspects of the RDP were retained, a subsequent series of neo-liberal economic policies followed. These are the Growth, Employment and Redistribution (GEAR): A Macroeconomic Strategy of 1996 through to the Accelerated and Shared Growth Initiative for South Africa (Asgi-SA) of 2006 (which focused on economic infrastructure and skills development), the New Growth Path of 2010 (economic diversification), and the National Development Plan of 2012 (focused on long-term investments and job creation). The outcome of these policies was a growth rate of 3,2% a year on average from 1994 to 2012. This has resulted in the transformation of the South African economy from a GDP of USD 136 billion in 1994 to a GDP of USD 384 billion in 2012.

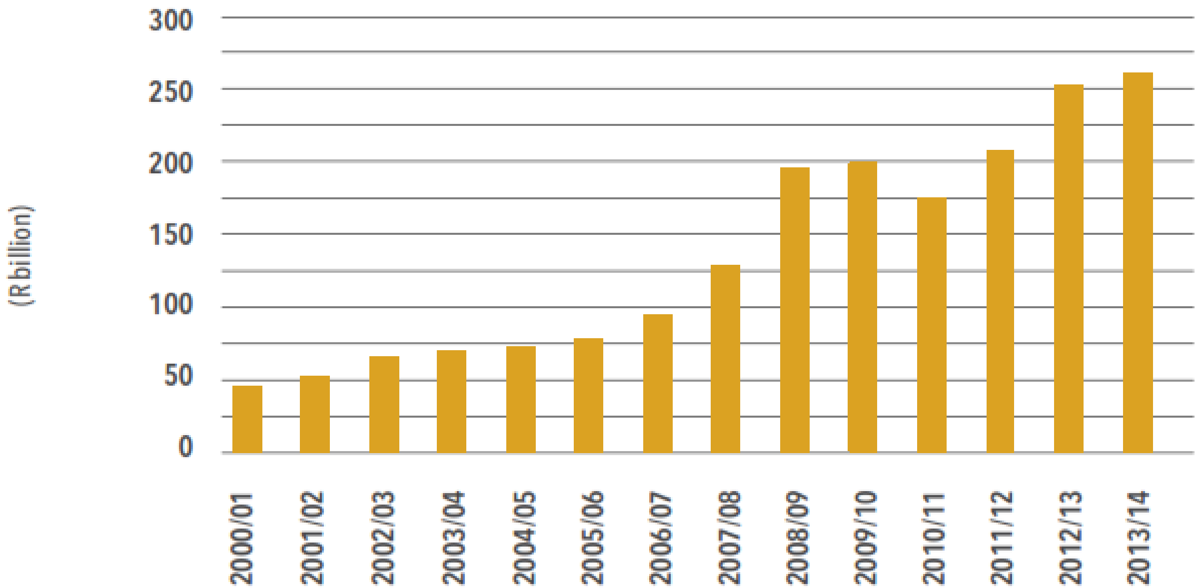
Figure 2: Comparison of Industry Contributions to GDP 1994 & 2013



Source: Statistics South Africa, GDP. Own calculations

However, public spending has grown from 27,5% of GDP in 1994 to 30,1% of GDP in 2013. (National Treasury Budget Review 2014)

Figure 3: Public-sector infrastructure expenditure estimates, 2000/01-2013/14



Source: The Presidency, Twenty Year Review (1994-2014)

Since the R50 billion, 2000/01 public sector infrastructure spending to over R250 billion spent for 2013/14, an increase of 400%, further increases are envisioned in terms of the National Development Plan until 2030. Currently investment in transport and logistics (41%) is the largest component of the public infrastructure programme. Energy (22,2%) is followed by water and sanitation (13,2%) while spending on social services (13,7%) and central government administrative services made up of 2,7% (The Presidency, 2014:105-106).

According to the National Treasury 2013 Budget Review, economic infrastructure accounted for 80.2% of MTEF while social infrastructure accounted for 16.6% of infrastructure estimates. The Treasury Budget Review of 2014 however concluded its 20 Year Review with these candid remarks:

> To overcome apartheid's spatial legacy, the provision of housing and social infrastructure needs to be improved, and planning frameworks across government strengthened. Government recognises that service-delivery shortcomings and social marginalisation are widespread and have led to heightened tensions. While South Africa faces resource constraints, urgent concerns in communities across the country – from the lack of housing to water service failures – require improved accountability, responsiveness and effective leadership.

Despite the levels of delivery of social infrastructure the backlogs had increased from 1,5 million housing units in 1996 to 1,8 million units in 2001 and then to 2,1 million by 2013 (Ndenze, 2013).[3] Furthermore, the delivery of social infrastructure has been based on the World Bank policy of cost-recovery resulting in widespread practice of disconnecting water (alternatively supplied free through a trickle system) and electricity due to non-payment.[4] It is estimated that 10 million South Africans had experienced water cut-offs due to non-payment of water bills (McDonald, 2003).[5] The impact of the cost recovery policies were especially severe as it proved to be the source of South Africa's biggest cholera outbreak in history with the disease infecting 113,966 people and claiming 259 lives between 2000 and 2002 (Cottle and Deedat, 2002:3). Furthermore, the production of the ground breaking pre-paid water and electricity meters were developed by Conlog, a wholly owned black company at the time which had the backing of the then President, Thabo Mbeki (Cottle, 2004:21). Thus the paradox of extending the ownership of productive assets through the policy of black empowerment in social services technology in a period of neo-liberalism had a far less than progressive implication as we will see a similar impact within the construction sector in Chapter 3. Thus, due to the crisis of affordability and the lack of access to adequate social services for the working class, there has been consistent and increased levels of social unrest in black communities across South Africa.

2.2 Black Economic Empowerment (BEE)

The post-1994 period saw the internationalisation of South African construction services directly as a result of the passage to a democratic dispensation as sanctions were dropped worldwide against South Africa. This new situation paved the way for the internationalisation of South African multinational corporations including that of the construction sector. Almost immediately the Department of Public Works (DPW) included preferential procurement in 1996 which was pioneered in the construction industry and informed the Preferential Procurement Policy Framework Act (Act No. 5 of 2000) (CIDB, 2004:9). Prior to this Act, all the major

[3] See, http://www.iol.co.za/news/politics/housing-backlog-will-cost-r800bn-1.1595609#.U_T9LvmSySo
[4] Cost recovery is the practice of recovering most if not all of the costs associated with providing a particular service.
[5] See, http://www.iol.co.za/news/south-africa/water-attack-the-problem-not-the-data-1.107882#.VD1CiPmSySo

construction companies became signatories to what became known as the Construction Charter, which made provision for BEE in 1996.[6] Since then the Construction Sector Charter on Black Economic Empowerment was promulgated in 2007. The Charter aimed to ensure a 25% black ownership target would be reached by December 2013.

Table 1: Registered contractor grade by tender value and black ownership

Designation	Tender Values	Black Owned	%	Total Grades	Characteristics
1	R200,000	56 261	89.94	62 554	local
2	R 650 000	2 977	93.06	3 199	local
3	R2,000 000	1 051	90.60	1 160	local
4	R4,000 000	1 364	82.22	1 659	local
5	R6,500 000	1 005	76.83	1 308	local/regional
6	R13,000 000	982	74.79	1 313	local/regional
7	R40,000 000	360	60.50	595	provincial/regional
8	R130,000 000	101	46.12	219	provincial/regional
9	No Limit	10	12.20	82	national/international
Total		64 111	88.93	72 089	

Source: CIDB contractor register

In 1985 there were 13 451 construction companies. According to the Construction Industry Development Board (CIDB) data base, there are currently 72,089 registered contractors of which 64,111 (88,93%) are black owned[7] and 7,978 (11,07%) are white owned. Of the largest contractors in grade 7-9, black ownership has increased to 360 (60,5%) of the 595 contractors. However, if we take grade 9 where the contracts are highest in value at R130 million and over, the percentage of black ownership is dramatically reduced to 12,2%. It is however, important to note that black ownership of CIBD registered contractors is defined as ownership control greater than 50%.

The National Treasury Budget Review of 2013 indicated the medium-term expenditure framework (MTEF) period, budgeted and approved public-sector projects total R827 billion.

[6] See, http://www.grinaker-lta.com/about-us/construction-charter.

[7] Black ownership of CIDB registered contractors is defined as ownership control of 50% or more.

Table 2: Breakdown of high grade contractor by ownership 2014

Grade	Tender Value	Black	White
7	R40,000,000	360	235
8	R130,000,000	101	118
9	No Limit	10	72
Total		471	425

Source: CIDB data base, own calculations

The CIDB reported that in 2013 approximately 80% of public sector tenders were awarded by contractors in grades 7 to 9 and that less than 10% of public sector contracts are typically issued in tender grades 2 to 4. However of the 82% of tender awards for civil engineering for grades 7-9 about 40% went to grade 9 contractors. While 77% of tender value of general building went to grades 7-9, 15% were awarded to grade 9 level contractors. Contractors at the lower scales are generally subcontracted by the large contractors through sub-contracting arrangements.

A Press Statement by the Department of Trade and Industry noted that the first baseline report for the construction sector was released in 2014 by the Construction Sector Charter Council (CSCC). According to the Minister,

> The report shows that there is little participation of black people as owners in large companies. In 2011 over 393 Construction Measured Entities has shown less than 10% black ownership. Most of the large entities are hovering around the 10 percent ownership level which is lower than the 25 percent ownership target. This means that black people in the sector are not participating as owners in the large construction entities.

From both CIDB and CSCC reports it is overwhelmingly clear that white construction sector capital during the last twenty years has enjoyed the largest share of government tender awards and has been the main beneficiary of the tender system. It was their acceptance of a non-racial order together with government's recognition of the need for better social infrastructure for the black population prior to 1994 that secured for the predominantly white-owned construction sector, their place in the new, democratic South Africa. Their willingness to embrace the changes assisted to ensure that they were well positioned to continue and increase their capital accumulation over the past twenty years.

2.3 Apartheid and the crisis of profitability in the construction sector

As indicated earlier, construction investment peaked in 1976 and was followed by a decline until 1994 resulting in a crisis of profitability in the construction sector. The sector as a whole had shrunk to half its size since the 1976-80 boom. Gross fixed investments as a percentage of real GDP fell from 8,5% in 1973 to 3,2% in 1991 (Krumm & West, 1992:32).

A look at the 1992 profit levels of the large construction companies confirms the downward spiral in profits. Grinaker's operating profit plunged 61% from R120 million to R39,6 million (Gqubule, 1992:32). Basil Read reported its first loss in a decade when its operating profit fell 66% from R14,3 million to R4,9 million, including a drop of 45% in housing income (West, 1992a). The Concor Group's pre-tax profit remained virtually unchanged at R18,3 million from R18,9 million the previous year (West, 1992b). Group Five's pre-tax profit declined by nearly a half from R45,7 million to R24,03 million (West, 1992c). Corobrik, a brick manufacturer's supply of bricks fell by 50% due to a plummeting housing and building market (Galli, 1992:32). Stock and Stocks reported a pre-tax profit increase from R37,2 million to R44,9 million. In the same period however Murray and Roberts only reported a dip of 3% as a result of its income derived from its prior financed takeovers (McNulty, 1992:32). Furthermore, around 300 building firms faced closure in 1992 with BIFSA reporting an increase of 36% in liquidations in its Annual Report (Argus, 28 October 1992). BIFSA also expected around 600 liquidations in 1993 (Wang, 1993) with the giant firm Basil Starke Holdings (Pty) Ltd being liquidated (Rowley, 1993:32).

At the 87th BIFSA Congress in 1992, harsh criticism was levelled by Ian Hetherington, the then Managing Director of Job Creation South Africa who stated that the rules of the game had been set, "so that most of the population are excluded from playing". The Association stood accused of crony capitalism where (Galli, 1992:32),

> [A] few large companies have allied them(selves) to the state. By prolonged, skilful and expensive lobbying they have persuaded the state to protect their narrow

> interests…Wherever it is enforced, the mixture of statism and crony capitalism leads to an explosion of the informal sector, as ordinary people seek a living denied them in a stagnant economy of the establishment.

At this time, some 50 000 black contractors were said to be forced into an informal sector relation because of the harsh entry barriers created by BIFSA (Rowley, 1992a). One of the key outcomes of the BIFSA Congress was to lobby the government to make a commitment to support the industry either through subsidies, tax incentives or a drop in the interest rates and the civil engineering sector made a call for the fixing of a GDP allocation to infrastructure not lower than 2% of GDP (Rowley, 1992b).

At this stage, the engineering sector in particular, started to show a more keen interest in developing labour intensive projects for Township development and roads infrastructure on a national level as employment declined from 134,000 in 1982 to 55,000 in 1992 within the engineering sector. Graham Power, the chairperson of four organisations within the industry, argued that "Engineers, universities and technical colleges would have to move away from traditional First-World techniques and teachings, which are largely based on mechanisation, without allowing standards to drop". This he said was because "labour intensive projects have proved highly successful in other countries and have made a contribution to alleviating poverty, raising the level of skill and training and helping to revive a flagging economy". This approach developed by the engineering industry had been given the full support of the leading trade union federation, the Congress of South African Trade Unions (COSATU) (Wood, 1992:32).

The crisis of profitability also saw the closer cooperation of the organised sections of the construction sector as a whole. At this stage there were plans to form a national body for the sector which would see the cooperation of the Building Industries Federation of South Africa (BIFSA), South African and Civil Engineering Contractors (SAFCEC) and the African Builders Association in October 1992. The key objectives were: (Krumm, 1992:32)

- To serve as a common platform and common lobby for the broad industry;

- To be a launching pad for talks and business with other African nations;
- To draw the major players into a single national body.

The lobbying efforts of the civil engineering industry bore fruit as the Department of Manpower of the then apartheid government gave a firm undertaking to support the labour-based programme and a working plan was submitted by the engineering sector for approval by Cabinet (Rowley, 1992). By 1993 BIFSA had secured agreement from the then apartheid housing ministry to build 300 000 affordable low-cost homes for the black population with an expected 1, 4 million jobs to be created. The state had provided some R2bn for the housing schemes in 1992 (Chester, 1993:32) and R2, 5bn in 1993 (Jeans, 1993:32). At the same time 70 000 jobs had been lost in construction from 420 000 in 1992 to 350 000 in 1993 (Duffy, 1993:32).

What is interesting to note at this point in the transformation of the construction sector, was the emphasis being placed on rolling out social infrastructure prior to the RDP, especially in the housing market of the formerly blacks only townships. This was a new way of capturing and promoting capital accumulation in a country where infrastructure was highly racialised and inequitable. On the other hand, the industry had a significant but declining concentration of wealth centered in construction monopolies which had no means of expansion due to apartheid sanctions which restricted business beyond South African borders, where the African continent was open for exploitation and new markets were available.

The political shift in the thinking of the construction capitalists lies in the understanding that apartheid would soon perish as the then President FW de Klerk had released Nelson Mandela from prison, unbanned the ANC, the South African Communist Party and the Pan Africanist Congress in 1990. The construction industry was also threatened by the extent of working class militancy which they lamented had resulted, "(In the) past five years, more man-days have been lost in strikes and stayaways than the previous 75 years of South African history" (Argus, 1992:32).

Apartheid had placed a huge constraint on capital's mobility and accumulation in the construction sector and support for apartheid's demise had gained dominance within the South African white ruling class. A non-racial future was at hand and this would allow the insertion of the construction monopolies into a global market of construction tenders.

The reward for moving towards a democratic South Africa was immediate with the then United States of America's President elect, Bill Clinton, pledging USD 80 billion and the Japanese government pledging USD 86 billion for social and economic infrastructure. The reflationary package was seen as a Keynesian strategy which was to be led by the public sector for the creation of schools, hospitals and other buildings, especially in rural areas where poverty was at its worst (Betty, 1993:32).

The acceptance of a non-racial order and appreciation of the need to deliver social infrastructure set the construction industry on a course of systematic cooperation with the ANC which had a mandate to implement the Reconstruction and Development Programme. The construction industry's direct role in influencing and shaping the initial construction aspect of the RDP, and its consequent policy formulations henceforth, cannot be underestimated as are the pre-1994 initiatives to 'save' the industry through the provision of social infrastructure.

We also observe at this point that in 1996, two years after the RDP had been launched, the government changed course and unveiled its new macro-economic strategy named, "Growth, Employment and Redistribution (GEAR)", a competitive, export-led macro-economic strategy that included fiscal restraint, tight monetary policies and wage restraint. GEAR was a classic neo-liberal programme with a smack of social democracy. The key aspects of the RDP were retained in GEAR while, at the same time, including reforms for more labour flexibility, improved productivity and increased training and employment of the unskilled (Hoogeveen & Ozler, 2006:60). Despite President Mandela's attempts to get the largest trade union federation COSATU to adopt GEAR at its 6th National Congress in 1997, the attempt failed and GEAR was unanimously rejected. John Gomomo, the COSATU President between 1991 and 1999, was then cited in the press as saying that "(GEAR,) left unchallenged, it can only mean more poverty and the increase of the gap between the rich and the poor" and in so doing government would be curtailed from addressing the legacy left by apartheid (kaNkosi, 1997).[8] The labour federation however, maintained its alliance with the ruling party in an understanding that it would be more "labour friendly".

Labour however, had underestimated the transformation of the ANC into a party of monopoly capital. In the Business Day of 18 August 1995, Dorion Wharton-Hood, the then head of Liberty Life, a leading financial monopoly, made this insightful remark, even prior to the adoption of GEAR (Lehulere, 1995: vii):

> There was fear the new government would be more interventionist but the reverse has happened. We are better off on two counts: the new government is more enlightened than predicted and is more market orientated.

The GEAR policy would thus serve as an anchor for the rapid growth in concentration and centralisation of capital in the construction sector through:

- an expansionary public infrastructure investment programme to provide for more adequate and efficient economic infrastructure services in support of industrial and regional development and to address major backlogs in the provision of municipal and rural services;
- a structured flexibility within the collective bargaining system to support a competitive and more labour-intensive growth path, including greater sensitivity in wage determination to varying capital intensity, skills, regional circumstances and firm size;
- reduced minimum wage schedules for young trainees, reducing indirect wage costs; and increasing the incentives for more shifts, job sharing and greater employment flexibility and

[8] See, http://madiba.mg.co.za/article/1997-09-19-solidarity-in-opposition-to-gear

- a social agreement to facilitate wage and price moderation, underpinning accelerated investment and employment and enhanced public service delivery.

The construction sector thus began its transformation in earnest within an ANC government policy framework that was actually “more market orientated” than capital had expected. It is in the context of global economic crisis, on the one hand, and the twin project of the delivery of social and economic infrastructure that the government proclaimed the construction industry as a national asset to be developed, maintained and transformed (CIDB, 2004:6). The construction sector was therefore seen as the key economic sector to give effect to desired transformation in which South Africa’s construction monopolies had a central role to play.

2.4 Post-apartheid transformation of the construction monopolies

2.4.1 The concentration and centralisation of capital

It was European monopoly capital that gave rise to giant corporations in South Africa starting in the gold and diamond industries during the 1880s. It was only during and after World War II that the South African economy was to have expansive capitalist relations in the mining, agricultural and manufacturing sectors which encouraged a process of concentration and centralisation of capital (Innes, 1993:2).

For the individual capitalist, concentration means an increased portion of social wealth concentrated within the company. By centralisation we are referring to a continuous process of mergers and acquisitions within which capital seeks to maintain and expand its market share. The concentration and centralisation tendencies of capital operate differently during periods of economic recessions and booms.

In South Africa, it was only in the 1950s that a few monopoly corporations came into being “that were either a product of state investment or of foreign capitalist investment or of investment by the mining monopolies" (Innes, 1993:4). For example, it was the mining industry that gave rise to Pretoria Portland Cement (PPC) which is still the leading supplier of cement in Southern Africa today. After the boom years of the 1960s large corporations merged with each other to protect themselves from the recession wherein centralisation of capital became the dominant tendency rather than concentration. The extent of cartelisation can be seen clearly by the 1977 Monopolies Commission Report where (Innes,1993:8):

- A mere 5% of the total number of firms in the manufacturing sector between them accounted for 63% of the sector's turnover;
- Only 5% of those in the wholesale and retail sector accounted for 69% of turnover;
- 5% of those in the construction industry accounted for 63% of turnover and
- 5% in transport accounted for 73% of turnover.

The Competition Commission of South Africa's Ten Year Report indicates that the construction industry in South Africa experienced an upsurge in centralisation (merger activity) between 1999 and 2008 as a result of increased government expenditure and investment in infrastructure. The centralisation takes the form of horizontal and vertical mergers. Horizontal merger is a business consolidation that occurs between firms who operate in the same space, often as competitors offering the same goods or service. A vertical merger occurs when two or more firms, operating at different levels within an industry's supply chain, merge operations.

In the last ten years merger activity in this sector has largely been driven by vertical integration by the five largest firms in the construction industry. Horizontal mergers have included WBHO (Pty) Ltd's acquisition in 2007 of Let Construction (Pty) Ltd, Murray & Roberts' acquisition of Concor Ltd in 2005. Other horizontal transactions include Alpha/Slagment in 2004, Group Five Construction/Quarry Cats in 2006 and the Stefanutti & Bressan Holdings mergers with Skelton & Plummer Investment in 2007 and then with Stocks Limited in 2008, the Basil Read mergers with Roadcrete Africa in 2008 and V&V Holdings in 2009 and Lafarge South African Holdings/Ash Resources in 2009 (Competition Commission, 2009: 21-22).

