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cidb Construction Monitor - Employment; October 2020

1. Introduction

The cidb Quarterly Monitors focus on the following themes per quarter:

- Quarter 1: Supply & Demand;
- Quarter 2: Contractor Development;
- Quarter 3: Employment; and
- Quarter 4: Transformation.

This cidb Construction Monitor – Employment (Quarter 3) examines employment in the construction industry and the factors affecting employment.

Details of employment are obtained from the Quarterly Labour Force Survey¹, the Quarterly Employment Statistics², the cidb SME Business Confidence Survey³. The employment data includes details of formal and informal construction employment, as well as employment at the national and provincial levels.

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2. Employment in the Construction Industry; Overview

2.1 Context

South Africa has a challenge of high unemployment and skills shortages, at the end of 2020Q2, the unemployment rate was 23%\(^4\), this was the lowest unemployment rate since 2009. The unemployment rate has fallen for very unhealthy reasons, not due to more jobs created, but because people were not able to actively look for work due to the lockdown. The construction industry is an important player in job creation, not only in the construction sector but in other sectors of the economy. According to Stats SA, the construction industry is one of the industries that have higher employment shares relative to their GDP contribution. The construction industry uses a wide range of inputs (such as construction materials) from many other industries to produce its goods and services\(^5\), and as a result the construction industry also contributes indirectly to the jobs that are created across a number of sectors. Sectors that benefit from construction output include manufacturing, mining, transportation, real estate and business services.

According to Stats SA\(^6\), total employment in South Africa has declined by 2,1 million between the period 2019Q2 to 2020Q2. During this period, the number of employed people in the construction industry declined by 297 000 on a year-on-year basis and 278 000 on a quarter-on-quarter basis. The construction industry was one of the industries that experienced a high number of jobs losses due to the lockdown. Many construction workers are on short term, project based contracts, therefore when construction sites were closed they lost their jobs immediately, especially those in the informal sector.

2.2 Employment in the Construction Industry (Formal Sector)

2.2.1 Construction Formal Employment (Quarterly Labour Force Survey)

Data from the Quarterly Labour Force Survey (QLFS)\(^7\) shows that the formal sector (excluding agriculture and private households) employs around 10,1 million people, of which the construction sector accounts for 7% of total formal employment. On a year-on-year basis, the total formal sector employment contracted by (-1,1million) for the period 2019Q2 to 2020Q2, on a quarter-on-quarter basis total formal sector employment contracted by (-1,2 million) for the period 2020Q1 to 2020Q2.


In the construction industry, based on the Quarterly Labour Force Survey data, formal employment accounts for 64%, while informal employment accounts for 36% of total construction employment. In 2020Q2 the construction formal sector employed 680 000 people, there was a decline of -186 000 jobs or (-22%) in the number of jobs created on a year-on-year basis. On a quarter-on-quarter basis, there was a significant decline of -202 000 or (-10%) in the number of jobs created. The construction formal sector has grown at a lower rate than the construction informal sector, the average growth rate was (-0,4%) from the period 2009Q2 to 2020Q2. During this period, the construction formal sector experienced it’s highest peak in employment in 2015Q3 when it had a year-on-year growth of around 17%.

2.2.2 Construction Formal Employment (Quarterly Employment Statistics)

According to the Quarterly Employment Statistics (QES), at the end of 2020Q2 the construction industry employed around 487 587 people in the formal sector, with civil engineering contributing to the bulk of the employment of 284 684 people (58%) and general building contributing around 174 044 (36%), the rest of the employment was for site preparation (1%) and renting of construction equipment with operators (5%). The effect of the downturn, the lockdown and lack of demand in the sector are illustrated by the decline in employment or job losses that have occurred in the sector. The Quarterly Employment Statistics data indicate that there were major job losses in the sector, total job losses amounted to (-111 782), in civil engineering (-68 571) and general building (-40 560) on a year-on-year basis. At the end of 2020Q2, Stats SA Quarterly Employment Statistics figures showed that construction employment declined by -22.9% year-on-year, - 24.1% in civil engineering and -23.3% in general building.

Trends in infrastructure investment (GFCF) and total formal employment are illustrated in figure 2, 3 and 4 below in which GFCF is shown in real terms (2010 Rands), together with the total formal employment obtained from the Quarterly Employment Statistics. It is seen that the total construction spend in 2019 amounted to around R271 billion in 2010 Rands (or R427 billion in nominal Rands), and as at 2019Q4

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the sector employed 337,000 in civil engineering, 212,000 in general building (building installation and completion) and a further 31,000 in site preparation and rental of construction equipment (i.e. total employment of 580,000 people).