Vertical mergers have been largely seen in Murray & Roberts' acquisition of Oconbrick Manufacturing and Others, manufacturers of various types of bricks, in 2005. Group Five's vertical mergers saw the acquisition of Quarry Cats, a downstream supplier of sand and stone, ready-mix concrete and mortar, as well as crushing services.

These centralisation tendencies are also a reflection of the growing dominance of the concentration tendency of capital that came with the huge investment growth in infrastructure projects. Through this process, the large apartheid era construction companies have increased their market share through the centralising activities wherein which large scale bankruptcies of smaller firms continued to take place.

According to Engineering News, construction firms have not benefitted equally from the infrastructure and housing boom, with the majority of smaller emergent firms being marginalised from ever winning a major contract. A tiny minority of registered contractors (about 0,2%) tend to win the lucrative government tenders (Engineering News, 2007).

In 2004, large enterprises (those with a turnover greater or equal to R26 million) accounted for 55% (R55,185 million) of the total income of the industry.

In 2007 large enterprises (those with a turnover greater or equal to R26 million) accounted for 56,9% (R96,251 million) of the total income of the industry. The large contractors were dominant in civil engineering projects (84%) and least dominant in plumbing (13%).

In 2011, large enterprises (those with a turnover equal to or greater than R52 million) generated R171,098 million or 64% of the total income of the construction industry, followed by medium enterprises (R57,229 million or 21%), and small and micro enterprises (R38,687 million or 15%).

If we take the CIDB database grade system we can safely assume that the large contractors fall in grades 7-9 where tender values start at R40 million with no limit in grade 9. In terms of current registered contractors these grades collectively total 896 or 1,2% out of a total of 72,089 contractors.

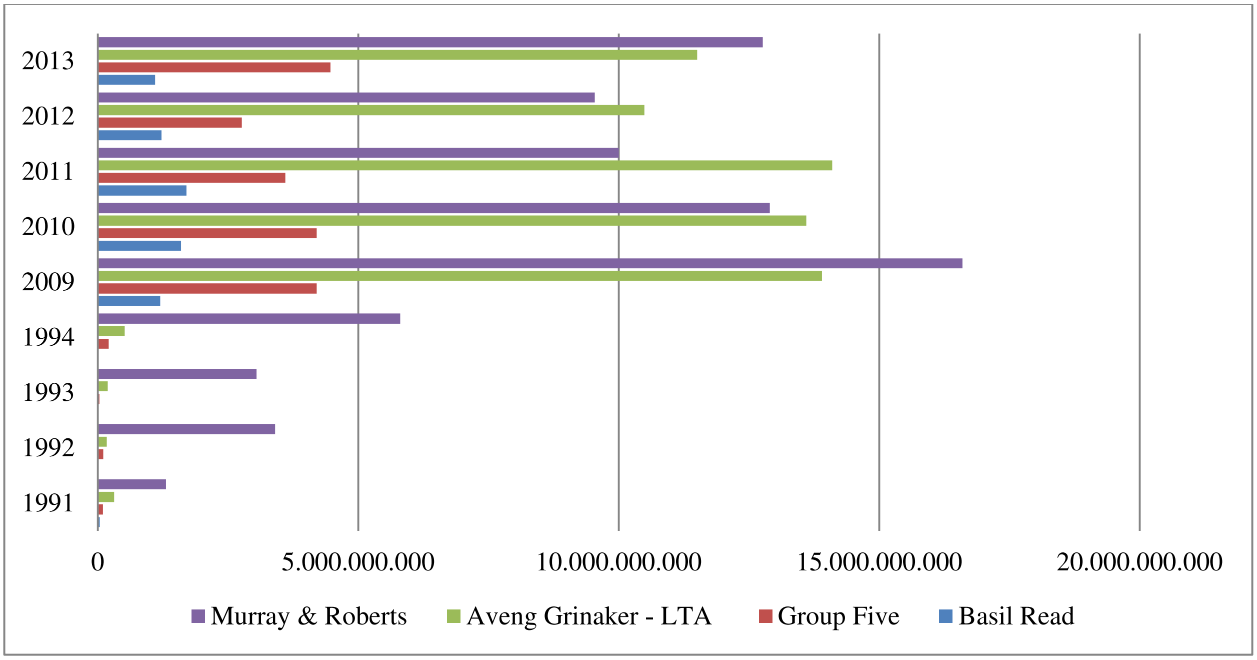
We can therefore deduce that in 2011, 64% of turnover in the construction industry went to 1,2% of the total registered contractors. Thus in 1977, 5% of those in the construction industry accounted for 63% of turnover and in 2011, 1,2% of construction companies accounted for 64% of industry turnover of all registered contractors in the construction industry. Furthermore, the listed construction sector companies have nearly halved over the twenty year period. In 1994 there were 23 industrial-building and construction companies listed on the Johannesburg Stock exchange (JSE) (McGregor's Who Owns Whom, 1995). According to the CIDB (2004) there were only 16 construction companies listed in 2004 and by 2013 there were only 12 'heavy construction' companies listed on the JSE (Who Owns Whom, 2014).

The trend since apartheid can thus be viewed as one of an increasing concentration and centralisation (monopolisation) of capital amongst the established apartheid era construction companies.

2.4.2 The restoration of profitability within the construction sector

The concentration and centralisation tendency of capital accumulation, itself an outcome of capitalist competition, is best expressed when looking at the market capitalisation within the construction sector as it "reflects the organic growth or regression, merger and acquisition activities and market expectations about the future" (PWC, 2013:5).

Figure 4: Market Capitalisation of selected construction companies 1991-2013 (R' billions in current prices)



Source: McGregor, Who Owns Whom (1992-1995), PWC (2013)

It was Murray and Roberts (M&R) the second oldest[9] (112 years old) of the construction companies that was able to perform the best through its merger and acquisitions projects in the early 1990s. The massive outlay of social and economic infrastructure, including the internationalisation of South African construction monopolies through the deregulation polices of the post-apartheid government contributed to the increased centralisation within the construction sector. In international terms South Africa's construction companies today would fall within the market share size categorisation of small-cap ($250 million–$2 billion). Under apartheid the very same companies would have been considered in the size of nano-cap (below $50 million) (Investopedia.com).

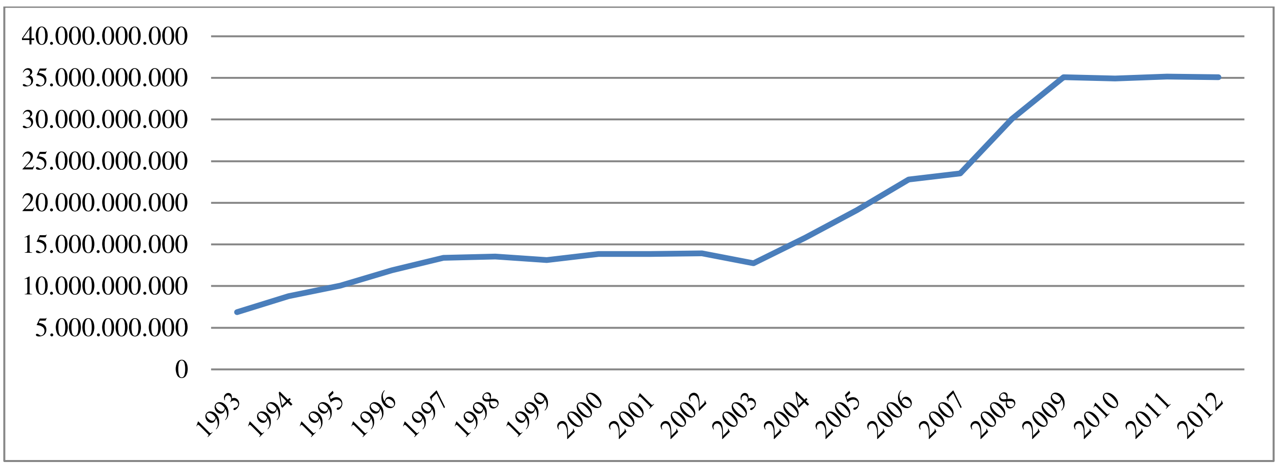
In the next chapter, I will examine the growth of the concentration tendency of capital within the construction industry monopolies in South Africa.   The concentration itself is also

[9] Aveng Group is the oldest construction sector firm in South Africa as it is 125 years old.

experienced as the concentration of a massive reserve army of labour but that will be addressed in Chapter 4.

Figure 5 (below) demonstrates very clearly that the decline in profitability of South Africa's construction sector that started in the late 1970s was effectively being reversed with the ruling ANC taking power in 1994. Between 1997 and 2003, the economic performance of the sector remained stable. But there was a strong increase in profitability of companies in the sector between 2004 and 2009. The gross operating surplus or gross operating profit (gross profit less total operating expenses) for 1993 was R 6,9 billion and R 35,1 billion in 2012 which amounts to a 412% increase in real terms over a 20 year period. In 2003 the real gross operating surplus was R 12,5 billion, almost 2 times higher than in 1993. And in 2012, almost 3 times higher than in 2003.

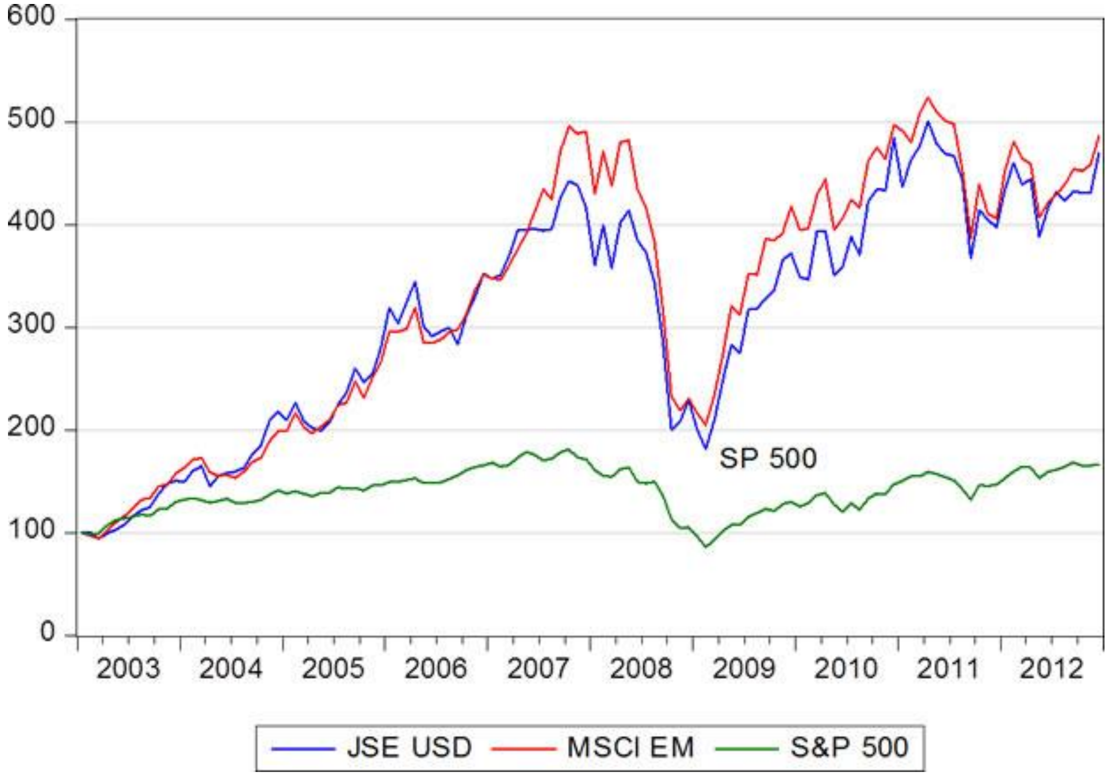
Figure 5: Construction Sector Real Gross Operating Surplus 1993-2012 (Constant 2005 prices)



Source: Statistics South Africa (GDP), Own calculations

In terms of the Global Competitiveness Index (2013-14) South Africa ranks 53rd as the most competitive out of 148 countries. The profitability of South Africa's construction sector is very much in line with the general profitability in the country as a whole as reflected on the JSE (Figure 6). The S&P 500 in the graph shows the returns of the top companies on the New York Stock Exchange and the MSCI EM shows the returns on investments of countries such as Brazil, Russia, India and China. In US dollar terms the JSE returned 16,4% p.a. on average over the last 10 years, very much in line with the equally outstanding returns realised by the average emerging market - represented by the MSCI EM Index - that provided average returns in US D of 16,5% p.a. over the 10 year period. The S&P 500 Index however, realised only 5,8% p.a. on average over the same period (Kantor, 2012).[10]

Figure 6: Comparative returns on Johannesburg Stock Exchange



Source: Brian Kantor (2013)

Figures from Statistics South Africa illustrate that net profit before-tax in the construction industry was 11,704 million in 2011, up 21% from 2007, and R9,649 million in 2007, up 143% from R3,968 million in 2004, when a similar large-scale survey was previously conducted by the institution (Statistics South Africa, 2004: 2007: 2011).

[10] See, https://www.investec.co.za/research-and-insights/newsletters/monthly-view-newsletter/january-2013-articles/equity-markets.html

Table 3: Market Capitalisation at 2013

Company	Market Cap ZAR	Year Listed
Murray & Roberts	12 763 926 589	1948
Aveng Grinaker - LTA	11 504 122 242	1991
WBHO	10 222 080 000	1988
Group Five	4 467 594 880	1974
Basil Read	1 103 598 075	1987

Source: Who Owns Whom (2014)

At the top of the construction chain (Table 3) sit the five large JSE-listed heavy construction companies – the "Big Five" – each of which tendered as a principal contractor for one or more of the 2010 FIFA World Cup stadiums. In order of market capitalisation, these companies are Murray & Roberts, Aveng (owner of Grinaker-LTA), Wilson Bayly Holmes–Ovcon (WBHO), Group Five and Basil Read. Supply companies like Pretoria Portland Cement (PPC) gained significantly through their increased cement sales (Taal, 2011:75).

With an overview of the past 15 years' performance of the "Big 5" we get a better appreciation of the rate of capital accumulation in the construction sector in a context within which the sector has largely been stimulated by pro-market policies and regulations promoted by the South African government.

We now take a look at the pre-tax profits of the "Big 5" construction sector contractors which continue to dominate the sector.

Not all of the income and profits of these companies have been generated through their involvement in construction for the 2010 World Cup as the breakdown of their revenue and profits is not disclosed in the company financial statements. However, it is clear that the "stadium years" have been particularly good for the "Big Five" (Ibid:78).

The announcement in 2004 that South Africa had won the bid to host the 2010 World Cup accelerated the growth of the construction sector, which had already been bolstered by increased investment in the country's infrastructure since 2002 (Cottle, 2009:2). The South African government committed R372 billion between 2006 and 2009 for its infrastructure development programme through the Expanded Public Works Programme (Parliament of South Africa, 2006:145) with an additional R30 billion committed to the 2010 World Cup, in order to ensure the development of sustained employment opportunities and economic growth. Having emerged from a decade-long slump in 2006, the construction sector recorded a 13,3% growth in that year, followed by a further 14,2% growth in 2007, the highest level of growth of all sectors of the economy. The construction sector's annual contribution to gross domestic product (GDP) was 3,1% in 2007, up again to 4% in 2008 (Statistics South Africa, 2008: P5002).

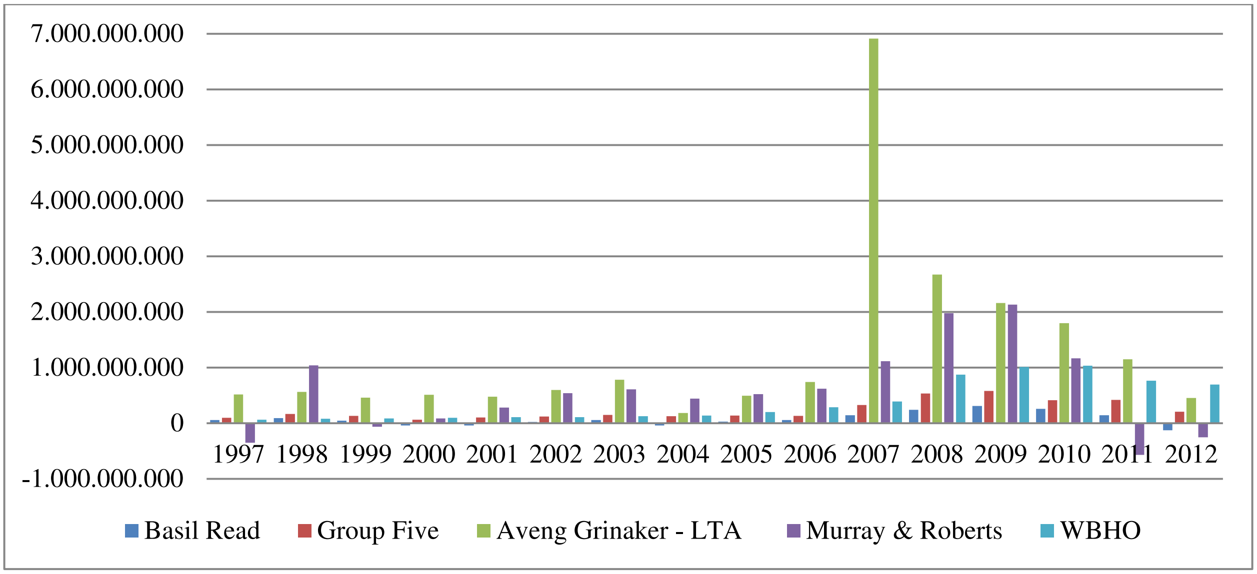
Beyond the 2010 World Cup, a further public investment programme of approximately R787 billion over the three financial years from March 2009 to March 2012 was put in place and in recent years there has been a strong acceleration in investment spending by state-owned enterprises, including Eskom's large power generation projects and several major transport improvement programmes.

Budgeted and approved public-sector infrastructure projects over the next three years currently totals R844,5 billion. The complete list of mega-projects under consideration comprises investments worth an estimated R3,2 trillion. According to government, the provision of financing for social and economic infrastructure that support development will remain a priority for budgets in future years. Government however, admits that, despite consistent growth in public spending over the past decade, rising budget allocations have not been matched by a commensurate improvement in service-delivery outcomes (Ministry of Finance, 2012:5). Despite shortcomings on service delivery, there has been no shortage in the levels of profit reached by the construction sector companies.

Figure 7, below, illustrates how from a pre-tax profit of R57 million in 1997 and incurring several losses in 2000 (-R42m), 2001(-R40m), 2004 (-R43m) and most recently in 2012 (-130m), Basil Read maintained an average profit of R74 million over the 15 year period. However, from

2005 to 2011 (over 7 years) profit levels soared, peaking at R306 million in 2009, and averaging R166 million per year, 191% more than its pre-tax profit in 1997. The pre-tax profit of Basil Read in 2013 (at current prices) was R126 million.

Figure 7: Construction real pre-tax profit 1997-2012 (2005 prices, ZAR)



Source: Labour Research Service MNC data base, Company annual Reports, Own calculations

Over the 15 year period Group Five's real pre-tax profit remained positive and was increasing dramatically especially between 2007-2011; peaking at R580 million in 2009, the average annual profit for the five-year period was R454 million and averages at R229 million for the entire period. The real pre-tax profit of R98 million in 1997 had been overtaken by the R204 million in 2012 or by 108%. The pre-tax profit of Group Five in 2013 (at current prices) was R559 million.

Aveng's profits increased dramatically over the years 2003 to 2007, showing a 1 236% rise at the height of the boom. This is the R6,9 billion in 2007 in contrast to R517 million in 1997. In the following years profits have dropped off from these record highs but, hovering around R1-2 billion between 2008 and 2011. Although the pre-tax profit of Aveng was R540 million in 2012 less than the R517 million in 1997, the average annual pre-tax profit was R1,3 billion over the 15 year period. The pre-tax profit of Aveng in 2013 (current prices) was up again to R1,2 billion. The profit levels remain substantial and well above those of the pre-World Cup period.

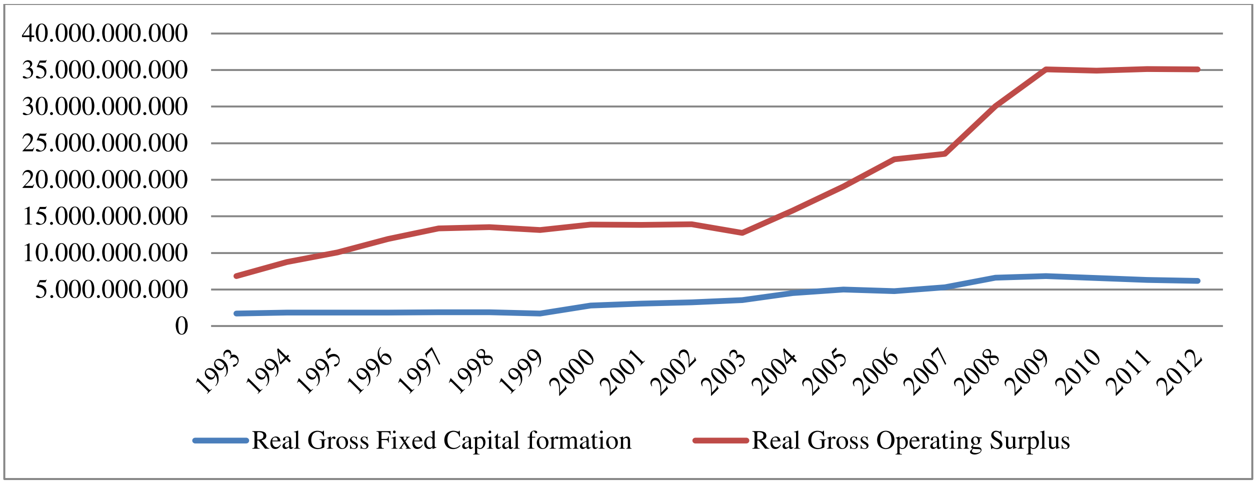
From a pre-tax loss of R352 million in 1997 and losses in 1999 (R63 million), R569 in 2011 and R254 million in 2012, Murray & Roberts maintained an average profit of R600 million over the 15 year period. The company experienced positive growth over a ten year period (2002-2010) where the average annual pre-tax profit was just over R1 billion per year. In fact, profit levels peaked during the world-wide recession at R2,1 billion in 2009.

WBHO's pre-tax profits increased steadily over the 15 year period from R64 million in 1997 to R692 million in 2012, representing a 983% increase. In the whole period not a single year of profits were negative and the average annual pre-tax profit was R377 million. Mike Wylie, executive chairman of WBHO, stated that in 2009 the World Cup projects contributed 20% of the company's revenue in that year, which came to just under R3 billion. This is more than the entire revenue of WBHO in 2004. WBHO's pre-tax profit was just over R1 billion (in current prices) in 2013.

The aggregate real pre-tax profits of the "Big 5" in 1997 was R382 million which had more than doubled despite huge losses to R 961 million in 2012, a massive increase of 151% over a 15 year period.

Looking at the real gross operational surplus and the real gross fixed capital formation of the construction industry, taken as a whole, there appears to be a reluctance to reinvest profits in gross fixed capital (Figure 8). As construction companies started to increase their profitability post-1994 into the current period the industry did not increase investment until 2000, when large scale public infrastructure was being delivered.

Figure 8: Construction Industry Profits and Investments 1993-2012 (Constant 2005 prices, ZAR)



Source: Reserve Bank National Accounts, Stats SA GDP, Own calculations

In 1994 the investment ratio was 3,7% of the gross operational profit of R6,8 billion. In 2012 the investment ratio was 4,7% of R35 billion with an average investment ratio of 4,1% over a 20 year period (1993-2012). The implication of this reluctance to invest takes place against the backdrop of the neo-classical argument that high wages reduce financing available for necessary investments to stimulate growth within the economy. What the data highlights is that the construction industry has made super-profits and that 95% of profit is being absorbed directly into private enrichment, conspicuous consumption by the construction and related elites and is likely to finance speculation.

On the whole the pre-tax profits of South Africa's "'Big 5" are unrecognisable from those of the companies that existed in 1997 and even more so than under apartheid. Even when considering the slight drop in their profits in 2008 (off the high in 2007), they have all maintained profits well above the pre-stadium years and 2013 has again shown an average upturn for these companies.

In 2013 the pre-tax profit of Group Five was R559 million (at current prices). The pre-tax profit of Basil Read was R126 million. In turn the pre-tax profit of Aveng in 2013 was up again to R626 million (the profit levels remain substantial and well above those of the pre-World Cup period). And WBHO's pre-tax profit was just over R1 billion (in current prices) in 2013.

What we can observe is the fact that post-apartheid has dramatically increased the concentration and centralisation tendencies within the construction sector with the concentration tendency being dominant. The recovery from the crisis of profitability is due to rapid capital accumulation and capitalist competition over the last 20 years. This is despite what has been called the worst global recession since the Great Depression of the 1930s. The recovery is in the main due to the ending of apartheid and with it sanctions against South Africa, allowing for integration in a global economy and unrestricted access to foreign capital. A neo-liberal government, which has weakened a formerly or historically militant trade union movement through cooption and thereby diminishing the power of the working class as a whole, has largely contributed to the strengthening of South Africa's construction capitalists.

The process of weakening the power of the working class and that of construction workers in particular was already underway when the ANC was elected in 1994. In the construction sector this was manifested not only in a struggle of profitability but also in the transformation of the productive forces within the entire construction sector.

Chapter 3
The transformation of the productive forces

3.1. The development of machinery and capital intensity of production

By productive forces I am referring to the means of production (owned by the capitalists) and the labour power of workers. The transformation of the productive forces here would thus involve the level of development of machinery, the labour process and the education of the workforce (Bottomore, 1991:204).

Against the backdrop of the 1970s economic crisis the International Labour Organization (ILO) advocated the substitution of labour for machinery to create more employment than capital intensive methods (ILO, 1995:15). The construction industry recognised that under the apartheid regime public works programmes such as the ‘Special Employment Creation Programme’ of 1985 had been badly run and that there was a need for a better developed plan.

In 1992 the chairperson of four organisations within the civil engineering industry, Graham Power argued that “engineers, universities and technical colleges would have to move away from traditional First-World techniques and teachings, which are largely based on mechanisation, without allowing standards to drop”. This, he said, is because “Labour intensive projects have proved highly successful in other countries and have made a contribution to alleviating poverty, raising the level of skill and training and helping to revive a flagging economy”. This approach developed by the engineering industry had been given the full support of the leading trade union federation, COSATU (Wood, 1992a:32).

According to Robert McCutcheon, professor of civil engineering at the University of Witwatersrand at the time, the most developed plan was the one that was negotiated between the civil engineering industry and COSATU. The issue at stake was a labour intensive employment programme to address an unemployment crisis of over 40% of the economically active population but which did not compromise productivity. The compromise deal between capital and labour was one in which labour-intensive based production would be linked to productivity. McCutcheon however cautioned that the "industry is still capital intensive and cannot restructure itself overnight" (Wood, 1992b:32).

Indeed the labour-intensive method became generally accepted in South Africa and was seen as a solution to the growing social unrest within the working class movement. The Executive Director of BIFSA, Ian Robinson, had remarked that, "providing adequate housing and employment will go a long way to easing domestic unrest" (Betty, 1992:32).

By 1994 the Reconstruction and Development Programme of the ANC articulated very clearly the imperative of labour-intensive production in construction,

> 1.4.3 Our people should be involved in these programmes by being made part of the decision-making on where infrastructure is located, by being employed in its construction and by being empowered to manage and administer these large-scale programmes [...] 4.4.7.10 The development of social and economic infrastructure, including pre-schools, water supplies, roads and electrification, will go a long way to improving productivity. Infrastructural programmes must therefore take the implications for micro enterprise into account.

Thus the production process within the construction sector was not only to be labour intensive and community-based but linked to the development of emerging black contractors. South African Federation of Civil Engineering Contractors (SAFCEC), Consulting Engineers South Africa (CESA), the South African Institution of Civil Engineering (SAICE), the Institute of Municipal Engineering of Southern Africa (IMESA), The South African Road Federation (SARF), Congress of South African Trade Unions and the South African National Civic Organisation (SANCO) became signatories to a Framework Agreement for use on public works where labour-intensive and labour-based construction systems are employed (Watermeyer, 1995:2).

There were three methods proposed to move away from the highly mechanised construction, namely:

- Labour intensive construction which is concerned with substituting labour for capital;
- Labour-based construction which incorporates a blend of labour and light equipment;
- Community-based construction which combines both labour intensive methods and labour-based technologies.

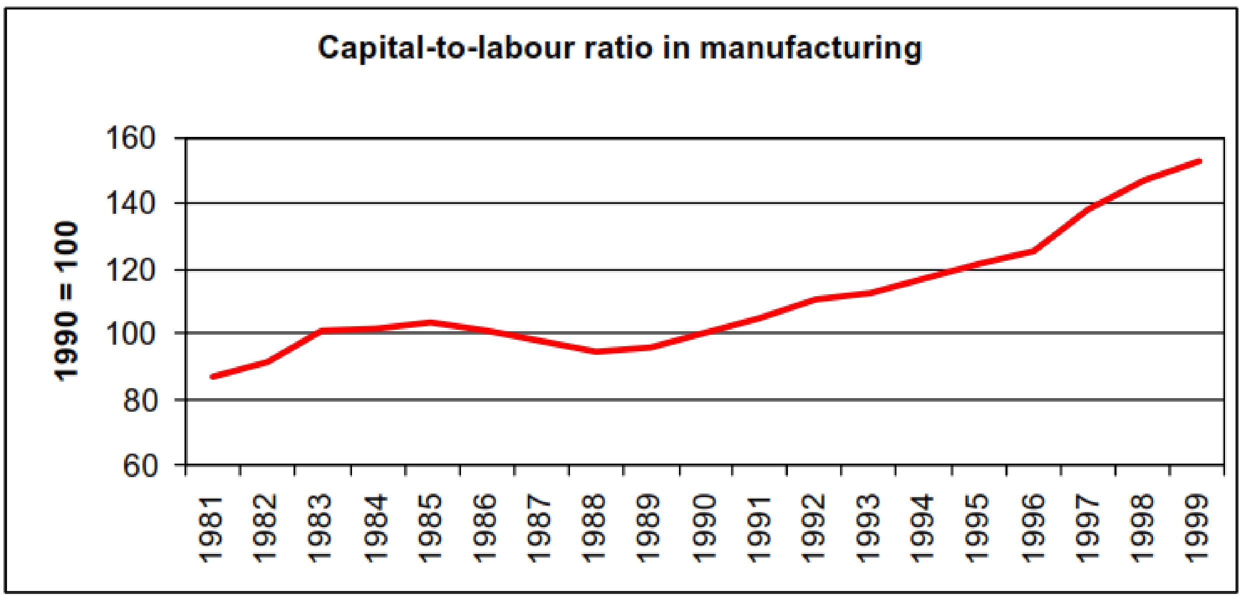
Research had indicated that the above employment-intensive methods in many more operations than anticipated, has been cost competitive with conventional capital-intensive work, without compromising time and quality" (McCutcheon and Parkins, 2003:3).

The Green Paper on an Enabling Environment for Reconstruction, Growth and Development in the Construction Industry (1997) suggests that the construction industry could generate between 11 and 23 direct, indirect and derived jobs per million Rand invested in the different sectors of the industry (an average of approximately 17 jobs per million Rand invested). It points out, however, that although these figures are slightly higher than other industrial sectors, they do not justify infrastructure investment beyond the immediate requirements in order to create jobs. If, however, the number of jobs created can be increased, for example, by substituting people for machines, investment in infrastructure projects will become more attractive (CIDB, 2005:4).

In contrast to the civil engineering industry the building industry is less machine-oriented and is labour-based by nature. The average cost per man hour of employment in the civil engineering sector in 1994 was around R37 and in building it was between R19 and R28. The issue of the viability of labour-intensive production linked to productivity became a central issue at the time and which was outlined in a commissioned paper of the National Housing Forum (more on this later in the section on productivity in Chapter 5) (Watermeyer, 1995:6).

Despite the historic agreement reached between capital, labour and community organisations the reality of the real economy showed that, quite contrary to expectation, capital intensity rather than labour intensity was a rising trend within the economy. The South African Reserve Bank 2001 Annual Report indicated that there was a rising capital intensity (declining labour intensity) throughout the 1990s and an increased demand for more skilled labour.

Figure 9: Capital-to-labour ratio in manufacturing



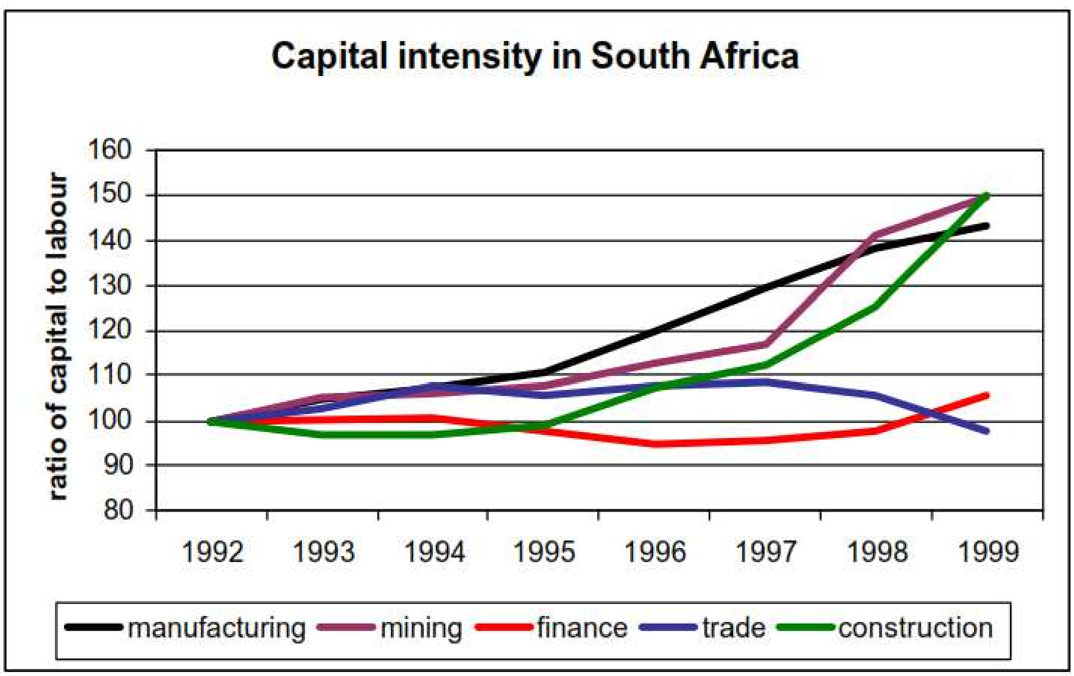
Source: Economic Policy Research Institute (2001)

The ILO had attributed the rising capital intensity to trade liberalisation and South Africa’s legacy of specialising in capital-intensive production under apartheid. The ILO Report underscores the contradiction of South Africa continuing to specialise in capital-intensive goods in the face of high rates of unemployment, arguing that “liberalisation and the removal of the peculiar set of industrial incentives which had favoured capital-intensive sectors could have been expected to shift export patterns in favour of labour-intensive sectors, which would have stimulated job creation. This has not happened” (Samson, Mac Quene and van Niekerk, 2001:7).

Part of the explanation they offer is the complementarity of natural resource industries and capital employed in the production process. Reinforcing this are two legacies of apartheid era industrial policies that favoured capital-intensive industries. "For example, mining companies can fully deduct capital expenditure from their taxable income of the year in which expenditure was undertaken, while other companies have to spread the tax deduction over a five-year period. This would favour mining and immediate downstream industries, which are capital-intensive" (ibid). Thus, relatively low reliance on capital taxes has supported the comparative attractiveness of capital over labour. This has in turn allowed for the continued anti-competitive behaviour of large conglomerates that undermine smaller labour-intensive enterprises (Ibid).

A 2001 report of the Economic Policy and Research Institute (EPRI) found substantial heterogeneity in sectoral trends in rising capital intensity in the mining, manufacturing and construction sectors (Figure10). The capital to labour ratio in construction had increased from100 in 1992 to 150 by 1999. The report further showed that the financial services and trade sectors, on the other hand, have experienced relatively stable capital-to-labour ratios.

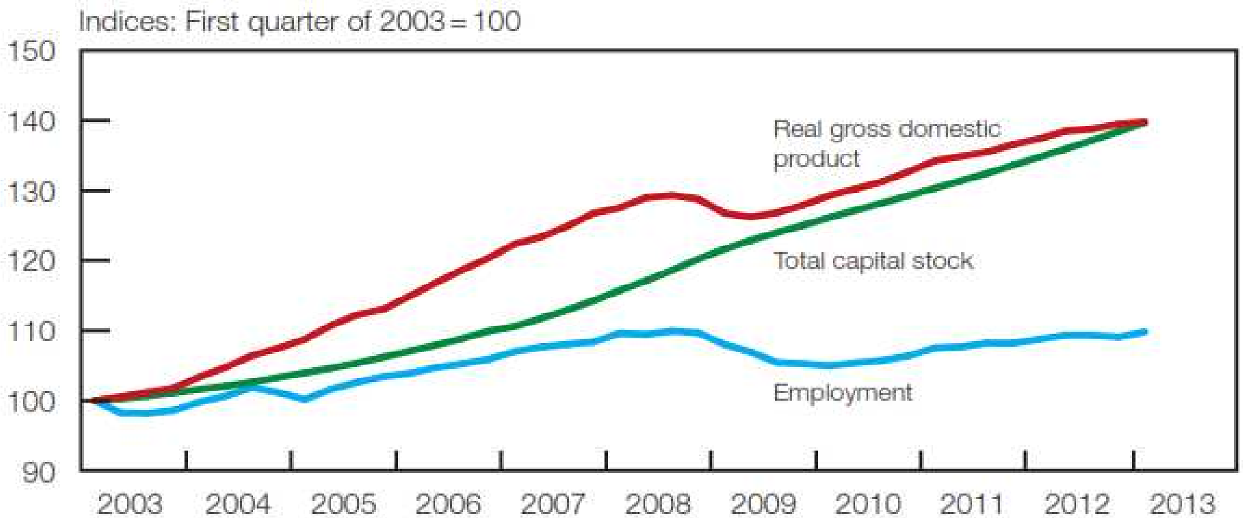
Figure 10: Capital intensity in South Africa



Source: Economic Policy and Research Institute (2001)

As indicated in the earlier sections, the post-apartheid government set out to reverse the post-1976 decline in investment and correcting the apartheid imbalances in social and economic infrastructure. Figure 10 (above) clearly indicates a rise in the capital intensity between 1994 and 1999 when public spending was channelled to the immediate challenges of the Reconstruction and Development Programme and the Growth, Employment and Redistribution (GEAR) strategy of 1996 whereby the government shifted focus towards economic infrastructure.

Figure 11: Capital, labour and output in the formal non-agricultural sector



Source: South African Reserve Bank, AER 2013

Following from the trend of increasing capital intensity as indicated in Figure 10, Figure 11 from the South African Reserve Bank's Annual Economic Report (2013) indicates that the trend in rising capital intensity has continued unabatedly upon the resumption of growth in the economy since the third quarter of 2009, following the international financial crisis, occurred within an expansionary monetary policy environment as evidenced by the decline in interest rates. The result was clear (AER, 2013: 20):

> At the same time the relative price of capital goods moved lower, partly on account of technological advances. Within this environment the coherence between the production factors of capital and labour has shifted: whereas the capital stock has increased further

since the resumption of domestic economic growth, there has been no expansion in the aggregate level of formal non-agricultural employment.

The total capital stock increased by 10, 7% from the fourth quarter of 2008 to the fourth quarter of 2012, while formal non-agricultural employment declined by 0,5% over the same period, leading to increased capital intensity in production processes in the economy. According to AER (2013), with the "exception of the manufacturing sector, where the level of capital stock essentially remained unchanged during the period 2009 to 2012, meaningful increases in the capital stock occurred in all the other sectors, with the most pronounced being in the electricity, gas and water sector (55,6%); mining and quarrying sector (26,0%) and the construction sector (25,9%)".

Thus the warning in 1992 by Robert McCutcheon, professor of civil engineering at the University of Witwatersrand that the "industry is still capital intensive and cannot restructure itself overnight" appears to have been overtaken by events in the real economy with capital intensity being further intensified in the post-apartheid period. A key consequence has been the displacement of labour by machinery and an increase in the labour reserve army.

While rising capital intensity marked an important change in the productive forces it was the changes in the labour process which allowed for increased division of labour and ensured greater control and discipline over the construction workforce.

3.2. Changes in the labour process

Coupled with rising capital intensity within the construction sector the crisis of the 1970s also dramatically altered the labour process through changes in how production was carried out within the sector in order to reduce operating costs and thereby enhance competitiveness.

> Responding to the decline in investment and accompanying volatility, South African firms - in conformity with global trends - have adopted more flexible production strategies. However, in the context of intense

> competition and the specific pre-1994 environment, the shedding of labour obligations and an increasing reliance on unregulated labour-only subcontracting... (Department of Public Works, 1999:12).

The construction sector rapidly changed the labour process from increased casualisation of the workforce to one of externalisation of workers through subcontractors and labour-brokers. The general trend has been for construction companies to downsize their workforces to fewer core site employees (Bamu & Godfrey, 2009:10). Subcontracting arrangements became increasingly prevalent with up to 70% of building and 30% of civil engineering projects subcontracted out. The duration of subcontracts in the building industry is between three and six months and around twelve months for civil engineering (CIDB, 2013:1).

Sub-contracting has always been necessary for certain functions, especially plumbing, electrical installation, air conditioning, joinery, tiling and roofing which have traditionally been carried out by specialist subcontractors in the building industry. Traditional sub-contracting "is characterised by specialist skills and the supply of materials by the sub-contractor". However, most construction companies (whether main contractors or subcontractors) in the past directly employed their own labour for the functions that they carried out (Buzuidenhout et al, 2004:45).