Figure 2 | Gross Fixed Capital Formation in Construction and Formal Employment (QES)

Figure 3 | Investment in Civil Engineering and Formal Employment in Civil (QES)
2.3 Employment in the Construction Industry (Informal Sector)

The informal sector employs around 2.3 million people, the largest contributors of jobs in the informal sector are trade (42%), community and social services (12%) and construction (17%). In South Africa, the informal sector accounts for around 18% of non-agricultural employment. In the construction industry, based on the Quarterly Labour Force Survey data, formal employment accounts for 64%, while informal employment accounts for 36% of total construction employment. The contribution of the construction sector to informal employment is significant.
The year-on-year growth in the construction industry’s informal employment is shown in the figure 6 and 7 below. Although significant fluctuations are seen on a year-on-year basis, overall there was significant growth in construction informal employment between 2009Q3 and 2019Q4, after that the sector started experiencing a decline.

The construction informal sector accounts for around 17% of total informal employment. In the shorter term, the construction informal sector contributed to job losses in 2020Q2. There was a decline of -76 000 or -16% in the number of job opportunities shed on year-on-year basis from 2019Q2 to 2020Q2, and there was also a decline of -111 000 or -22% in the number of job opportunities shed on a quarter-on-quarter basis. According to the International Labour Organisation, in previous economic crises, the informal sector tends to increase because it acts as a default option for survival or maintaining income, but the lockdown has restricted that type of coping mechanism9. This is also shown in the number of job opportunities shed by the construction informal sector.

![Figure 6](image-url)
The informal sector includes the self-employed in micro-businesses that are not registered for income tax or VAT registered, employees with regular employment in formal or informal enterprises who do not receive benefits such as medical aid and pension funds, those that do not contribute to UIF and who do not have written employment contracts, short term employees and casual employees. According to the ILO, these unprotected workers, including the self employed were the hardest hit by COVID and the lockdown because they do not have access to paid leave and sick leave benefits, and they are less protected by social protection mechanisms. Many construction workers in the informal sector were severely impacted by the lockdown because they are mostly on short term, project based contracts, therefore when construction sites were closed they lost their jobs immediately. In the construction industry, the majority of the informal self-employed individuals are mostly micro and small enterprises registered in cidb Grades 1 and 2. The informal self-employed are predominantly in rural provinces such as Limpopo, Mpumalanga and the Eastern Cape as well as urban provinces such as Gauteng and KwaZulu Natal in which the construction or major repairs to own houses is high. High informal employment in these provinces is also attributed to the following:

- the high unemployment rate in these provinces, the individuals located in these provinces may not have the experience and skills to be absorbed by the formal enterprises therefore people have to find alternative means other than formal employment to generate an income and to gain experience; and
- informal sector construction activities such as constructing, maintaining and repairing individual’s houses is common in these areas.

The informal sector enterprises comprises mostly of subcontractors and labour only contractors, some of these businesses have linkages with enterprises in the formal sector through subcontracting and providing labour-only services. In terms of skill requirements, the subcontractors and labour only

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contractors that perform common tasks in the informal sector utilises mostly low skilled and unskilled labourers.

2.4 Employment Index; Contractors

The cidb SME employment index\textsuperscript{12} and activity index obtained from the cidb SME Business Conditions survey which covers Grades 3 to 8 cidb registered contractors is shown in figure 8 and 9 below. The Quarterly Labour Force Survey and the Quarterly Employment Statistics both show a decline in formal construction employment, this is supported by the cidb SME employment index which shows a negative net balance – i.e. more contracting enterprises surveyed indicated that they are reducing staff than employing staff. For General Building (GB) the employment index and activity was at it’s lowest level of (-69) and (-93) respectively in 2020Q2. For Civil Engineering (CE) the employment index and activity was at it’s lowest level of (-70) and (-86) respectively in 2020Q2. Construction workers get laid off due to a decline in construction activity, during the lockdown construction sites were shut down for over a month, and they reopened slowly under alert level 3, this had a severe impact on activity, hence the deficiency of the demand for the services of construction workers has created job losses. The rate of labour shedding has been increasing for both General Building (GB) and Civil Engineering (CE) contractors, this correlates with construction activity which has been declining.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{graph.png}
\caption{Employment Index (Net Balance) and construction activity: cidb Registered Contractors (Grades 3 to 8 - GB)}
\end{figure}

Of the nine provinces in South Africa, four provinces stand out in terms of their contribution to employment, namely Eastern Cape, Gauteng, KwaZulu Natal and Western Cape which collectively account for around 75% of total formal and informal construction employment. Of these, Gauteng alone accounts for close to 32% of total construction employment. Gauteng currently has the highest contribution of 32% and Northern Cape has the lowest contribution of 5%.
Quarterly gains and losses in total construction employment by province is given in the table 5 below.