The key changes in the transformation of the labour process have been the predominant reliance on labour-only subcontracting and labour broking services. Labour-only subcontracting refers to a subcontractor that employs skilled tradesman that provides labour only services, while the main contractor provides the materials and supervision. Labour broking involves the engagement of labour through an intermediary, who supplies a specified number of workers for an agreed period of time or the performance of a particular task. Workers assigned by a labour broker remain the employees of the labour broker, despite the fact that they report to and are subject to the discipline and control of the client or core enterprise (Ibid: 4).

Mirroring the time span of the contractual relations between main contractors and subcontractors, construction workers are employed via temporary employment contracts commonly referred to as Limited Duration Contracts (LDCs) in the construction industry. Employers use LDC to exert control over the labour process in which workers are engaged on a project-to-project basis to avoid having to pay them when work is unavailable. The labour process is highly exploitative as workers are employed on LDCs that are constantly renewed by employers. “Casualisation of this kind occurs at all levels in the industry, as main contractors, subcontractors, including LOSCs and labour brokers all use LDCs” (Bamu & Godfrey, 2009:11). These employment contracts usually offer a three-month employment relationship which may be renewable. Employers argue that, since construction work is highly dependent on the availability of contracts, permanent employment in a volatile economy is not sustainable. Unions have argued that there has been a construction boom since 2004 and, despite this protracted boom, workers have not benefited in terms of better working conditions or permanent employment (Cottle, 2011:112). However, the predominant use of labour only subcontracting and labour brokers has meant that the labour process within the construction sector has become increasingly fragmented and so too the division between un-skilled, semi-skilled and skilled workers.

3.3 Skills development and construction employment

Linked to the changes in the labour process in the construction sector is the impact on training and skills development on the labour force. Mike Lomas, a former CEO of Group Five, was responding to the “Joint Initiative on Priority Skills Acquisition” of the government at a Bureau for Economic Research Conference in May 2007 when he openly stated that, “I am not too concerned about the demand for manual labour because these people can be recruited and trained very quickly”. The South African Federation of Civil Engineers (SAFCEC) echoed this position in its “State of the South African Civil Industry” Quarterly Report of 2012 where it is expressed that the majority of employers in the industry believe that although, “it takes time to source skilled people”, it is not restricting the growth of the companies (SAFCEC, 2012). The estimated composition of an onsite construction workforce is normally 50% unskilled, 26% semi-skilled, 19% skilled and 5% supervisory (BMI, 2006: 31). In other words, there is no real interest in the skilling of the vast majority of unskilled and semi-skilled workers who make up 76% of the general construction production process. This is not dissimilar to other developing countries such as Brazil where employers do not really require an average level of education for workers in the construction industry (ILO, 2001:12).

However, the approach of business conforms to government expectations. For example, the Expanded Public Works Programme (EPWP) has come to be regarded as the government's flagship labour intensive employment project. Yet, it aims to provide temporary job opportunities supported by training to enable job seekers to find more permanent employment (Hemson, 2008). In most cases employers provide on-site "training by observing" in an informal construction environment that does not facilitate the development of higher-level skills (McCutcheon, 2003:5).

The rapid expansion of production within the construction sector with the combined processes of an increase in the intensity of capital and the changes within the labour process through the externalisation of the large majority of the workforce has resulted in a great increase in the reserve army of labour.

Chapter 4

The Progressive Production of a Construction Reserve Army of Labour

4.1 Definition and measurement

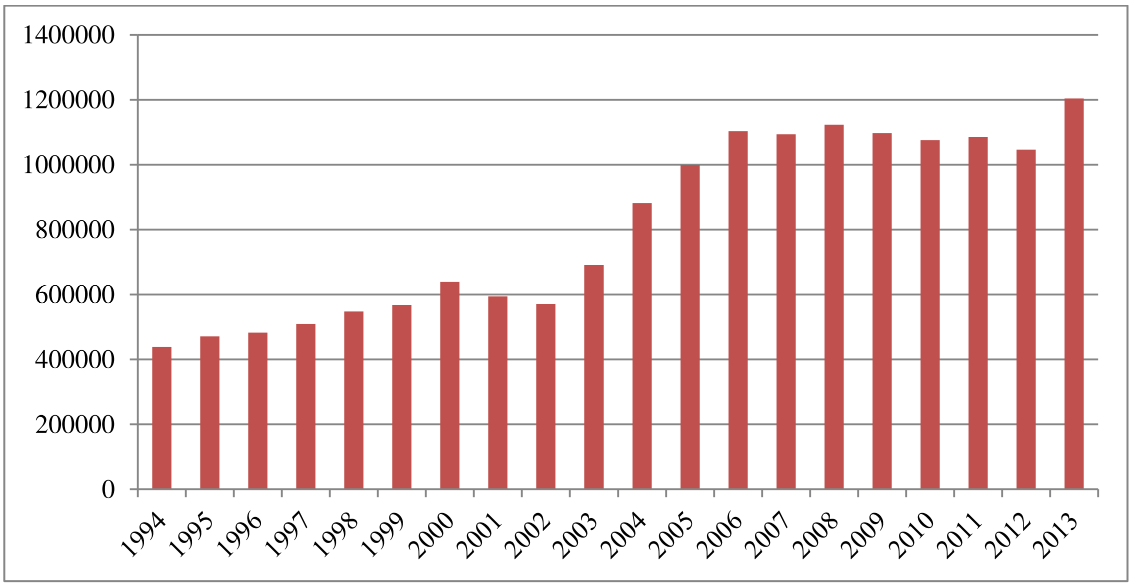
The South African Reserve Bank Annual Economic Report (2013) indicates that "capital stock has increased further since the resumption of domestic economic growth, there has been no expansion in the aggregate level of formal non-agricultural employment".

This is because "with the growth of the total capital, its variable constituent, the labour incorporated in it, does admittedly decrease, but in a constantly diminishing proportion" (Marx, 1982: 781). In other words, increased capital intensity would lead to a proportional decrease in the amount of employment required within the labour process and thus create "unemployed or semi-employed hands" which constitutes a "disposable reserve army" of labour. However, Marx continues, as "capital's power of sudden expansion also grows" this "additional capital thrusts itself into old branches of production, whose market suddenly expands, or into newly formed branches" and in such instances, "there must be the possibility of throwing great masses into the decisive areas…the surplus population supplies these masses". The movement of capital as reflected in the "varying phases of the industrial cycle" thus also shapes the movement of the reserve army of labour in the "movement of alternate expansion and contraction" (Marx, 1982: 785-786).

According to Marx, the reserve army is functional for regulate supply of workforce and keep the wage rate required for the reproduction of the working class. But since the middle of last century, national governments in developed countries have adopted measures to reduce the number of workers who are part of the reserve army, and to improve the standard of living of the population.

When we analyse the labour market in a particular economic sector, it is also possible to use the concept of "reserve army" because there is a large group of workers who are recruited by companies in the expansion stage of the activities and dispensed during the retraction phase. Although the fired worker may find employment in another sector, the lack of options can make that employee to undergo a precarious situation, a temporary job with low pay.

Figure 12: Movements of the Reserve Army of Labour in construction: 1993-2013

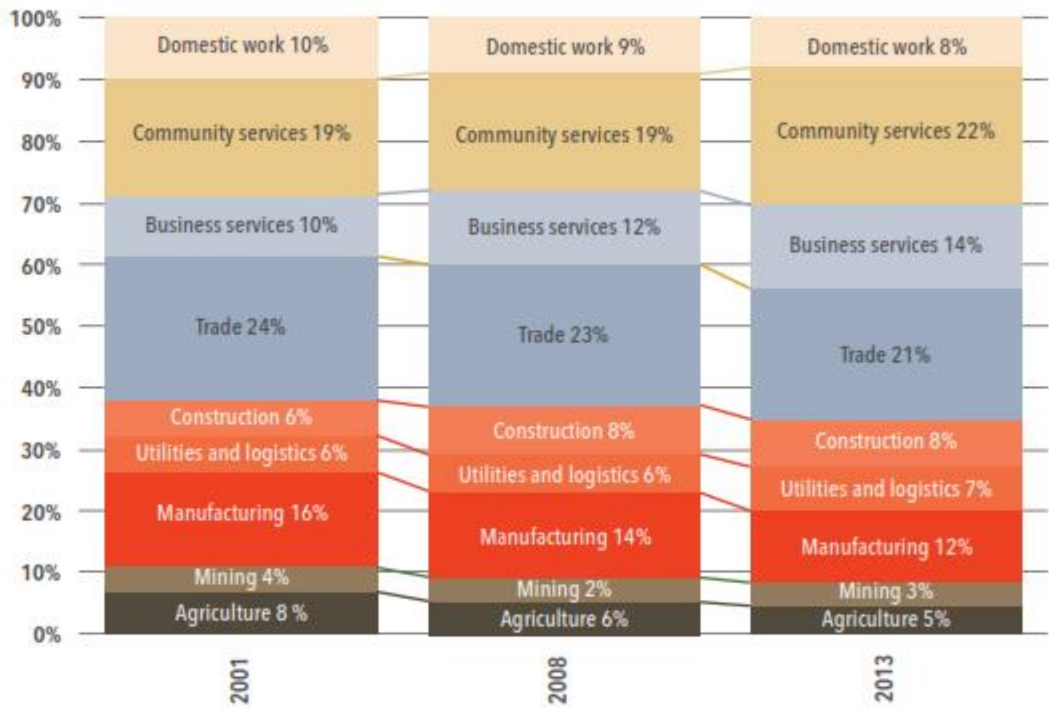


Source: Statistics South Africa, (QLFS, LFS, OHS), Own calculations

The movements of the labour reserve army in the construction sector is clearly expressed in Figure 12 as labour follows capital as a matter of course during periods of expansion and contraction of capital accumulation.

Due to the recession it is estimated that more than 35% of all construction employees were lost to the industry by the mid-1970s and that at least a further 30% of employees were again lost in the late 1980s and early 1990s (Department of Public Works, 1999:11). As capital regained levels of profitability increased concentration exists as the mass of the reserve army of labour are mobilised to work in the expanded means of production. Construction employment was at its lowest at 438 665 in 1994 to an all-time high of 1 204 000 in 2013. This is a 174% increase in formal and so-called informal construction employment since 1994.

Figure 13: Employment by economic sector: 2001, 2008, 2013



Source: Presidential Review (2014)

The share of construction employment (Figure 13) grew from 6% in 2001 to 8% of total employment in 2013. In other key sectors such as mining, manufacturing and agriculture employment dropped steadily over the years with the public sector (Community Services) and Business Services increasing its share of employment from 19-22% and 10-12% respectively.

4.2 The rapid growth of the reserve army of labour in the construction sector

The announcement in 2004 that South Africa had won the bid to host the 2010 World Cup accelerated the growth of the construction sector, which had already been bolstered by increased investment in the country's infrastructure since 2002 (Cottle, 2009: 3). The South African government committed R372 billion between 2006 and 2009 for its infrastructure development programme through the Expanded Public Works Programme (Parliament of South Africa, 2006:145) with an additional R30 billion committed to the 2010 World Cup, in order to ensure the development of sustained employment opportunities and economic growth. Having emerged from a decade-long slump in 2006, the construction sector recorded a 13,3% growth in that year, followed by a further 14,2% growth in 2007, the highest level of growth of all sectors of the economy. The construction sector's annual contribution to gross domestic product (GDP) was 3,1% in 2007, up again to 4% in 2008 (Statistics South Africa, P5002; 2007, 2008).

In the construction sector where some 1 117 000 workers in both the formal and so-called informal sector were employed in 2009, only 1 006 000 workers were employed by the time the World Cup kicked off in South Africa resulting in a loss of 110 000 construction jobs year-on-year. In fact, between quarter 4 of 2009 the official unemployment rate was 24,3% and in quarter 1 of June 2010 unemployment had reached 25,2%. Within the "Big Five", it was reported that in the 2010 financial year WBHO cut its South African workforce by 15%, half of them permanent staff. Aveng reduced its permanent staff by 367, while contract workers, many of whom had worked on the World Cup projects, have been reduced by 4 800 because other big projects did not require them. At Group Five, 202 workers lost their jobs. Basil Read increased its jobs by 1277, while Murray & Roberts had cut some 11 463 since 2008 (Company 2010 Annual Reports). From a historic point between levels of profitability and employment, Murray and Roberts retrenched 2 000 workers in 1990 when the company increased profit by 36% that year (LRS, 1991:2).

Large sections of the reserve army of labour in the construction sector were disposed of as soon as the World Cup projects were completed. The reserve army of labour thus followed the "movement of alternate expansion and contraction" of construction sector growth.

A report by the Economic Policy Research Institute in 2001 into the increase of capital intensity and job creation stated that, "The rising capital-intensity of South African industry is in part responsible for the country's experience with formal sector job losses. Evidence suggests that this process is more extreme in South Africa than in other countries, and that creating formal sector jobs in the face of increasing capital intensity is extremely difficult" (EPRI, 2001: 14). How then do we understand the rise in capital intensity on the one hand and the rise in employment within the construction sector on the other?

As "capital's power of sudden expansion also grows" so too we have seen an impressive increase in the employment of the reserve army within the construction sector. Thus despite the growth in capital intensity within the construction sector, the dramatic expansion of production required an increasing pool of the reserve army of labour in productive employment. The growth of the reserve army alone does not tell us much about the nature of employment as outlined earlier when discussing the changes in the labour process. Marx's breakdown of the reserve army of labour into its various components was complex within which the worker "belongs to it during a time when he is only partially employed or wholly unemployed" (Marx, 1982: 794). The notion that Marx put forward of a partially employed worker as constituting an essential component of the reserve army is clearly expressed in the changes to the labour process of the construction sector. The specific form of the reserve army, the "stagnant population", according to Marx, is "part of the active reserve army but with extremely irregular employment. Hence it offers capital an inexhaustible reservoir of disposable labour". This included all sorts of part-time, casual and what would today be called informal labour.[11] Furthermore, the largest part of this stagnant reserve army was to be found in what consisted as "outwork" carried out through the agency of subcontractors where the "outworkers" outweighed factory labour in an industry (Marx: 749-796). Green (1991: 138) makes a convincing case for use of the concept of the "reserve army" as there are no "major points of principle in using the [Reserve Army Hypothesis] RAH in either quantitative or qualitative ways" and that labour force data can be adapted and interpreted appropriately.

As indicated in the previous chapter, the construction sector rapidly changed the labour process from increased casualisation of the workforce to one of externalisation of workers

[11] Due to a lack of coherent data it is not possible this stage to give an accurate statistical breakdown of the reserve army of labour. Statistics South Africa and company reports do not always provide a clear breakdown of the nature of employment in terms of part-time, casual and what would today be called informal labour in order to establish more precisely what portion of the labour force finds itself in "partial" employment.

through subcontractors and labour-brokers. The general trend has been for construction companies to downsize their workforces to fewer core site employees with subcontracting arrangements becoming increasingly prevalent with up to 70% of building and 30% of civil engineering projects subcontracted out. The duration of employment contract of workers in the construction sector in general is a three month contract, called the limited duration contract (LCD).

Table 4: Large contractor employment 1994 and 2013

	Aveng	Basil Read	Group Five	Murray & Roberts	WBHO
1994	7 551	4 000	13 721	49 754	N/A
2013	28 296	2 959	13 659	33 281	11 916

Source: Company Annual Reports

Despite the increase in the profitability of the construction sector taken as a whole, the construction monopolies have mostly shed employment (Table 4). Murray and Roberts which had 49,754 fulltime and casual staff in 1994 had 16,473 fewer employees in 2013 where employment stands at 33,281. Group Five which had 13,271 fulltime and casual staff in 1994 had barely changed employment levels with 62 fewer employees in 2013 where employment stood at 13,659. Basil Read which had 4 000 fulltime and casual staff in 1994 had 1,041 fewer employees in 2013 when employment was at 2,959. Only Aveng which had 7, 551 fulltime and casual staff in 1994 had 20,745 more employees in 2013[12] where employment stood at 28,296. The total employment of the "Big Five" construction companies amounted to 90,111 (7,5%) out of a total of 1,204,000 construction workers in 2013. As demonstrated above, there is thus no direct correlation between employment levels and levels of profitability.

When using Statistics South Africa employment surveys, the Quarterly Labour Force Survey (QLFS) includes both formal and so-called informal employment while the Quarterly Employment Statistics (QES) survey only covers formal employment. Since the QES captures a

[12] The increase could be attributed to Aveng's international activities. The company reports do not provide adequate distinctions between the proportion of full-time and casual workers.

larger proportion of formal employment (excluding agriculture) in its survey than the QLFS, we can deduce that it is more accurate than the QLFS in capturing formal employment.

As per Table 5, the QLFS clearly shows a steady growth trend in the overall size of total formal and so-called informal employment. The QES data indicates marginal growth and contraction of formal employment with an average formal employment of 430,000 for the period 2004-2013 which is a similar amount to the 450,000 that were employed in 1982.

Table 5: Comparing construction employment survey statistics (‘000) 2004-2013

	2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
QLFS	882	999	1 103	1 093	1 123	1 097	1 076	1 086	1 046	1 204
QES	373	449	458	466	474	413	399	426	427	419
Difference	509	550	645	627	649	684	677	660	619	785

Source: Statistics South Africa, own calculations

Since we have deduced that the QES is more accurately reflecting in formal employment the difference between the QLFS and QES should more accurately reflect the extent of so-called informal employment. While the average formal employment for the period 2004-2014 is 430,000 construction workers the average so-called informal employment is 641,000. While the proportion of formal employment in 2004 of total employment was 42% it declined further in 2013 to 35%. Put differently, we can thus deduce that 65% of all employment in the construction sector is within the so-called informal sector. We can thus further deduce that the largest proportion of employment of construction workers lies with the smaller registered and unregistered contractors and subcontractors. The “outworkers” therefore outweigh the workers employed by large contractors and it is here where the greatest concentration exists as the mass of the reserve army of labour is mobilised to work in the expanded means of production.

The relative increase in the disposable reserve army of labour in the construction sector has occurred concurrently with the process of concentration of market power of the “Big Five”. Of course, this trend has social consequences. In the next chapter, we will examine the social wealth concentrated within the larger companies producing at the same time new levels of inequality.

Chapter 5

The deepening of inequality within the construction sector

5.1. Growth in productivity and intensity of labour

The changes brought about in transforming the productive forces (the level of development of machinery, the labour process and the education of the workforce) were the key factors in increasing labour productivity, in order to restore and increase the level of profitability in the construction sector in post-apartheid South Africa.

Under capitalist competition each capitalist must increase their share of the market and in order to succeed the price of commodities must be reduced without threatening the levels of profit. Thus the cost of production must be reduced in order to reduce the price of commodities in order to increase the volume of sales. This is achieved through raising the level of productivity in the company in order to increase profits. For Marx, increasing labour productivity is the main way to increase the rate of exploitation of labour (Mandel, 1977:133).

When economists generally refer to labour productivity they mean the output per unit of labour. National labour productivity is measured as the value added in the whole economy (GDP) divided by the hours worked or number of workers employed. Thus increased productivity implies an increase in number and value of commodities produced at a reduced cost of output per unit of labour. The aim of labour productivity is thus to increase the level of profit (Reddy, 2014:21). Conversely, labour productivity is also a measure of the extent and level of exploitation.

Thus the formula for labour productivity $= \frac{Value\ added}{no\ of\ workers}$

Marx however regarded the growth of productivity of labour in general as that of an increase in the rate of exploitation in order for the capitalist to quench his “thirst for surplus-value”, that is, profit maximisation. This can take two forms. The one in which the worker works longer hours without a change in wages which is called “increasing absolute surplus value”. The other is through the introduction of machinery which reduces the time it takes to cover the cost of wages and increases the surplus, called “relative surplus value” (Mandel, 1977:135).

The other ways in which absolute surplus value can be attained is through increasing the labour intensity of production, making work continuous without breaks, crudely applied discipline and more indirect methods of where a system of wages based upon “piece rates” induces a faster pace of work and a premium for overtime as an inducement to work beyond normal hours (Fine & Saa-Filho, 2010:35).

In terms of the Basic Conditions of Employment Act, the work week in South Africa was shortened from 46 hours to 45 hours in 1997, within a system in which bargaining councils could agree upon shorter work weeks (Oostshuizen & Goga, 2007:1).

Table 6: Mean Hours Worked by Sector, 2000-2005

	2000	***2005***	***Change***	
			Hours	***Percent***
Agriculture	51.3	50.9	-0.4	-0.7
Mining	50.0	50.1	0.1	0.2
Manufacturing	47.4	48.5	1.1	2.2
Electricity, Water & Gas	47.8	50.2	2.4	5.1
Construction	47.8	48.7	0.9	1.9
Wholesale & Retail Trade	48.4	50.0	1.6 *	3.4
Transport	50.2	53.5	3.2	6.4
Financial Services	48.7	51.0	2.3	4.7
Community Services	45.0	45.3	0.3	0.6

Source: Morné Oosthuizen and Sumayya Goga (2007)

However, Table 6 indicates that during the period 2000-2005 workers within all sectors of the economy, with the exception of agriculture, had experienced an average increase in their respective working hours. In the South African construction sector collective agreements vary in hours of work from 40 hours to a maximum of 45 hours per week. The total of ordinary and overtime hours may not exceed 55 hours per week (LRS, 2009:15). However, what the data shows is that construction workers on average are working overtime and increased hours of work per week of 47,8 in 2000 to 48,7 per week. It appears that working overtime has become a norm rather than an exception as construction companies try to continuously increase their profitability.