<table>
<thead>
<tr>
<th>Yyyqq</th>
<th>SA</th>
<th>EC</th>
<th>GP</th>
<th>KZ</th>
<th>WC</th>
<th>NC</th>
<th>FS</th>
<th>MP</th>
<th>LP</th>
<th>NW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020Q2</td>
<td>-278</td>
<td>-51</td>
<td>-39</td>
<td>-34</td>
<td>-40</td>
<td>-12</td>
<td>-17</td>
<td>-31</td>
<td>-46</td>
<td>-9</td>
</tr>
<tr>
<td>2020Q1</td>
<td>-7</td>
<td>14</td>
<td>15</td>
<td>-6</td>
<td>-17</td>
<td>3</td>
<td>-10</td>
<td>-4</td>
<td>1</td>
<td>-3</td>
</tr>
<tr>
<td>2019Q4</td>
<td>45</td>
<td>-6</td>
<td>-16</td>
<td>-10</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>-2</td>
<td>-1</td>
<td>7</td>
</tr>
<tr>
<td>2019Q3</td>
<td>-24</td>
<td>15</td>
<td>2</td>
<td>1</td>
<td>-29</td>
<td>4</td>
<td>-13</td>
<td>-3</td>
<td>14</td>
<td>-14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-297</strong></td>
<td><strong>-28</strong></td>
<td><strong>-38</strong></td>
<td><strong>-48</strong></td>
<td><strong>-66</strong></td>
<td><strong>-5</strong></td>
<td><strong>-20</strong></td>
<td><strong>-40</strong></td>
<td><strong>-32</strong></td>
<td><strong>-19</strong></td>
</tr>
<tr>
<td>2019Q2</td>
<td>24</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>-6</td>
<td>-2</td>
<td>4</td>
<td>9</td>
<td>-9</td>
<td>5</td>
</tr>
<tr>
<td>2019Q1</td>
<td>-142</td>
<td>-28</td>
<td>-55</td>
<td>-14</td>
<td>-3</td>
<td>-6</td>
<td>-2</td>
<td>-5</td>
<td>-10</td>
<td>-22</td>
</tr>
<tr>
<td>2018Q4</td>
<td>-21</td>
<td>-8</td>
<td>16</td>
<td>6</td>
<td>-11</td>
<td>-1</td>
<td>-7</td>
<td>-9</td>
<td>-16</td>
<td>8</td>
</tr>
<tr>
<td>2018Q3</td>
<td>27</td>
<td>9</td>
<td>-6</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>13</td>
<td>2</td>
<td>13</td>
<td>-16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-113</strong></td>
<td><strong>-16</strong></td>
<td><strong>-38</strong></td>
<td><strong>8</strong></td>
<td><strong>-19</strong></td>
<td><strong>-7</strong></td>
<td><strong>9</strong></td>
<td><strong>-3</strong></td>
<td><strong>-22</strong></td>
<td><strong>-25</strong></td>
</tr>
</tbody>
</table>

At the end of 2020Q2, 1 066 000 people were employed in the construction industry. In 2020Q2 the construction industry contributed to job losses in the economy, declining by -278 000 jobs quarter-on-quarter, -202 000 in the formal sector and -76 000 in the informal sector. Construction employment contracted by -20.7% quarter-on-quarter and there was also a year-on-year contraction of -21.8%. All provinces experienced a quarter-on-quarter decline in employment, the highest number of job losses were in the Eastern Cape (-51 000), Limpopo (-46 000), Western Cape (-40 000) and Gauteng (-39 000).

On a year-on-year basis, (-297 000) jobs were shed in construction employment, -186 000 in the formal sector and -111 000 in the informal sector. All provinces experienced a year-on-year decline in employment, the highest number of job losses were in the Western Cape (-66 000), KwaZulu Natal (-48 000), Mpumalanga (-40 000) and Gauteng (-38 000). Details of employment for the provinces with the major contributions to construction employment in South Africa are shown in figure 12 to 16 below.