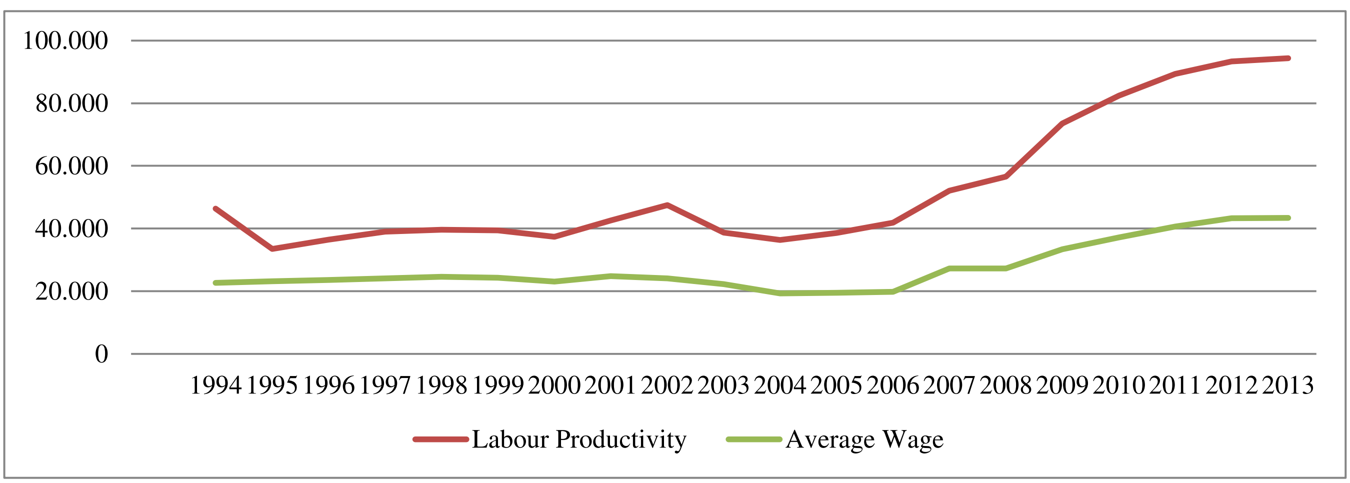
Table 7: Mean hours worked by type of work, 2000-2005

	2000	2005	Change	
			Hours	Percent
Permanent	47.5	48.7	1.2 *	2.6
Fixed period contract	49.7	49.1	-0.6	-1.2
Temporary	48.6	49.5	0.9	1.9
Casual	45.7	48.6	2.8	6.2
Seasonal	45.8	47.3	1.5	3.3

Source: Morné Oosthuizen and Sumayya Goga (2007)

Furthermore, as illustrated in Table 7 on mean hours worked per type of work, fixed term contract and temporary workers worked the longest hours of all types of workers including permanent, temporary, casual and seasonal workers in the general South African economy. The fixed term contract also referred to as the limited duration contract (LDC) is the preferred form of employment in the construction sector. It is the predominant use of the LDC contract system within the construction sector which has ensured the disciplining of the workforce and increasing productivity of labour.

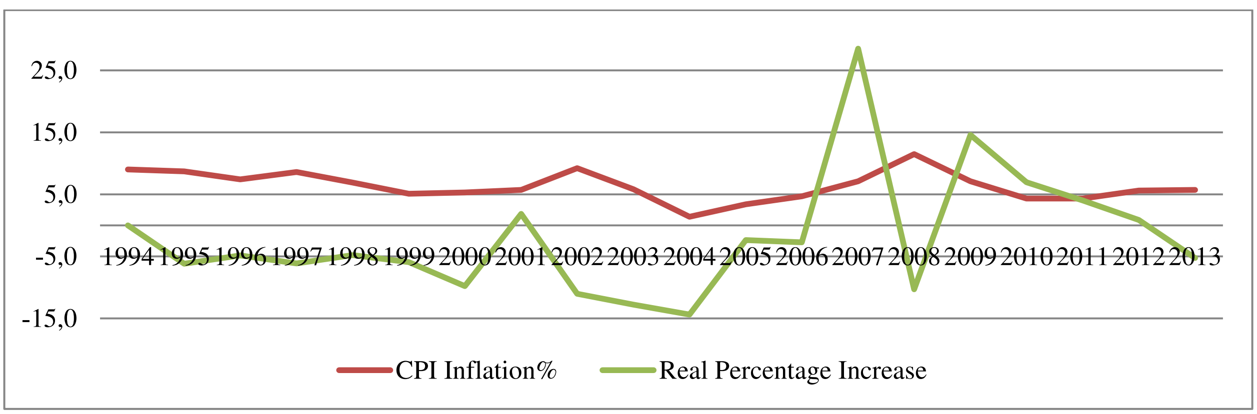
Figure 14: Construction Sector Average Labour Productivity, 1993-2013 (current prices, ZAR)



Source: Statistics South Africa, GDP, Construction Census 2007, Historical revisions QLFS, Own Calculations

Over the twenty year period from 1994-2013, the total productivity of construction workers increased by 122.73% with an average productivity increase of 6.14% per annum (Figure 14). The levels of increased productivity were achieved through increasing the exploitation of workers through a combination of increases in both absolute surplus value and relative surplus value. Construction workers in general appear to work longer hours with most workers working at least 4 hours overtime per week or 16 additional hours per month. Besides overtime, production bonuses have also been extensively used to increase the intensity of labour in the production process especially since construction projects are time-bound. An example of the use of production bonuses was during the 2010 FIFA World Cup construction processes where most stadia were completed ahead of schedule (Cottle, 2011:109). The increases in wages after 2006 is due to the increased worker militancy and increases in skilled worker, supervisory and management incomes. Thus the change in trend occurred after 2006: the labour productivity increased from R40,000 to over R90,000 in 2013, while the average annual wage in the sector increased from R20,000 to over R40,000. Thus labour productivity gains outstripped wages by more than 100% by 2013.

Figure 15: Real Average Wage Increase in the Construction Sector 1994-2013



Source: Statistics South Africa (GDP), World Bank (GDP Deflator), Own calculations

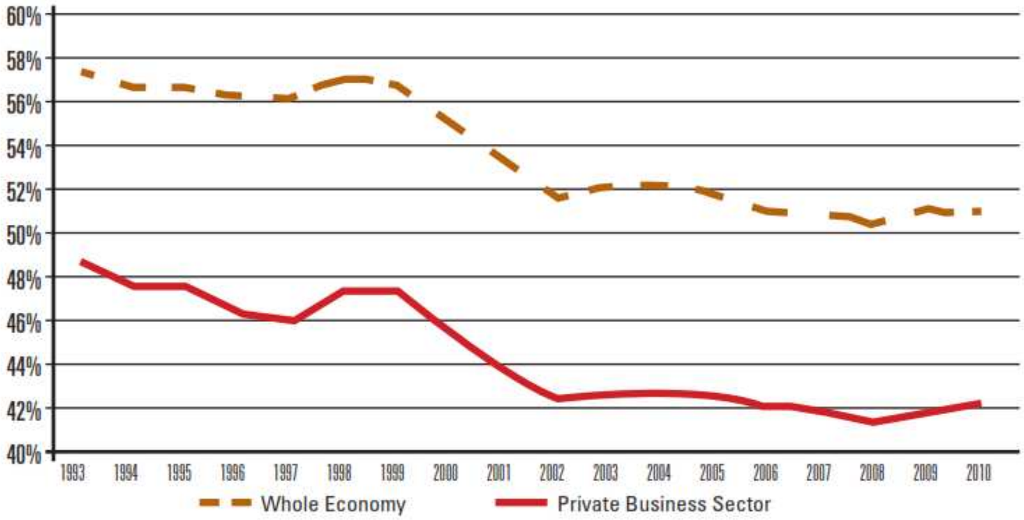
The increase in productivity in the construction sector in South Africa since 1994 has seen the general decline in real average wages of construction workers. Noting that the average wage also includes the portion of income of senior management we can deduce that the decline in real wages of the construction workforce is lower than what is being depicted in Figure 15. The downward spike of the real average wage in 1995 can be traced to the lowering of the total wage bill due to the massive retrenchments that took place from 1992-1994. As the RDP began to take off with over 44 335 jobs created by 1996 wages began to increase again and were maintained until 1999. The upward spike in the average wage could be explained by the dramatic increases in remuneration of senior management within the construction industry, coupled with the massive strike wave that began in 2007 during the 2010 FIFA World Cup preparations. The efforts of organised labour are further expressed in the upward spike in wages in 2009 during the Building and Wood Workers' International (BWI) Fair Play Campaign to organise vulnerable workers before the 2010 FIFA World Cup.

Overall, increasing the labour intensity of production within the construction sector which was combined with the rise in capital intensity of production has led to the rapid rise in the productivity of labour. Thus in 1994 the real annual wage income was R68, 762 and in 2013 it is R41, 923, a difference of R26, 840.The increase in productivity of 6% per annum within the construction sector has outstripped the increase in wages of -2,1% per annum and has ensured a decline in the workers' wage share.

5.2 The decline in wage share

The increased rate of exploitation of workers has ensured that the levels of productivity increases are higher than the levels of remuneration of workers. This appears to be the general situation of labour in South Africa which has resulted in a declining wage share since apartheid ended. The labour share of GDP (Figure 16) dropped over an 18 year period from 57% to 51% between 1993 and 2012. (Reddy, 2014:24) The largest drop occurred between 1999 and 2002.

Figure 16: Wage Share of GDP in South Africa 1993-2010

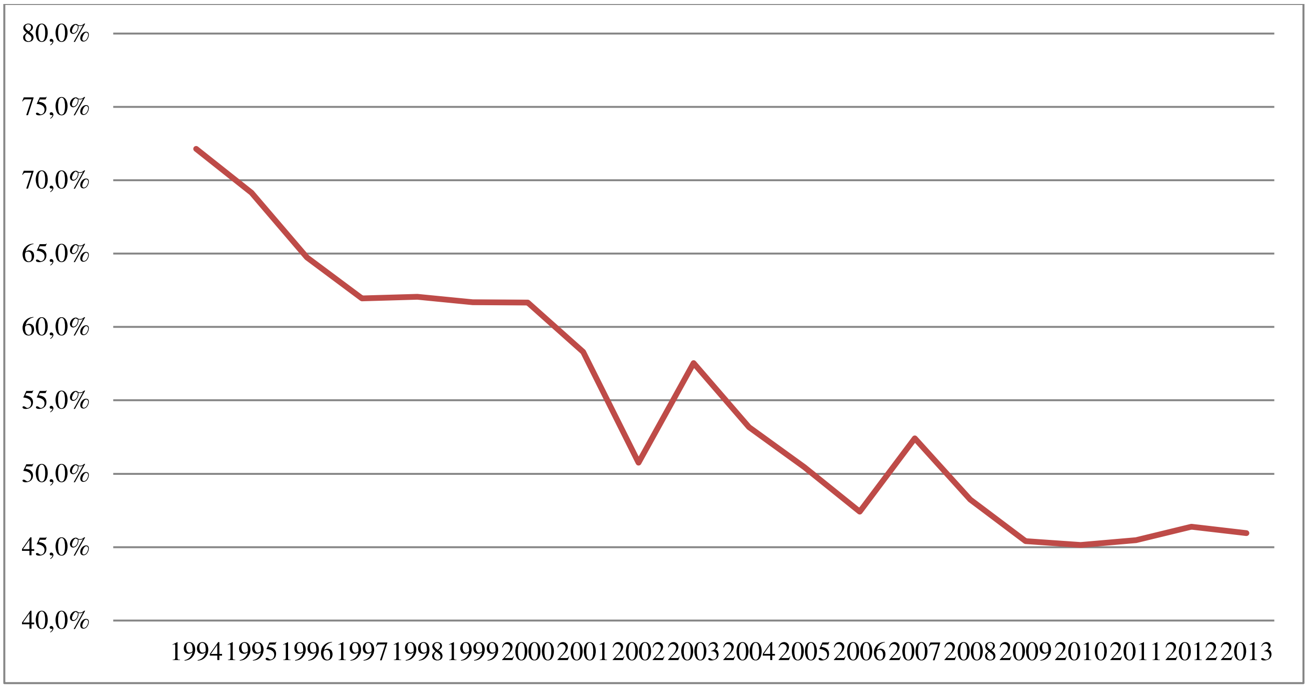


Source: Niall Reddy (2014)

In 2013, Adcorp labour economist Loane Sharp said: "Wages are the remuneration received by labour; profits and other income is the remuneration received by capital. The implication of the dropped wage share was that South Africa's profit share rose to a 50-year high" (Mail & Guardian, 11 March 2013)

The decline in the construction wage share (Figure 17) follows the general pattern of South Africa's wage share. The wage share dropped from a high of 72% in 1993 to a low of 46% in 2013. The drop of wage share corresponds to the progressive increase in levels of profit (Figure 5) from 1994 to 2013, the years of massive social and economic infrastructure investment by the government including the 2010 FIFA World Cup. The wage share in the calculations below also includes the remuneration of managers, senior management and CEOs of the construction sector companies. This means that the decline of the wage share of construction workers fell below the 46% indicated in Figure 17.

Figure 17: The Decline in Construction Sector Wage Share



Source: Statistics South Africa (GDP), Own calculations

The sudden leveling out of the drop in the wage share from 2009 to 2013 is consistent with the variation in average wages (Figure 14) and leveling of profits (Figure 5). This is likely the impact of growing worker and trade union militancy during the preparations for the 2010 World Cup and the effect of the 2009 World Cup national strike. However, the steep decline of the wage share in the construction sector on the whole is an indicator of the level of working class strength relative to capital. The fact that the steepest decline of the wage share is immediately after the fall of apartheid (1993-1997) in South Africa as a whole, and within the construction sector in particular, is telling of the kind of transformation that was taking place – one of increasing socio-economic inequality.

5.3 A discussion on average minimum and average wages

In this discussion about the real income of construction workers, two sets of data can be compared (Table 8). The information is taken from Labour Research Service (LRS) and Statistics

South Africa. The LRS information accessed from its wages database collects information on minimum wages from construction collective agreements on a national, provincial and individual company level including that of sectoral determinations. Statistics South Africa reports on wages in its GDP reports but these amounts include the income of all categories of workers within the construction sector, including executive and senior management. LRS calculates the average minimum wage according formal sector wage agreements whereas Stats SA calculates the average wage for the sector as a whole encompassing both formal and informal sectors. Both sets of data therefore have limitations in reflecting the real average wage of construction workers.

Table 8: Comparison between LRS and Stats SA

Average Annual Wage 1997-2013 (CPI index 100=2012)

Year	Monthly Real Average Monthly Minimum Wages (LRS)	Real Average Monthly Wages (Stats SA)	Year	Monthly Real Average Minimum Wages (LRS)	Real Average Monthly Wages (Stats SA)
1994	2 120.36	5 730.20	2005	2 717.67	2 559.74
1997	2 023.87	4 800.23	2006	3 081.33	2 490.01
1998	2 060.27	4 568.83	2007	2 836.85	3 198.87
1999	1 961.78	4 296.84	2008	2 992.43	2 869.28
2000	2 247.98	3 875.55	2009	2 365.25	3 287.25
2001	2 400.76	3 946.38	2010	2 589.57	3 515.42
2002	2 354.90	3 511.58	2011	2 584.23	3 656.15
2003	2 315.70	3 062.95	2012	2 534.76	3 688.18
2004	2 799.67	2 622.11	2013	2 676.02	3 493.55

Source: Statistics South Africa (GDP), Labour Research Service AWARD database, Own Calculations

According to the LRS database the real average monthly minimum wage of a construction worker was R2, 120.36 per month in 1994 and R2, 676.02 per month in 2013, a difference of R555.66 per month. Thus a formally employed construction worker's average monthly minimum wage only grew by R556 or 26% in real terms over almost twenty years or 1,3% per annum.

When we calculate the average wage using Stats SA data which includes executive and senior management the picture of the wages alters somewhat and shows a decrease in real monthly wages from R5, 730.20 in 1994 to R3, 493.55 in 2013 a real loss of wages of R2,236.65. There is thus a huge discrepancy between the figures of LRS and Stats SA. This significant drop in Stats SA figures can be explained in terms of the decline in wage share (Figure 17) of labour but it does also show that the Stats SA wage figures distort the real income to workers as it includes executive and senior management.

While South Africa has extensive labour regulations and social security systems, compliance is generally low. A study found that 45% of employees were receiving sub-minimum wages. The violation rate varies from 67% for Security Workers to 9% for employees in civil engineering. While the study excluded the building sub-sector we can assume a higher rate of non-compliance as the sector is more labour intensive than civil engineering (Bhorat, Kanbur and Mayet, 2011:5).

While LRS figures are based on formal collective bargaining agreements which may not reflect the real application of such agreements due to the high rate of non-compliance of contractors in both the formal and so-called informal sector we can safely assume that the average minimum monthly wage of a construction worker in real terms is lower than the stated wage in collective agreements.

Table 9: Comparison of LRS Average Minimum wage with non-compliance rate of 9%

1994	2 120.36	1 908.32
2013	2 676.02	2 408.42

Source: Labour Research Service wage database

Thus if we take the LRS average minimum wage to be more accurate than the Stats SA figures and we take the rate of non-compliance of 9% for civil engineering into account, then the average real wage in the construction sector should be around R1,988.32 per month in 1994 and R2,408.42 per month in 2013. We can further deduce that the average minimum wage therefore increased by 17% in real terms rather than the 26% if we take a non-compliance rate of 9% into account.

If we now compare real percentage increases in profit with real increases in wages with the two sets of data, we can draw several conclusions.

Figure 5, which is based upon figures of Stats SA shows that the operating profit of the construction sector increased by 412% in real terms from 1993-2012. The profitability trend, which is confirmed by LRS, indicated that aggregate real pre-tax profits (Figure 7) of the "Big 5" increased by 151% from 1997-2013.

Thus, even if we use Stats SA figure which shows a real average wage decrease of -61% or the LRS figure for the real average minimum wage increase of either 26% or 17%, if we take the non-compliance rate into account, the real increase of the gross operating surplus of the construction sector of 412% or the 151% pre-tax profits of the "Big 5" construction companies, the level of profitability far outstrips the rate of increases in wages within the sector.

Since the Labour Market Survey data (2012), shows that the median wages in South Africa for the economy as a whole have remained largely the same and, taking into account the tremendous growth of the reserve army of labour and that about 65% of all employment in the construction sector is within the so-called informal sector, it is more probable that wages of construction workers have declined in real terms since 1994 and have contributed to an increase in the wage gap and growing income inequality.

5.4 The Wage Gap and Inequality

> Our income distribution is racially distorted and ranks as one of the most unequal in the world... In commerce and industry very large conglomerates dominated by whites, control large parts of the economy. Cheap labour policies and employment segregation have concentrated skills in white hands.
>
> White Paper on Reconstruction and Development (1994)

Racial inequalities formed the bedrock of social and economic apartheid resting on the exploitation of 'cheap' black labour. According to Labour Market Survey data (2012), real earnings for the median worker have remained almost unchanged since 1995. Median earnings in constant 2000 prices have consistently remained below R2,000 a month since 1995, in contrast to those above the median wage, which have seen real wage gains since 1995. Labour Research Service wage data indicates that the real average minimum wage of a construction worker in 2012 was R2,534 per month, not far off the median monthly wage of R2, 000. This implies that the income of the construction workforce has not changed substantially since apartheid.

Since Stats SA does not calculate wage gaps per economic sector, we shall rely on so-called formal sector income data from LRS from 2004 to 2013. The data will look at the wage gap in terms of the average minimum wage and the average executive remuneration of the "Big 5" construction companies.

Table 10: The Construction Wage Gap 2004 & 2013 (current prices ZAR)

Year	2004	2013
Average Annual CEO Remuneration (a)	3,453,000	9,519,000
Average Annual Minimum Wage (b)	20,628	33,204
Wage gap (a)/(b)	167	287

Source: Labour Research Service wages and MNC database, Company Annual Reports, Own calculations

Keeping pace with the rising profits has been the rewards to those at the top – the executives of the "Big Five". The average nominal remuneration for the chief executive officers (CEOs) of these companies has increased by 176% if we compare the remuneration of 2004 with that of 2013.

The wage gap also referred to as the pay gap ratio = CEOs total guaranteed package divided by average income of the lowest-paid band of employees. While there is no agreement on what an acceptable wage gap between executives and workers would be, it has been suggested that any gap larger than a factor of 20 is evidence not of greater talent and performance by executives, but of extreme exploitation (Elliot, 2010). The total remuneration of CEOs clearly highlights which group of employees is taking the greatest advantage of the increasing success of the sector.