![Figure 12](image-url)
4. Composition of Construction Labour Force

4.1 Composition by Gender

According to Stats SA, the unemployment rate is higher amongst females (45.7%) compared to males (38.9%). The labour absorption rate is higher for males (41.3%) as compared to females (31.3%). At the end of 2020Q2, the construction industry employed around 1 066 000 people, of which 87% are male and 13% female. In comparison with other industries, the construction industry has the highest proportion of male employment. On a year-on-year basis, the number of females employed in the industry decreased by -9 000 while the number of males employed decreased by -288 000. On a quarter-on-quarter basis the number of females employed in the industry decreased by -6 000 while the number of males employed decreased by -271 000. Male representation in the construction industry is high (87%) compared with the industry average of 56% for all industries. Women’s contribution to the construction labour force has remained in same range over the past 10 years.

Trends in the employment by gender are given in figure 17 below. These trends show that during COVID, males appeared to be at the forefront of job losses, males experienced -24% year-on-year job losses, and females experienced -6% year-on-year job losses.

![Figure 17 | Composition of Construction Employment by Gender](image)

4.3 Composition by Skills Profile

An estimate breakdown of the labour force profile in the contracting sector is given below, obtained from the 2017 Workplace Skills Plan submissions and the CETA database.14

<table>
<thead>
<tr>
<th>Occupational Major Group</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>9%</td>
</tr>
<tr>
<td>Professionals</td>
<td>8%</td>
</tr>
<tr>
<td>Technicians and Associate Professionals</td>
<td>11%</td>
</tr>
<tr>
<td>Clerical Support Workers</td>
<td>6%</td>
</tr>
<tr>
<td>Service and Sales Workers</td>
<td>2%</td>
</tr>
<tr>
<td>Trade Workers</td>
<td>14%</td>
</tr>
<tr>
<td>Plant and Machine Operators and Assemblers</td>
<td>13%</td>
</tr>
<tr>
<td>Elementary Occupations</td>
<td>37%</td>
</tr>
</tbody>
</table>

It is seen that the semi-, low and unskilled occupations of trade workers, plant and machine operators and assemblers, and elementary occupation, clerical support, and services support workers account for around 70% of the total construction workforce and only around 28% account for the skilled workers such as managers, professionals, technicians and associate professionals.

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4.4 Skills Shortages; Contractors

Access to skills is one of the constraints that contractors experience in growing their businesses. This is illustrated in figure 18 and 19 below where the constraints of access to work and access to skills are compared (weighted index) for General Building (GB) and Civil Engineering (CE) classes of work.\(^\text{15}\)

Note that the shortage of skills is also driving up the cost of labour, resulting in decreased profit margins for small and medium contractors. Small and medium sized emerging contractors are likely to be bearing the brunt of these skills shortages, and are the least able to attract and train skilled labour. According

to Stats SA, unemployment rates are higher amongst individuals with less than matric and matric, relative to graduates and it is also reported that long term unemployment occurs more amongst those individuals without experience\textsuperscript{16}. South Africa has an abundance of low and unskilled labour, there is a gap between the skills that the population has and the skills that the economy needs, this is also reflected by the high labour absorption rate for the individuals with tertiary education, they are more likely to be absorbed or employed in the economy. Compared to other sectors such as finance and business services, construction is one of the sectors which is most intensive in unskilled and low skilled labour, therefore it is one of the sectors that should be absorbing the high number of low and unskilled unemployed individuals. Unfortunately the low growth and decline in the sector has impacted the sector’s ability to create jobs.

Access to skilled labour is a constraint for the growth of small and medium contractors, but it is currently not a significant constraint as it was in 2008 when the construction industry was at its peak. Contractors are currently experiencing that access to work is the most significant constraint to their growth.

GAUTENG PROVINCIAL OFFICE PRETORIA  
cidb@cidb.org.za

WESTERN CAPE PROVINCIAL OFFICE CAPE TOWN  
cidbw@cidb.org.za

EASTERN CAPE PROVINCIAL OFFICE BISHO  
cidbec@cidb.org.za

NORTHERN CAPE PROVINCIAL OFFICE KIMBERLEY  
cidbnce@cidb.org.za

FREE STATE PROVINCIAL OFFICE BLOEMFONTEIN  
cidbf@cidb.org.za

KWAZULU-NATAL PROVINCIAL OFFICE DURBAN  
cidbkzn@cidb.org.za

LIMPOPO PROVINCIAL OFFICE POLOKWANE  
cidb@lidb.org.za

MPUMALANGA PROVINCIAL OFFICE NELSPrUIT (MBOMBELA)  
cidb@mpumalanga@cidb.org.za

NORTH WEST PROVINCIAL OFFICE MAHIKENG  
cidbnw@cidb.org.za

cidb contact number: 086 100 2432
Anonymous Fraud Line: 0800 11 24 32
email: cidb@cidb.org.za
www.cidb.org.za