According to Table 10, the lowest paid worker within the construction sector would take167 years to earn the average annual remuneration of the CEO within the construction sector. At 2013 levels this has increased to 287 years, an increase of 71% when we compare the wage gap of 2004 to that of 2013. There is thus a widening of incomes and increasing inequality within the “Big 5” construction companies.

In 2012, the median income for an African household was under R3,000. For Coloureds and Indians, it was just over R7,000, while for whites it was around R20,000. The real average monthly wage of the construction workforce of R2,535 is lower than the median income of an African household.

Despite 17 years of positive economic growth, South Africa has the most unequal income distribution in the world with a Gini coefficient of 63,1 in 2012 a minor decrease from 64,1 in 1995, just one year after apartheid officially ended. South Africa’s Gini coefficient was also much higher than the rest of the BRICS countries with Brazil at 54,7, India at 33,9, Russia at 40,1 and at China 42,1 (UNDR, 2014:168-170).

The drop in the wage share within the construction sector from a high of 72% in 1994 to a low of 46% in 2013, coupled with a low level of real wage increases (if we use LRS wage data) and with profitability far outstripping wages and the huge increases in the wage gap, all contributed to overall inequality in South Africa as expressed in the very high Gini coefficient.

What the figures suggest is that the South African government’s policy development has succeeded in “Creating an Enabling Environment for Reconstruction, Growth and Development in the Construction Industry”. But it is one that has produced a substantial gain in white ownership in the construction sector through providing an enabling environment for capital accumulation that has allowed South African construction monopolies to internationalise their services but achieved this at the expense of public resources and the compromises of decent work. In so doing, the policies developed have been central to creating increased social inequality through increasing the wage gap between workers and executives to alarming levels.

Chapter 6

The role of labour, class struggle and social inequality

6.1 The rise and fall of the construction sector unions

> South Africa's entire economy was founded and built on the availability of cheap black labour, and the political infrastructure was such that it supported this imperative…Black unionism therefore constituted a threat to the cheap-labour edifice and elicited vicious responses from employers and the state…But the unions would decline and collapse within the first ten years of its existence as a result of a heavy onslaught by employers and the state…collapse of African trade unionism in each phase was aggravated by other subjective factors such as the inability of leadership to think and act strategically about the long-term survival of the unions.
>
> (Sakhela Buhlungu, 2010:8)

The key issue confronting the labour movement in the apartheid era was overcoming the system of cheap black labour on the one hand and the struggle for the survival of the trade unions. It was the largely spontaneous rising of some 100 000 African workers in Durban in 1973 that gave hope for the revival of black trade unions against the backdrop of the severe repression and setbacks of the 1960s. This rising also allowed for the consolidation and stabilisation of South Africa's modern trade union movement. The late industrialisation of South Africa similarly to other countries in the global south had developed their own brand of unionism and what became known as social movement unionism against the "economism of 'free collective bargaining' and the tradition of 'political bargaining'" (Munck, 2002:115-117) of trade unions of the global north. But this tradition in South Africa became transformed as the trade union movement moved away from a repressive capitalist state and entered a democratic dispensation. This process of transformation of the trade unions from social movement unionism to "free collective bargaining" is well expressed in the construction trade unions.

The Building Construction and Allied Workers' Union (BCAWU) was the first black construction trade union, formed 1 March 1975. The union was aligned to the Pan Africanist Congress and an affiliate of the trade union federation, what would later become the National Council of Trade Unions (NACTU) (South African History Online). BCAWU became one of the strongest trade unions in the country with a membership over 40 700 by the mid-1980s (Sithole & Ndolvu, 2006:199). Its rival, the Construction and Allied Workers' Union (CAWU) was formed at the initiative of COSATU and was launched in January 1986 with a membership of 19 000 workers (South African History Online). CAWU was allied to the ANC. The trade union was launched in the midst of a state of emergency which was declared by the apartheid regime in 1985. Within the first six months of the Emergency, 575 people were killed in political violence and an estimated 26,000 people were detained between June 1986 and June 1987. Over 2 700 unionists were detained, the majority of them from COSATU. The trade unions thus struggled to maintain their organisations in the midst of brutal state repression but it was the organised strength of the working class that allowed for the survival of the unions.

> There are no signs of reduced union strength so far in 1989. Despite the start of an economic slowdown, unions won average settlements of 22,5% on the labourer's wage […] this is well above the inflation rate of 14,9%.
>
> Labour Research Service (1989)

The growing strength of the construction trade unions in the 1980s could be seen not only in the increases in membership but also its relative strength in collective bargaining through the wage increases secured for workers. In a building industry report commissioned by CAWU, LRS indicates that in 1989, only 16 out of 181 wage agreements were settled below the inflation rate of 14,9% in that year (Table 11).

Table 11: Construction sector wage settlements in 1989

% Increase	No. of companies
0-9%	4
10-19%	77
20-29%	71
30-49%	24
50% plus	6

Source: Labour Research Service (1989)

The average wage settlement at 22,5% with an inflation level of 14,9% meant that workers, on average, had real increases in income of 7,6%. On the other hand, the profits after tax of the top 20 construction companies listed on the Johannesburg Stock Exchange in the construction sector were 49,3% in 1989. Despite the lowering of the high average after tax profit rate to 37% in 1990, LRS reports that many of the companies reported lower employment. Murray & Roberts, for example, increased profits by 36% in 1990 and yet, retrenched 2 000 workers. However, as profits started to plummet over 70 000 workers were retrenched in the1992-1993 period (as outlined in Chapter 2). This did not mean that all companies did not make any significant profits. The LRS report indicates that 8 listed construction companies had an average increase of after tax profit of 28,2% in 1994. In the same year, the wage share for the economy as a whole was 57% and 72% within the construction sector. This was reflective of the relative strength of a combatant working class which had gained sustained workplace and political power and a context within which organised labour had committed itself to a socialist future.

Due to the increased strength of the working class, and despite the increased levels of state repression during the transition to the end of apartheid (1990-1994), business leaders within the construction sector opened itself up for reform and actively participated in social dialogue with organised labour in the face of a growing crisis of profitability.

It was in 1993 and against the backdrop of massive unemployment that COSATU (with the support of CAWU) struck a compromise deal with employers. This was one in which labour intensive production would be linked to productivity within the construction sector which pre-dates the official implementation of the Reconstruction and Development Programme in 1994. Furthermore, COSATU and SANCO agreed to a Framework Agreement with the civil engineering industry that allowed “task-based payments” in the industry to “remunerate labourers at wage levels below the minimum levels on the basis of tasks completed”. However, the prevailing Wage Order in 1994 in terms of the Labour Relations Act at the time prohibited payment for piece work at a lower remuneration than that based on time worked. The Wage Order, however, did not apply to companies that employed below twenty employees and whose turnover did not exceed R1 million in any 12 month period (Wood, 1992:32).

It therefore appears that COSATU, in an effort to offset a crisis of unemployment, believed that, in getting a commitment from employers to commit to labour intensive employment in exchange for higher productivity, to be a victory as this commitment was in line with fulfilling the employment creation aspects of the RDP.

It was in 1997 that the report of the September Commission on "The Future of the Unions" was tabled at COSATU's Congress. The Congress took place one year after the ANC changed its macro-economic strategy from the RDP to GEAR. The report argued that labour market flexibility, as a key characteristic of globalisation, generates increased differentiation and fragmentation of the organised working class. The results are an increase in non-standard forms of employment such as "a large mass of temporary, part-time, subcontracted, outsourced workers who are vulnerable and difficult to organise". The vulnerable sectors identified by the commission for special attention were the construction industry, farming, parts of retail and catering and the domestic sectors. It is in these sectors that "the labour process, working conditions and production cycle combine to make it difficult to build a stable organisation or maintain membership".

The September Commission made a startling revelation regarding the construction sector. The report acknowledged that the "Framework Agreement on labour intensive construction also tends to marginalise the trade unions". The report referred to the fact that, in terms of the RDP, parastatals and the public sector encouraged contracts to small and new black businesses where most of the workers were in vulnerable employ.

Furthermore, one major infrastructure development and unemployment alleviation vehicle is the Expanded Public Works Programme (EPWP) which is implemented mainly by the Department of Public Works. The EPWP, which started in 2004, provides unemployed people with income through short-term work e.g. basic road repairs, tidying streets and community care. The first phase of the EPWP ran from 2004-2009 and created 1,6 million work opportunities. The second phase runs from 2009-2014 and aims to offer 4,5 million work opportunities. The third phase of the EPWP begins in April 2014 and the government wants to increase its scale and improve its impact (Jones, 2013:32).

However, if one compares the lowest minimum wage rate as legislated through the sectoral determinations, the current R8.82 per hour for a worker employed on the EPWP is only slightly lower than the R9.63 of metro domestic workers and less than half (R20.50 per hour) of a general worker in the civil engineering industry doing similar work. Despite COSATU having representation in the Development Chamber of National Economic Development and Labour Council (NEDLAC), the seat of national social dialogue in South Africa, it has merely played an ineffectual monitoring role of the EPWP. Labour has however asserted that the "EPWP is being used to replace real public sector jobs" and that this assertion be tested. NEDLAC has consequently agreed to establish a Research Task Team to evaluate the assertions made by COSATU (COSATU, 2014:15).

Thus the paradox of the victory of the RDP and the Framework Agreement on labour intensive production was that it was essentially encouraging increased levels of sub-contracting and outsourcing and increasing the rate of exploitation of construction workers through productivity agreements thus effectively circumventing the role of Black unionism as a threat to the cheap-labour edifice.

The organisational impact of the changes in the production process (as outlined in Chapter 3) on construction unions was so severe that the September Commission recommended that CAWU, due to its organisational weaknesses, merge with the National Union of Mineworkers (NUM) or the National Union of Metalworkers of South Africa (NUMSA). At CAWU's 1995 Congress, the paid-up membership was 33 000 and by 1996, this rose to 40 000. But by 1997, membership had dropped to 35 000 (COSATU, 1997).[13] Due to organisational challenges, CAWU dissolved and merged with NUM in 2001 (Mining Weekly, 2000). With the entry of

[13] See, http://www.cosatu.org.za/show.php?ID=2095#faces

trade unionism into the post-apartheid period came the increasing bureaucratisation of the labour movement and with it the separation of the leadership from the shop floor.

6.2 Spontaneity and Trade union transformation

In the immediate post-apartheid period the transformation of the trade union movement was marked by the process of the organisational weakening of the trade union movement as hundreds of unionists left to join parliament and business (Buhlungu, 2010: 157).

The changes in trade union organisation and the relationship to its mass base were almost immediate. According to Themba Majola, CAWU's First Vice President, the building and construction industry was fertile ground for union organisation because "workers were treated like slaves and there was a high level of discontent on the shop floor. As a result, the period from 1987 to 1993 was characterised by wild cat strikes".[14] The wild cat strikes took place over a six year period at the height of worker militancy that marked the 1980s to 1993 just before the country's first democratic elections. However, three years after the first democratic election, Fred Gona, the outgoing president of CAWU stated that, "we were not proactive in our dealings with the spontaneous eruption of strikes [...] We were managing crisis after crisis. Looking back, I think we have improved a lot. Today we plan before we embark on industrial action and the shop stewards consult us before embarking on industrial action" (Ibid). The irony, however, is that while the modern trade union movement of today emerged on the backbone of massive wildcat strikes of the 1970s and the 1980s, the trade union leadership of the 1990s began to see "spontaneous" eruptions by workers as a disorderly practice.

This change in attitude toward spontaneous struggles signaled the transformation of trade union leadership and the bureaucratisation of the trade unions in post-apartheid South Africa and a widening gap between the leadership and the shop floor. In 1997 the outgoing General Secretary, Thembinkosi Oliphant of CAWU said that "organisers' day-to-day duties included regular visits to sites and workplaces to talk to union members and listen to their problems.

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[14] See, http://www.cosatu.org.za/show.php?ID=2095#faces.

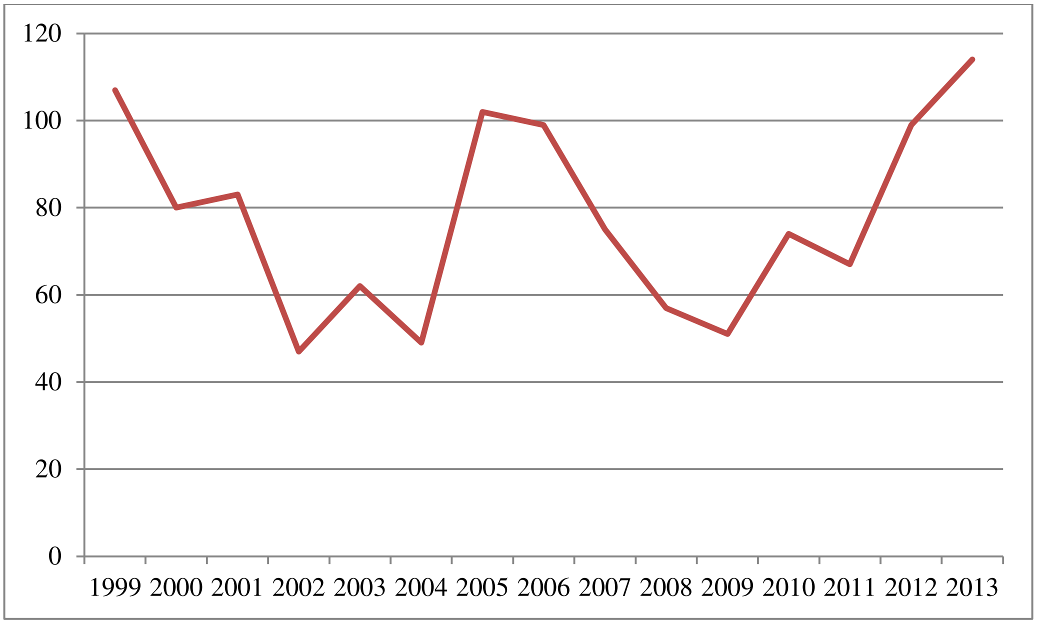
However, this practice had largely been discarded […] Organisers nowadays rely only on shop stewards, some of whom are no longer popular with members" (Ibid). Part of this lack of popularity could be explained by two reasons. Firstly, positions of leadership at all levels within the trade unions have come to symbolise power and entitlement to perks and resources not accessible to the rank and file membership. Secondly, COSATU's own Workers' Survey in 2008 showed that 52% of workers surveyed had encountered a shop steward being promoted to an entry level management position. More recently there was an uproar when it was revealed that the General Secretary of NUM had received an increase of R40, 000 raising his monthly salary to R77, 000 (Letsoalo, 2012). The latter pay scale is similar to Director Level in various state departments. If we take the annual salary of the general secretary and the annual salary of the low paid construction workers (R924, 000/ R30, 420) then we have a wage gap of 30.3. This means that it would take the average construction worker 30 years and 3 months to earn what the General Secretary of NUM earns in one year.

In 2013 it was further revealed that then NUM President Senzeni Zokwana (currently South Africa's Minister of Agriculture, Forestry and Fisheries) and Deputy President Piet Mathosa were being paid directly by the mines and not from trade union subscriptions. Apart from being NUM President, Zokwana is the chairman of the SACP and an ANC NEC member (Marinovich, 2013).

The Tripartite Alliance between COSATU, ANC and SACP also created greater social and political interaction between union leaders and the political elite, which provided for a moderating influence on key union leaders (Buhlungu & Tshoaedi, 2012: 12). A key indicator of this moderating influence is the level of strike activity within the workers' movement.

Since apartheid's end in 1994 strikes in South Africa went on a downward trend (Figure 18). While there is not adequate data before 1999 it is quite plausible that the downward spiral started around 1994 as trade unions began taking their place in shaping the new government.

Figure 18: National Strikes 1999-2013

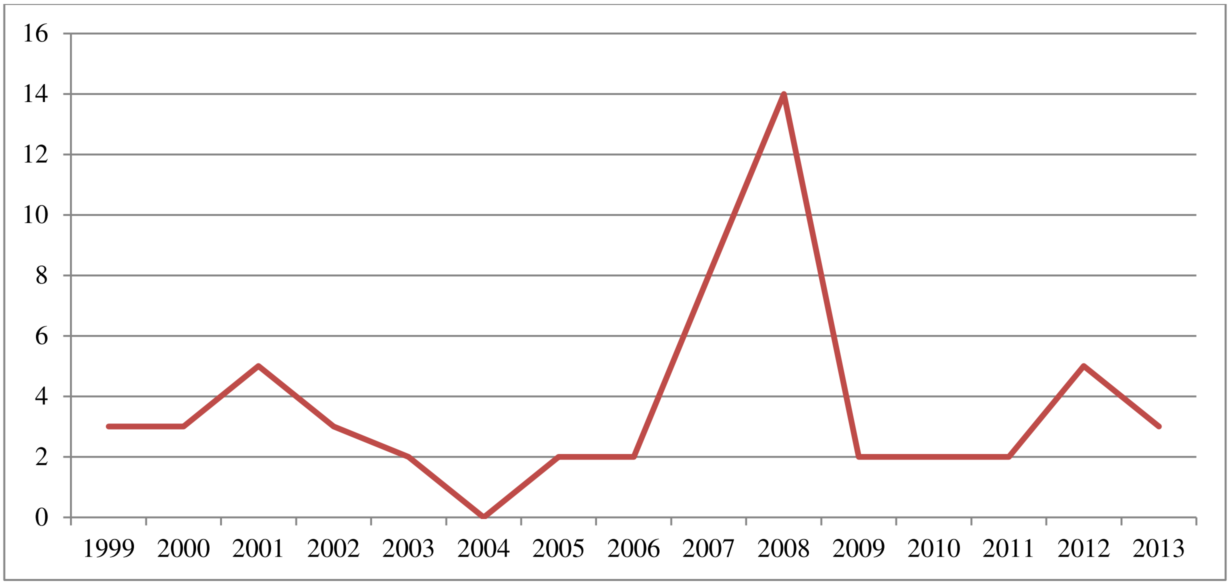


Source: Department of Labour Annual Industrial Relations reports, Own calculations

There were around 107 strikes in 1999 compared to the low of 49 strikes in 2004. The upward trend started again after the 2008 financial crisis with the number of strikes reaching 114 by 2013 indicating a new upward trend in worker militancy. However the Department of Labour indicates that workdays lost decreased by 44,2% from 3, 309, 884 in 2012 to 1, 847, 006 in 2013. Furthermore, the level of protected strikes in 2013 amounted to 48% as compared to the 54% in 2012. What this implies is that wildcat strikes are on the increase in South Africa and that this is largely due to the failure of trade unions to represent workers.

The construction sector strike wave (Figure 19) has followed a similar pattern as the national with a downward trend from 1999 but where no strike took place at all in 2004.

Figure 19: Construction Sector Strikes 1999-2012



Source: Department of Labour Annual Industrial Action Reports, Labour Research Service

The lower levels of strike action from 1996 onwards in the construction sector was also influenced by the National Negotiating Forum (NNF) which was established and where centralised bargaining took place in the civil engineering sector. While agreements in the bargaining councils are annual agreements, those of the NNF are three-year agreements which form the basis of sectoral determinations for the civil engineering industry and where both NUM and BCAWU are signatories. The result of the three-year agreements meant that the trade unions tended to lose contact with vast layers of the reserve army of construction sector workers who were mainly employed on the three month limited duration contract system.

The hosting of the World Cup in South Africa provided an opportunity to revitalise the trade union movement as these workers were thrown into employment. It was the South African trade unions affiliated to the Building and Wood Workers' International (BWI) that saw the strategic importance of the World Cup for labour and were the first to develop a model for strategically campaigning around mega sports events with the international launch of the "Campaign for Decent Work Towards and Beyond 2010" (Cottle & Rombaldi, 2013:1). The BWI campaign, which was coordinated with the technical support of a campaign coordinator from

Labour Research Service had also established clear plans, together with the unions, for recruiting vulnerable workers employed by the vast machinery of sub-contractors. The unions recruited 27,731 workers in total and membership grew from 70,736 (2006) to 98,195 (2009), increasing union density by 39,4 % (Ibid: 6). This increase in trade union density had as its source the spontaneous struggle of the construction workers themselves. An upward tendency in the strike wave started in the construction sector a year after South Africa was awarded the right to host the FIFA 2010 World Cup in 2004.

The first spontaneous strike recorded at a World Cup construction site broke out at Green Point Stadium on 27 August 2007 (News 24, 2007), igniting a wave of local site strikes which resulted in agreements with employers across the country. About 20 of the 26 strikes were wildcat in nature, and were led by either a workers' committee or trade union or both. The wildcat strikes indicated an autonomous and spontaneous new militancy among construction workers (Cottle, 2011:101). This militancy was to some extent captured by trade unions, ultimately leading to widespread gains such as project bonuses of R6,000, no downward variation of working conditions, improved health and safety, and increases in pay rates (Ibid). After two years of preparation by BWI and its affiliates a nationwide strike of 70,000 workers was organised which took place between 8 and 15 July 2009. The strike affected major construction World Cup projects, and marked a turning point in the level of organisation of workers in a fractured construction sector. Upon the call for a strike in the engineering sector, thousands of building workers responded and came out on unprotected strike action with a rate of 100% participation on the first day of the action. This was a decisive show of force for a sector fragmented through a division of the workers into the civil engineering and building sectors. Despite the conjectural power of the strike on critically time-bound projects as the World Cup, and despite the compromise reached by the leadership of NUM and BCAWU, the strike set a historical president in terms of winning a double digit wage increase and other benefits. A 12% wage offer effectively ended the eight-day strike and the pay hike was 4% above the official 8% inflation rate. The national strike however did not offer the vast majority of the reserve army of construction workers any immediate relief especially since thousands would start to lose their jobs as the world cup infrastructure was nearing completion. The leadership of the trade unions on the whole also failed to grasp the significance of the spontaneous and unprotected nature of the strike action and was rather determined to settle as quickly as possible due to political pressure from the Ministry of Labour and FIFA's Local Organising Committee. In this sense the role of the trade unions was one of ensuring a restraining influence on the workers (Cottle, 2011:103).

The construction trade unions, having made an orientation to the reserve army of construction workers, were not able to sustain the high membership levels reached during the campaign due to the limited nature of employment contracts on the one hand but also because the trade unions failed to change its organisational form to accommodate the changes within the productive forces. After having increased its membership by 33% to 58 984 in 2009, NUM's membership declined to 43,894 in 2014 not far off from the level of its predecessor CAWU's 40,000 members in 1996. Similarly, BCAWU's membership of 35,100 in 2014 is nowhere close to the membership levels of 40 700 it reached in the mid-1980s.[15]

The September Commission of COSATU had made clear recommendations on strategies of how the trade union movement could organise and defend vulnerable workers. These included the annual Summer Offensive where unions could develop sustained and targeted campaigns to recruit and engage in struggles and fight for the limited use of casual labour. The Commission also called for the establishment of complaints services where vulnerable workers' situations make collective approaches difficult. The third most important recommendation was for the trade unions themselves to change union practices and attitudes toward vulnerable workers who were regarded, in some cases, as "second-class" workers. This implicated unions where the constitution barred non-standard workers from union membership, from stop order deductions or from standing or voting for shop stewards and even specifying them as the first casualties in the retrenchment process. In other words, the Commission made it clear that the transformation of

[15] Trade union membership provided to author by the trade unions via email.

employment relations at the same time required the transformation of the trade union as an organisation and its strategies.

While the construction trade unions in the construction sector were able to carry out a systematic campaign during the World Cup and in the process secured many gains for non-standard workers, they failed to make the organisational and attitudinal changes necessary to fully grasp the strategies needed to sustain the trade unions, workplace power and trade union membership. But this process also required a fuller appreciation of the socio-economic order in that the trade unions merely followed capital as a matter of course and began to accept the reality that construction sites are not permanent workplaces and that the industry is highly cyclical. At no time have the trade unions begun to look at a public alternative due to its conservative political outlook.

6.3 The lack of a state-owned construction company

On 2 August 2012 the Human Settlements Minister, Tokyo Sexwale lamented the fact that the state had to pay R50 billion in order to rectify shoddy workmanship on the low-cost housing programme in South Africa. At a construction sector breakfast he tabled the issue that a state-owned construction company should be debated since shoddy work "has become a R50 billion problem". The government had also sent a team to Brazil and other parts of the world to examine the viability of a state-owned construction company. The Minister, on this same occasion, lambasted the BEE companies for the shoddy work regarding the delivery of South Africa's housing programme (Infrastructure News, 2012).[16] What was noticeable from the Minister's breakfast talk was the absence of any mention of the construction trade unions.

Both NUM and BCAWU had been completely silent on the housing crisis and in responding to the debate on a state-owned construction company. This failure to respond meant that construction trade unions could not take stock of the fact that the labour-intensive housing programme agreed to through the Framework Agreement had not only delivered poor quality

[16] See, http://www.infrastructurene.ws/2012/08/07/r50bn-bill-follows-poor-housing-workmanship/

housing for the working class but also that of the entry of a plethora of small, mainly black contractors and sub-contractors that had vastly increased the number of workers who were precariously employed. Furthermore, by not responding to the debate, the construction trade unions missed a crucial opportunity to address the problem of the lack of permanent employment and increasing trade union density through the establishment of a public construction company. After all, trade union growth in South Africa had been sustained through increased employment in the public sector.

Noting the failure of the private sector in the low income housing sector, the construction trade unions in South Africa could have utilised the opportunity to table a concrete proposal for a state-owned construction company and housing bank. Instead NUM had in June 2000, established Ubank (then Teba Bank), a micro-finance institution which, together with the South African Chamber of Mines, ensured that profits are made and channeled into both trade union and mining coffers. The trade union has become, what Hyman (2001:13), referred to as a "business union" following an approach of "market-orientated unionism" as the union was engaging with the private sector as its preferred economic partner instead of engaging in more socially necessary economic activity with the public sector.

This "business unionism" became more vivid when NUM chose to turn its back on striking mining workers on 11 August 2012 leading to a clash with union officials outside their offices. The NUM office was the site of the conflict that started the chain of events leading to the Marikana Massacre on 16 August where 34 striking mineworkers were killed by police (Marinovich, 2013).

The construction trade unions could instead have looked at learning from the China State Construction Engineering Corporation Ltd (China Construction) which is China's largest construction and real estate conglomerate and biggest building work contractor. It is the largest transnational construction company in developing countries and the top home builder in the world (CSCEC.com). Furthermore, there are substantive examples of housing and infrastructure delivery by Chinese state companies in Africa. The lack of any response from the construction trade unions to the discussion on a state-owned construction company to resolve the backlog of 2,1 million low cost houses shows that the growth in the social distance between the trade unions is not only with its members but with the working class as a whole. For it is the increasing pool of the construction reserve army of labour (over 1 million workers) and their families that constitute a significant part of the working class communities that do not have access to decent housing and in most likelihood live in poverty and informal housing settlements. While the trade unions have not been able to defend the incomes of construction workers they have also sorely neglected the socio-economic conditions of construction workers thereby contributing to increasing social inequality.

Through waging a campaign for decent housing, a housing parastatal and housing bank the construction trade unions could have connected with the nationwide localised community struggle for housing and social services. In this way trade unions could start to explore changing their traditional structures, including transcending their bureaucratic centralised type structure to a hybrid of social movement trade union to assist in addressing the chronic shortage of housing affecting some 12 million people. By a campaign to take back the delivery of housing from the private sector into the public sector a more stable path would be established to ensure some form of sustainable employment in a public construction sector and in so doing break barriers in overcoming a fragmented construction sector and a fragmented workforce. Such an approach by the trade unions would greatly increase trade union membership and the workplace power of construction workers. This would impact positively on income distribution; undermine the high levels of sub-contracting while at the same time improving the delivery of social housing and services to communities thus contributing to transforming the deep levels of social inequality in South Africa.

Chapter 7

Summary and Conclusion

Over the last 20 years South Africa's construction sector has undergone significant transformation and marked expansion since the period of Apartheid when it was constrained by sanctions and racial policies, curbing its growth. The economic crisis of the 1970s and the increased intensity of the class struggle, combined with the growing strength of the labour movement, posed a serious threat to the levels of profitability of the construction sector companies. The post-apartheid state led by the African National Congress actively intervened on behalf of capital through a series of policy measures to promote stability, foster economic growth and create enabling conditions for the international competitiveness of South African construction firms. The key component of this policy process was the establishment of a Construction Industry Development Board, the establishment of a Register of Contractors, the scheduling of public sector spending through the Medium Term Expenditure Framework process and support programmes to develop the emerging black sector which effectively incorporated black capital into the capital accumulation process denied under apartheid. The post-apartheid state also became the construction sector's biggest single client in the delivery of social and economic infrastructure. The almost immediate shift from the RDP in 1994 to a series of neo-liberal macro-economic policies from 1996 onwards ensured increasing levels of labour flexibility and improved productivity of the labour force. State intervention was therefore crucial in ensuring that the construction sector enjoyed 18 years of sustained economic growth with an average GDP contribution of 2,3% over a 20 year period.

Between 1994 and 1998, public spending was channelled to the immediate priorities identified under the Reconstruction and Development Programme. The post-apartheid period was marked by increased investment in social and housing infrastructure. With the passing of a series of neo-liberal economic policies the government shifted focus towards economic infrastructure from the mid-2000s. The new government effectively used the arena of social service delivery as a capital accumulation strategy for the emerging black small and medium sized contractors. Despite the increased levels in delivery of social infrastructure, the backlogs had increased from 1,5 million housing units in 1996 to 2,1 million by 2013. Not only were these housing schemes of poor quality, the delivery of social infrastructure has been based on the World Bank policy of cost-recovery resulting in the widespread practice of disconnecting water and electricity supply due to non-payment. It is estimated that 10 million South Africans had experienced water cut-offs due to non-payment of water accounts. After an increasing trend of social unrest, the government has admitted that "'service-delivery shortcomings and social marginalisation are widespread and have led to heightened tensions" in the country. (National Treasury 2013 Budget Review)

While approximately 50,000 black contractors were forced into an informal sector relation during apartheid, of the current 72,089 registered contractors, 64,111 (88,93%) are black owned. Attempts by the ANC government to transform the class and race composition of the large construction companies through black economic empowerment by setting a target of 25% black ownership by 2013 have dismally failed to reach this target. The latest figures show that only around 10% of large construction companies are black owned. In addition, in 2013, approximately 80% of public sector tenders were awarded to large contractors in grades 7 to 9 which implies that white capital within the construction sector are still the main beneficiaries, including of the new government's tender system. Over a period of twenty years of active and sustained government intervention to transform the racial ownership patterns in the construction sector, the majority of South Africans remain excluded from ownership, control and management of the productive assets within the construction sector.

The lack of transformation in the ownership patterns in the construction sector is mainly due to the rapid increase in the concentration and centralisation tendencies of capital that occurred as a result of the pro-market policies of the new government but also the internationalisation of South Africa's large construction companies. Under apartheid about 5% of construction companies accounted for 63% of turnover in the industry. By 2011 about 1,2% of construction companies accounted for 64% of turnover in the industry. In 1994 there were 23 industrial-building and construction companies listed on the JSE and by 2013 there were only 12 "heavy construction" companies listed on the JSE as a result of bankruptcies or mergers. The trend therefore since apartheid can be viewed as one of an increasing concentration and centralisation of capital amongst the established apartheid era construction companies and the continued marginalisation of black owned construction companies.

The tendency of concentration of capital within the construction industry monopolies in South Africa which was in decline in the late 1970s was effectively being reversed with the ruling ANC taking power in 1994. The gross operating profit for the construction sector in 1993 was R6,9 billion and R35,1 million in 2012 which amounts to a 412% increase in real terms over a 19 year period. The average gross operating surplus for the entire period (1993-2012) is R19,1 billion, 180 times more than in 1993. The five large JSE-listed heavy construction companies, the "Big Five" each of which tendered as a principal contractor for one or more of the 2010 FIFA World Cup infrastructure projects are Murray & Roberts, Aveng (owner of Grinaker-LTA), Wilson Bayly Holmes-Ovcon (WBHO), Group Five and Basil Read. The aggregate real pre-tax profits of the "Big 5" in 1997 was R382 million which had more than doubled despite huge losses to R 961 million in 2012, a massive increase of 151% in real terms when comparing the two yearsover a 15 year period. What we can observe is the fact that post-apartheid has dramatically increased the concentration and centralisation tendencies within the construction sector with the concentration tendency being dominant. The recovery from the crisis of profitability is due to rapid capital accumulation and capitalist competition over the past 20 years. This is despite what has been called the worst global recession since the Great Depression of the 1930s. The average investment ratio of 4,7% over a 20 year period (1993-2012) indicates a reluctance to invest takes place against the backdrop of the neo-classical argument that high wages reduce financing available for necessary investments to stimulate growth within the economy. What the data highlights is that the construction industry has made super-profits and that 95% of profit is being absorbed directly for private enrichment, conspicuous consumption by the construction and related elites and is likely to finance speculation.

The recovery from the crisis of profitability is not only due to the neo-liberal policies of the post-apartheid government but mainly due to the weakening power of the working class that was already underway when the ANC was elected in 1994. This was manifested not only in the state repression under apartheid, but also capital's response to the economic crisis and the transformation of the productive forces, which involved changes in the development of machinery, the labour process and the education of the workforce. The issue at stake was a labour intensive employment programme to address an unemployment crisis of over 40% of the economically active population (in 1992) but which did not compromise productivity. The compromise deal between capital and labour (mainly led by COSATU) was one in which labour intensive production would be linked to productivity. Despite the "Framework Agreement" between labour and capital (which later became endorsed by government) for a programme of labour intensive construction, the country witnessed a rising capital intensity in the construction sector which increased unabated from 100 in 1994 to 150 by 1999 which further increased to 26% between 2009 to 2012. Coupled with rising capital intensity within the construction sector, the crisis of the 1970s also dramatically altered the labour process through changes in how production was carried out in order to reduce operating costs and thereby enhance competitiveness. The construction sector rapidly changed the labour process from increased casualisation to one of externalisation of workers through subcontractors and labour-brokers. The general trend has been for construction companies to downsize their workforces to fewer core site employees. Subcontracting arrangements became increasingly prevalent with up to 70% of building and 30% of civil engineering projects subcontracted out. The majority of employers in the industry also relied on sourcing skilled people which did not restrict the growth of the companies. The estimated composition of an onsite construction workforce is normally 50% unskilled, 26% semi-skilled, 19% skilled and 5% supervisory. In other words, there is no real interest in the skilling of the vast majority of unskilled and semi-skilled workers who make up 76% of the general construction production process.

Due to the recession, it is estimated that more than 35% of all construction employees were lost to the industry by the mid-1970s and that at least a further 30% of employees were again lost in the late 1980s and early 1990s. As capital regained levels of profitability, increased concentration exists as the mass of the reserve army of labour are mobilised to work in the expanded means of production. As “capital’s power of sudden expansion also grows” so too has there been an impressive increase in the employment of the reserve army within the construction sector. Construction employment was at its lowest at 438,665 in 1994 but climbed to an all-time high of 1,204,000 in 2013. This is a 174% increase in formal and so-called informal construction employment since 1994. Thus, despite the growth in capital intensity within the construction sector, the dramatic expansion of production required an increasing pool of the reserve army of labour in productive employ. The increase in the unskilled and semi-skilled reserve army of labour depicts capital’s continued thirst and reliance on the cheap black labour system inherited from apartheid.

Furthermore, the changes brought about in transforming the productive forces were the key factors in increasing labour productivity, in order to restore and increase the level of profitability in the construction sector in post-apartheid South Africa. Over the twenty year period from 1994-2013, the total productivity of construction workers increased by 123% with an average productivity increase of 6% per annum. The levels of increased productivity were achieved through increasing the exploitation of workers through a combination of increases in both absolute surplus value and relative surplus value. Construction workers in general appear to work longer hours with most workers working at least 4 hours overtime per week or 16 additional hours per month. Besides overtime, production bonuses have also been extensively used to increase the intensity of labour in the production process, especially since construction projects are time-bound. The increase in productivity of 6% per annum within the construction sector has outstripped the increase in wages of -2% per annum and has ensured a decline in the wage share from a high of 72% in 1993 to 46% in 2013. The increases in productivity in the construction sector since 1994 has therefore seen the general decline in real average wages of construction workers.

Racial inequalities formed the bedrock of social and economic apartheid resting on the exploitation of 'cheap' black labour. According to Labour Market Survey data (2012), real earnings for the median worker have remained almost unchanged since 1995. Median earnings in constant 2000 prices have consistently remained below R2,000 a month since 1995, in contrast to those above the median wage, which have seen real wage gains since 1995. Labour Research Service wage data indicates that the real average minimum wage of a construction worker in 2012 was R2,535 per month, not far off the median monthly wage of R2,000. This implies that the income of the construction workforce has not changed substantially since apartheid. On the other hand, the wage gap within the "Big 5" construction companies has grown substantially. In 2004 it took the lowest paid worker within the construction sector 167 years to earn the average annual income of a CEO. At 2013 levels this has increased to 287 years, an increase of 71% when we compare the wage gap of 2004 to that of 2013. There is thus a widening of incomes and increasing inequality within the construction sector. The drop in the wage share within the construction sector, coupled with low level of real wage increases (if we use LRS wage data) with profitability far outstripping wages and the huge increases in the wage gap all contributed to overall inequality in South Africa as expressed in the Gini coefficient of 63,1.

The marginal decrease in the Gini coefficient can be explained in the fact that the power of the working class has receded since the 1980s and with this its capacity to distribute national income in its favour. Part of the problem was discussed with the tabling of the September Commission Report at COSATU's Congress in 1997. The report acknowledged that the Framework Agreement on labour intensive construction agreed to by construction trade unions and COSATU contributed to the marginalisation of the trade unions. The report was referring to the fact that in terms of the RDP, parastatals and the public sector encouraged contracts to small and new black businesses where most of the workers were in vulnerable employ. Furthermore, one major infrastructure development and unemployment alleviation vehicle of government is the Expanded Public Works Programme (EPWP) which pays less than half of what workers in civil engineering pay workers doing similar work. Thus the paradox of the victory of the RDP and the Framework Agreement on labour intensive production was that it was essentially encouraging increased levels of sub-contracting and outsourcing and increasing the rate of exploitation of construction workers through productivity agreements, thus effectively circumventing the role of Black unionism as a threat to the cheap-labour system.

Other factors that contributed to the weakening of trade unions was the exodus of large layers of experienced trade unionists into government and business; an attitudinal change of trade unions to the spontaneous struggle of the workers who had built and sustained the militant trade unions since the 1970s and the increasing bureaucratisation of the trade union movement. The close alliance between labour, the ANC and SACP at the same time also ensured the management of the discontent of organised labour and a decrease in strike activity since 1994 until the 2008 financial crisis where a resurgence of unprotected strikes is emerging indicating a new trend in workers' militancy. The construction sector strike wave has followed a similar pattern as the national with a downward trend from 1999 and where no strike took place at all in 2004. While agreements in the building bargaining councils are annual agreements, those of the civil engineering industry are three-year agreements where both NUM and BCAWU are signatories. The result of the three-year agreements meant that the trade unions tended to lose contact with the vast layers of the reserve army of construction sector workers who were mainly employed on three month limited duration contracts.

It was the hosting of the 2010 FIFA World Cup in South Africa that provided an opportunity to revitalise the trade union movement as vast layers of the reserve army were thrown into employment. It was the construction trade unions affiliated to the Building and Wood Workers' International (BWI) that saw the strategic importance of the World Cup for labour and were the first to develop a model for strategically campaigning around mega sports events with the international launch of the "Campaign for Decent Work Towards and Beyond 2010". The unions recruited 27,731 workers in total and membership grew from 70,736 (2006) to 98,195 (2009), increasing union density by 39,4 %. This increase in trade union density had as its source the spontaneous struggle of the construction workers themselves with 20 of the 26 strikes being wildcat in nature. While the construction trade unions were able to carry out a systematic campaign during the World Cup and in the process secure many gains for non-standard workers, they failed to make the organisational and attitudinal changes necessary to fully develop strategies required to sustain the trade unions, workplace power and trade union membership. After having increased its membership by 33% to 58,984 in 2009, NUM's membership declined to 43,894 in 2014 not far off from the level of its predecessor CAWU's 40,000 members in 1996. Similarly, BCAWU's membership of 35,100 in 2014 is nowhere close to the membership levels of 40,700 it reached in the mid-1980s. The trade unions furthermore only looked at the private sector but at no time did they look at developing a perspective towards a public alternative.

In fact both NUM and BCAWU had been completely silent on the housing crisis and in responding to the debate on a state-owned construction company prompted by Tokyo Sexwale, the then Minister of Human Settlements in 2012 who was lamenting some of the failures of South Africa's housing programme. The construction trade unions could have looked at learning from the China State Construction Engineering Corporation Ltd (China Construction) which is China's largest construction contractor and top home builder in the world. The lack of any response from the construction trade unions to the discussion on a state-owned construction company to resolve the backlog of 2,1 million low cost houses shows that the growth in the social distance between the trade unions is not only with its members but with that of the working class as a whole.

South Africa's construction trade unions, having been transformed from social movement unionism to 'business unionism' would have to review their approach to worker militancy and the class struggle. The alternative is that they will face a gradual demise and, in their place the possibility of new unions emerging to compete in an otherwise open and growing reserve army of labour. Unless a decisive shift and commitment is made to social movement unionism and changes to the organisational form of the unions to adequately represent a fragmented and localised construction workforce, the growing redistribution of income in favour of construction capital will continue unabatedly until the reserve army of labour takes matters into its own hands in episodic spontaneous revolts. There will be no changes made to the current production processes where the huge mass of workers are externalised and casual unless new ways of organising are discovered with an adequate method of servicing non-standard workers where specific kinds of gains in wages and benefits can be made. Overall, a new strategic path needs to be developed where the construction trade unions amass enough confidence to place public sector alternatives on the agenda where the reproduction of the workforce is more stable, where workplace power can be built and the gains used methodically to strengthen workers in the private sector. As in the past, the strategic strength of the construction trade unions lies in linking up with the militancy and spontaneous struggle of workers and harnessing the discontent of working class communities. In so doing, new alliances will be formed and new forms of solidarity will become possible to struggle against the scourge of rampant and growing inequality in South Africa.

References

African National Congress. 1994. “A basic guide to the Reconstruction and Development Programme”. Available at: http://www.anc.org.za/show.php?id=234 (Accessed July 2014)

Bamu, P. & Godfrey, S. 2009. “Exploring labour broking in the South African construction industry”. Report commissioned by the Labour Research Service on behalf of BWI. Cape Town

Betty, T. 1992. “Bifsa has plan to provide housing”. *Sunday Times*, 22 November.

Betty, T. 1993. “Low-cost Housing plan to save building industry”. *Sunday Times*, 10 November.

Bhorat, H., Kanbur, R and Mayet, N., 2011. *A note on measuring the depth of minimum wage violation. Working Paper.* Charles H. Dyson School of Applied Economics and Management, Cornell University, Ithaca, New York.

Bhorat, H., Goga, S., van der Westhuizen, C. & Tseng, D. 2013. “Labour Market and Social Welfare Outcomes in the Context of the Crisis" In: *The ‘Dynamic South’, Economic Development and Inclusive Growth, e*dited by Alexandre de Freitas Barbosa and Maria Cristina Cacciamali. São Paulo.

Bottomore, T. 1991. *A Dictionary of Marxist Thought*. Blackwell Publishing. Australia.

Buhlungu, S. 2010. *A Paradox of Victory: COSATU and the Democratic Transformation in South Africa.* UKZN Press. Durban.

Buhlungu, S & Tshoaedi, M. 2012 (ed). *COSATU’s Contested Legacy.* Human Science Research Council, Cape Town.

Building and Wood Workers’ International. 2008. “BWI mid-year report to Swiss Labour Assistance and SASK”. Johannesburg: BWI.

Business staff. 1992. “300 SA Business Firms face closure”. *Argus*, 28 October.

Bezuidenhout, A, Godfrey, S, Theron, J with Modisha M. 2004. “Non-standard employment and its policy implications”. Unpublished report submitted to the Department of Labour. Sociology of Work Unit, University of the Witwatersrand and Labour and Enterprise Project, University of Cape Town.

BMI Building Research Strategy Consulting Unit CC. 2006. *Strategic Research into the opportunities for job creation, new enterprise development and empowerment in the value system* *of the building industry*, for Construction Industry Development Board and Department of Trade and Industry.

Chester, M. 1993. “Fresh optimism over low-cost housing drive”. *The Star*, 11 March.

China State Construction Engineering Corporation. http://english.cscec.com/col/col144/index.html (accessed 15 August 2014)

Camco and TIPS. 2010. “Climate change risks and opportunities for the South African economy”. Available at: http://www.climateriskandopportunity.co.za/downloads/Section_4/Climate_Change_&_SA_Economy_Construction_201005.pdf (accessed 3 August 2010).

Congress of South African Trade Unions. *The Shop Steward*. Volume 6 No 3 - June/July 1997. Johannesburg. http://www.cosatu.org.za/show.php?ID=2095#ten (accessed 5 June 2014)

Congress of South African Trade Unions. 1997. “The Report of the September Commission: The Future of the Unions”. Johannesburg: COSATU. http://www.cosatu.org.za/docs/reports/1997/septcomm.htm (accessed 14 July 2014)

Congress of South African Trade Unions. 2014. “Minutes of the COSATU Vulnerable Workers Task Team”, 19 August. Johannesburg: COSATU.

Construction Industry Development Board. 2004. *South African Construction Industry: Status Report – 2004*. Pretoria: CIDB.

Construction Industry Development Board. 2005. *Labour Based methods and technologies for employment-intensive construction works.* Pretoria: CIDB

Construction Industry Development Board. 2008. *Quarterly Monitor, Quarter 4*. Pretoria: CIDB

Construction Industry Development Board. 2013. *Subcontracting in the South African Construction Industry*. Pretoria: CIDB.

Construction Industry Development Board. 2014. *Quarterly Monitor, Quarter 1.* Pretoria: CIDB

COSATU. 1997. Cawu faces the challenges of its second decade. In: *Shopsteward*. Volume 6, No. 3 - June/July.

COSATU. 1997. Cawu's ten years of proud struggle. In: *Shopsteward*. Volume 6, No. 3 - June/July.

COSATU. 2009. The Report of the September Commission on the Future of the Unions – Available at: http://www.cosatu.org.za/show.php?ID=2148#sthash.mgUQnrKG.dpuf (accessed 11 December 2013)

Cottle, E & Deedat, H. 2002. *The Cholera Outbreak: A 2000-2002 case study of the source of the outbreak in the Madlebe Tribal Authority areas, uThungulu Region, KwaZulu-Natal*. Health Systems Trust. Durban.

Cottle, E. 2004. The Class Nature of Free Water in South Africa: From Past to Present. (unpublished).

Cottle, E. 2009. "Workers' education and social mobilisation: The Building & Wood Workers' International 2010 World Cup Decent Work Campaign". Paper presented at the Federation of Workers' Education Association (IFWEA), Rutgers University, New Brunswick, New Jersey, 8–9 October.

Cottle, E. 2009. "2010 World Cup and the construction sector: Campaign for Decent Work". Campaign pamphlet produced for Labour Research Service and Building and Wood Workers' International. Cape Town.

Cottle, E. 2011. "Scoring an Own Goal? The Construction Workers' 2010 World Cup Strike" In: Eddie Cottle (ed). *South Africa's World Cup: A Legacy for Whom?* Durban: UKZN Press.

Cottle, E & Rombaldi, M. 2013 "Lessons from South Africa's FIFA World Cup, Brazil and its Legacy for Labour" In: Third World Centre*"La Coupe est pleine!"*. Switzerland.

Department of Public Works. http://www.epwp.gov.za/ (accessed 15 July 2014)

Donnelly, L.2013. "Welfare could be Gini in the bottle".*M&G Online.* 10 May. Available at: http://mg.co.za/article/2013-05-10-00-welfare-could-be-gini-in-the-bottle

Dlamini, R. 2012. "The relationship of construction sector to economic growth". School of Construction Management and Engineering, University of Reading, UK.

Duffy, A. 1993. "One in five construction jobs face axe". *Business Day*, 15 March.

Elliott, L. 2010. "Executive pay should be capped at 20 times average, says union leader", *Guardian online.* Available at: http://www.guardian.co.uk/business/2010/jan/27/executive-pay-bonuses-davos (accessed 1 February 2010).

Fine, B & Saa-Filho, A. 2010. *Marx's Capital*, Fifth Edition, Pluto Press, London.

Galli, P. 1992. "Demand for bricks dives". *Business Day*, 11 September.

Galli, P. 1992. “Bifsa keeping informal sector out”. *Business Day*, 20 October.

Gallin, D. 2001. ‘Propositions of Trade Unions and Informal Employment in Times of Globalisation’. Global Labour Institute, Geneva.

Gqubule, D. 1992. “Grinaker Battered by Slump”, *Business Day*, 3 September.

Green, F. 1991. The ‘Reserve Army Hypothesis’: a Survey of Empirical Applications. In: Dunne, P, (ed). *Quantitative Marxism*. Polity Press. United Kingdom.

Hemson, D. 2008. “Decent work for all?” *Mail&GuardianOnline,* 10 October. Available at: http://mg.co.za/article/2008-10-10-decent-work-for-all (accessed 6 November 2012)

Hoogeveen, J & Ozler, B. 2006. “Poverty and inequality in post-apartheid South Africa: 1995-2000” In: *Poverty and Policy in Post-Apartheid South Africa,* edited by Bhorat, H and Kanbur, R. Cape Town: HSRC Press.

Hyman, R., 2001. *Understanding European Trade Unionism: Between market, class and society*. London: SAGE Publications Ltd.

Infrastructure News. 2012. “R50 billion bill follows poor housing workmanship”. 7 August. http://www.infrastructurene.ws/2012/08/07/r50bn-bill-follows-poor-housing-workmanship/ (accessed 14 August 2014)

ILO. 1995. Labour Based Technologies – A Review of current Practice. *Regional Seminar for labour-based practitioners in the road sector in Sub-Saharan Africa*. University of Witwaterand, Johannesburg, South Africa. 16-20 January 1995.

ILO.2001. The construction industry in the twenty first century: Its image, employment prospects and skill requirements. *Tripartite Meeting on the Construction Industry in the Twenty-first century: Its Image, Employment Prospects and Skill Requirements*. Geneva.

ILO. 2011. Crisis: Causes, prospects and alternatives. *International Journal of Labour Research*. Vol. 3, issue 1.

Jones, G. 2013. “Government to expand Public Works Programme”. *Financial Mail*. 28 March http://www.fm.co.za/economy/2013/03/28/government-to-expand-public-works-programme (accessed 20 February 2014)

Infrastructure News. 2012. “R50 bn Bill follow poor housing workmanship”. 22 August. Available at: http://www.infrastructurene.ws/tag/tokyo-sexwale/ (accessed 14 August 2014)

Innes, D. 1983. “Aspects in Monopoly Capitalism in South Africa” .University of Witwatersrand, African Studies Institute. African Studies Seminar Paper. September.

Investopedia.com. Available at: (http://www.investopedia.com/terms/n/nanocap.asp)

Jeans, F. 1993. “Housing millions need to be released”. *The Star*, 19 March.

Joans, G. 2013. “overnment to expand Public Works Programme”. Financial Mail. 28 March. Available at: http://www.financialmail.co.za/economy/2013/03/28/government-to-expand-public-works-programme (accessed 16 June 2014)

kaNkosi, S. 1997. “Solidarity in opposition to Gear”. *Mail&Guardian*. 19 September. Available at: http://madiba.mg.co.za/article/1997-09-19-solidarity-in-opposition-to-gear (accessed 29 September 2013)

Kalecki, M. 1971. Class Struggle and the Distribution of National Income. Available at: http://econpapers.repec.org/article/blakyklos/v_3a24_3ay_3a1971_3ai_3a1_3ap_3a1-9.htm (Accessed 25 September 2013)

Kantor, B. 2012. ‘Equity markets: Drawing the investment lessons of the past year and the past decade’. Investec. Available at: https://www.investec.co.za/research-and-insights/newsletters/monthly-view-newsletter/january-2013-articles/equity-markets.html (accessed 25 June 2014)

Krumm, A & West, E. 1992. “Building Trade Shrunk by Half”. *Business Day*, 10 September.

Krumm, A. 1992. “Building Industry plan new body”. *Business Day*, 23 September.

Labour Research Service. 1989. *The Building Industry: Bargaining Report for the Construction and Allied Workers Union*. Cape Town: LRS.

Labour Research Service. 1991. *Economic Review prepared for CAWU*. Cape Town: LRS.

Labour Research Service. 1994. *The Building Industry: Bargaining Report for the Construction and Allied Workers Union*. Cape Town: LRS.

Labour Research Service. 2009. *Submission for the Sectoral Determination 2: Civil Engineering Sector, South Africa*. Cape Town: LRS.

Labour Research Service. 2009. Bargaining Monitor: Collective Bargaining Arrangements in the Construction Industry: A Handbook. Cape Town.

Lehulere, O. 1995. “The Workplace Forums and the Struggle for Workers Control”. Unpublished.

Letsoalo, M. 2012. “Uproar over unionist’s huge salary hike just ‘a campaign’”. *Mail & Guardian*. 18 May.

Mandel, E. 1977. *Marxist Economic Theory*. Merlin Press, London.

Marinovich, G. 2013. “Conflict of Interest, Inc: Mining unions' leaders were representing their members while in corporations' pay”. *Daily Maverick*. http://www.dailymaverick.co.za/article/2013-04-24-conflict-of-interest-inc-mining-unions-leaders-were-representing-their-members-while-in-corporations-pay/#.U-EFRfmSySo (accessed 5 august)

Marinovich, G. 2013. “NUM, AMCU, Marikana: ‘Tis the Season to be Bloody’”. *Daily Maverick.* 4 Junehttp://www.dailymaverick.co.za/article/2013-06-04-num-amcu-marikana-tis-the-season-to-be-bloody/#.U_SWCPmSySo (accessed 20 august 2014)

Wittenberg, M. 1994 “Analysis of employment, real wage, and productivity trends in South Africa since 1994” in Conditions of Work and Employment Series No. 45. International Labour Office.

Mead, D. and Morrisson, C. 1996. The Informal Sector Elephant. *World Development*, vol. 24, no. 10, p. 1611-1619.

Mining Weekly. 2000. “Merger-mania grips mining union”. *Mining Weekly Online* (accessed 30 July 2014).

McCutcheon R. 2003. ‘An Overview of the South African Construction Sector in 2003’. Paper drafted for NALEDI. Johannesburg.

McCutcheon, R.T & FLM Parkins, T. 2003. “Employment and High-Standard Infrastructure”. WORK Research Centre for Employment Creation in Construction. University of the Witwatersrand, Johannesburg.

McDonald, D and Pape J. 2002. “Cost Recovery and the Crisis of Service Delivery”. HSRC Press. Cape Town.

McGregor’s Who Owns Whom. 1995. 15th edition. Rosebank.

McNulty, A. 1992. “Investment Needed”. *Financial Mail*, 4 September.

Marx, K. 1990. *Capital Volume 1*. Penguin Classics. England.

Munck, R. 2002. *Globalisation and Labour: the new 'Great Transformation'*. Zed Book. London & New York.

Ndenze, B. 2013. "Housing backlog will cost R800bn". *IOL News*. 22 October. Available at: http://www.iol.co.za/news/politics/housing-backlog-will-cost-r800bn-1.1595609#.U_T9LvmSySo (accessed 20 august 2014)

News 24. 2007. "Green Point 2010 workers strike", News 24. 27 August. Available at: http://www.news24.com/xArchive/Sport/Soccer/Green-Point-2010-workers-strike-20070827 (accessed 27 August 2007).

Oosthuizen, M and Goga, S. 2007. "An Investigation into Changes in the Number of Hours Worked in South Africa: 2000-2005". Development Policy Research Unit School of Economics, University of Cape Town.

Own correspondent. 1992. "Builders want set part of GDP". *Business Day*, 22 October

Price Waterhouse Cooper. 2013. "SA Construction": 1st Edition. Available at www.pwc.co.za/construction (accessed 11 February 2014)

Reddy, N. 2014."Wages, Profits and Unemployment in Post-Apartheid South Africa". Alternative Information Development Centre, Cape Town.

Rowley, M. 1992. "BIFSA Conference". *Cape Times*, 20 October, p.32.

Rowley, M. 1992. 'Government action urgent for construction'. *Cape Times*, 22 October, p.32.

Rowley, M. 1992. 'Plan to boost jobs in construction'. *Cape Times*, 27 October, p.32.

Rowley, M. 1992. 'Government spending boost for construction'. Cape Times, 13 January, p32.

Samson, M, Mac Quene, K and van Niekerk, I. 2001. "Capital/Skills-Intensity and Job Creation: An Analysis of Policy Options". Economic Policy Research Institute. Available at: http://www.tips.org.za/files/CapitalSkills-intensity_and_Job_Creation_An_Analysis_of_Policy_Options.pdf (Accessed 13 February 2014)

Sithole, J & Ndlovu, S. 2006. *The Revival of the Labour Movement, 1079-1980*. University of South Africa. Unisa Press.

South African Federation of Civil Engineering Contractors. 2012. *State of the South African Civil Industry: 2nd Quarter*. Bedfordview: SAFCEC.

South Africa (Republic). 1994. The White Paper on Reconstruction and Development. Government Gazette. No 16085. Pretoria: Government Printers.

South Africa (Republic). Department of Public Works. 1999. *White Paper: Creating an Enabling Environment for Reconstruction, Growth and Development in the Construction Industry*. Pretoria: Government Printer.

South Africa (Republic). Statistics South Africa. 2003. Gross Domestic Product. Revised Estimates 1993-1998, Quarter 1.Statistical release P0441. Pretoria: Statistics South Africa

South Africa (Republic). Statistics South Africa. 1999. Gross Domestic Product. Revised Estimates 1993-2002, Quarter 1.Statistical release P0441. Pretoria: Statistics South Africa

South Africa (Republic). Statistics South Africa. 2013. Gross Domestic Product. Historical tables 1994-2013. Statistical release P0441. Pretoria: Statistics South Africa.

South Africa (Republic). Statistics South Africa. 2014. Gross Domestic Product. Statistical release P0441. Pretoria: Statistics South Africa.

South Africa (Republic). Statistics South Africa.1997. *Construction: Census of construction*. Statistical release P5001. Statistics South Africa.

South Africa (Republic). Statistics South Africa. 2004. *Construction industry*. Statistical release P5002. Pretoria: Statistics South Africa.

South Africa (Republic). Statistics South Africa. 2007. *Construction industry*. Statistical release P5002. Pretoria: Statistics South Africa.

South Africa (Republic). Statistics South Africa. 2011. *Construction Industry*. Statistical release P5001. Statistics South Africa.

South Africa (Republic). Statistics South Africa. 2014. Poverty Trends in South Africa: An examination of absolute poverty between 2006 and 2011. Pretoria: Statistics South Africa.

South Africa (Republic). Statistics South Africa. 2014. Quarterly Employment Statistics (QES). Statistical release P0277. Pretoria: Statistics South Africa.

South Africa (Republic). Statistics South Africa. 2014. Quarterly Labour Force Survey: Historical revisions of the QLFS 2008 to 2013. Statistical release P0211.5. Pretoria: Statistics South Africa.

South Africa (Republic). 2006. Information Services Section, Research Unit, Parliament of South Africa. *The strategic imperatives for South Africa as set out in the 2006 State of the Nation*

Address: An oversight tool for members and committees of Parliament. Cape Town: Parliament of South Africa.

South Africa (Republic). Department of Labour Press Release. 2004. 'Minister appalled at Construction Industry working conditions'. 20 January. Available at: http://www.labour.gov.za/DOL/media-desk/media-statements/2004/minister-appalled-at-construction-industry-working-conditions/?searchterm=construction%20sectoral%20determination (accessed 9 December 2013)

South Africa (Republic). 2014. *The Presidency, Twenty Year Review: South Africa 1994-14*. The Presidency.

South Africa (Republic). 2012. Ministry of Finance. *Budget Review*. Pretoria: Ministry of Finance.

South Africa (Republic). Competition Commission and Competition Tribunal of South Africa. 2009. *Ten years of enforcement by the competition authorities: Unleashing Rivalry, 1999-2009*. Pretoria: Competition Commission and Competition Tribunal of South Africa.

South Africa (Republic). South African Reserve Bank. 2001. *Annual Report*. Available at: https://www.resbank.co.za/Pages/default.aspx (Accessed 12 June 2014)

South Africa (Republic). 2013. South African Reserve Bank Annual Economic Report. Pretoria: South African Reserve Bank.

Sithole, J and Ndlovu, S. 2006. The Revival of the Labour Movement, 1970-1980. In: *The Road to Democracy in South Africa.* South African Democracy Education Trust. Vol. 2. (1970-1980). Pretoria: UNISA Publishers.

South African Federation of Civil Engineering Contractors. 2012. *State of South African Civil Engineering Industry.* Quarter 2. SAFCEC.

South African History Online. Timeline of the Labour and Trade Union Movement in South Africa 1980 – 1990: http://www.sahistory.org.za/timelines (accessed 28 July 2014)

Staff Reporter. 2013. "Productivity drops to 50-year low in SA". *M&GOnline*. Available at: http://mg.co.za/article/2013-03-11-job-index-the-same-but-huge-dip-in-labour-productivty (accessed 15 august 2014)

Staff Reporter. 1993. "Giant Basil Starke finally liquidated". *Cape Times,* 25 March.

Staff Reporter. 2013. "Productivity drops to 50-year low in SA". *Mail&Guardian*. 11 March.

http://mg.co.za/article/2013-03-11-job-index-the-same-but-huge-dip-in-labour-productivty

(Accessed 16 July 2014)

Taal, M. 2011. Their Cup Runneth Over: Construction Companies and the 2010 FIFA World Cup. In: Cottle, E (ed). *South Africa's World Cup: A Legacy for Whom?,* Durban: UKZN Press.

Trading Economics. "South Africa GDP Growth Rate". Available from: http://www.tradingeconomics.com/south-africa/gdp-growth (accessed 16 October 2013)

http://www.grinaker-lta.com/about-us/construction-charter (accessed 24 July 2014)

Wang, M. 1993. "Construction industry goes to the wall". *Weekly Mail*, 11 March.

Watermeyer, R.B. 1995. "Labour Based Construction, the Development of Emerging Contractors and the RDP". Soderlund & Schutte Inc. Consulting Engineers. Johannesburg.

UNDP. 2014. *Human Development Report*. New York.

West, E. 1992. "Basil Read reports first loss in a decade". *Business Day*, 11 September, p.32.

West, E. 1992. "Higher tax bill takes bite out of Concor's earnings". *Business Day*, 14 September, 32.

West, E. 1992. "A bridge too far for Group Five". *Business Day*, 25 September, p.32.

Wood, T. 1992. "Scheme Launched in the Townships". *The Star*, 22 September, p.32.

Venter, I. 2010. "Construction capacity to exceed demand into 2012, says WBHO's Nel", *Engineering News*, 7 September.