



Bi-Annual Economic and Capacity Survey

January – June 2021

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1. Economic overview

1.1 International Developments

After what was a record contraction of 3.5 percent in the global economy in 2020, the global economy is expected to bounce back driven by vaccines and the liberalizing of restrictions on basic economic activity. The recovery is however expected to be divergent in nature between advanced economies and emerging/developing economies, with vaccine access being the main driver. According to the IMF's latest world economic outlook report, the global growth forecast for 2021 is unchanged from their April report at 6.0 percent, but the nature of the forecast has changed, as emerging economies are expected to perform more poorly than expected, while advanced economies are expected to perform better than expected. The IMF notes that this is the 'principal fault line' that has emerged along which the recovery is split into two groups: those that can expect and look forward to a further normalization of economic activity in the latter stages of 2021, and those that will face resurgent infections of the virus. South Africa falls into the latter group, with a slow and lackluster vaccine rollout hindering the ability of the economy to recover, as we still expect to face restrictions on economic activity at least until the end of the year.

The IMF has in turn revised forecast for emerging markets down by 0.4 percent for 2021, while they upgraded the outlook for advanced economies by 0.5 percent respectively. Importantly they note that the recovery in advanced economies is not guaranteed as long the virus continues to rage in other parts of the world, given the globalized nature of the global economy. The IMF also notes that as long as the vaccine rollout in many emerging markets remains slow, this gives the virus a chance to mutate further, which in turn poses an even greater risk. It is well known that it is considerably more difficult to transmit the virus amongst those who are vaccinated, and until we get to a point where most of the global population is vaccinated, the virus will continue mutating. Downside risks to the outlook include transitory inflation which has remained relatively high, as well as food prices which has been a lot higher than anticipated.

Table 1: Global economic outlook

	2017	2018	2019	2020	2021	2021
World	3.8%	3.6%	2.9%	-3.5%	6.0%	4.9%
Advanced Economies	2.4%	2.2%	1.7%	-4.9%	5.6%	4.4%
US	2.2%	2.9%	2.3%	-3.4%	7.0%	4.9%
Eurozone	2.4%	1.8%	1.2%	-7.2%	4.6%	4.3%
UK	1.8%	1.4%	1.3%	-10.0%	7.0%	4.8%
Emerging markets	4.7%	4.5%	3.7%	-2.4%	6.3%	5.2%
Brazil	1.1%	1.1%	1.2%	-4.5%	5.3%	1.9%
Russia	1.8%	2.3%	1.1%	-3.6%	4.4%	3.1%
India	6.7%	7.1%	4.8%	-8.0%	9.5%	8.5%
China	6.8%	6.6%	6.1%	2.3%	8.1%	5.7%
Sub-Saharan Africa	2.7%	3.0%	3.3%	-2.6%	3.4%	4.1%
SA	1.3%	0.8%	0.4%	-7.5%	4.0%	2.2%

Source: IMF World Economic Outlook July 2021

1.2 Domestic Economy

According to Stats SA, the economy contracted by 2.7 percent on a year-on-year basis in the first quarter, as the economy struggles to recover from the Covid-19 pandemic and subsequent global lockdowns. The economy is clearly still operating at a much lower level than pre-pandemic which was also a recessionary period, so that comparison is coming off a low base. Growth in the first quarter of 2020 was barely affected by the pandemic and lockdowns, so it makes for a robust point of comparison at this stage. This comes as the vaccination rollout has been extremely slow, and at the current pace we are not expected to vaccinate enough people to start to open the economy, in any meaningful way, anytime soon.

The construction industry was again the worst performing sector in the economy, with construction GDP down 18.1 percent in the first quarter year on year, seasonally adjusted, which certainly dents the narrative that the construction industry is seeing some sort of robust recovery which has been pushed by those who may peg industry performance against an improved performance by a few listed companies, such as Raubex. While tender activity has improved, there is still little to no evidence that these tenders are being awarded at any sort of reasonable pace. It also puts to bed the notion that any of the governments Strategic Infrastructure Projects (announced and gazetted at the end of July last year) were indeed 'shovel ready' or being fast tracked on any sort of broad base. There has however been some progress, with a few high-profile projects being awarded, but at a broader macroeconomic level, these have proved so far just to be anecdotal examples, not indicative of the overall environment.

In terms of the other sectors, there were some positives, with **the agriculture and mining sectors with some encouraging figures**, with agriculture and mining output up by 10.7 percent and 4.8 percent respectively, which is excellent. Unfortunately, the agriculture industry is one of the smallest sectors in the economy, so is not able to contribute much to the overall figures. Favourable climate, as well as soaring food and commodity prices were able to boost the prospects for these two industries. Manufacturing output was down by 0.7 percent in the first quarter, which isn't too bad, but the tertiary/service sectors were what really brought the overall figures down, with GDP from finance, real estate and business services down by 5.2 percent y-y, and GDP from wholesale, retail trade, hotels and restaurants down by 2.7 percent y-y, as poorer South Africans and a lack of tourists dent those sub-sectors.

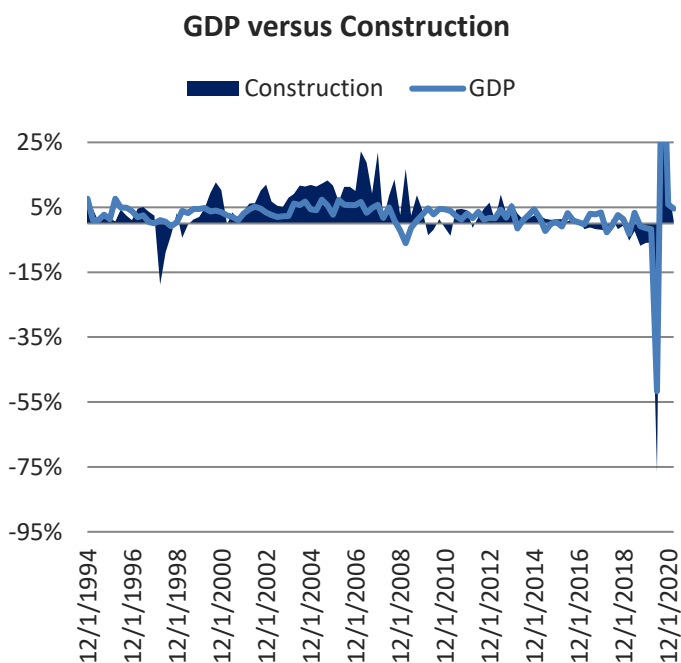


Figure 2: GDP overall versus construction

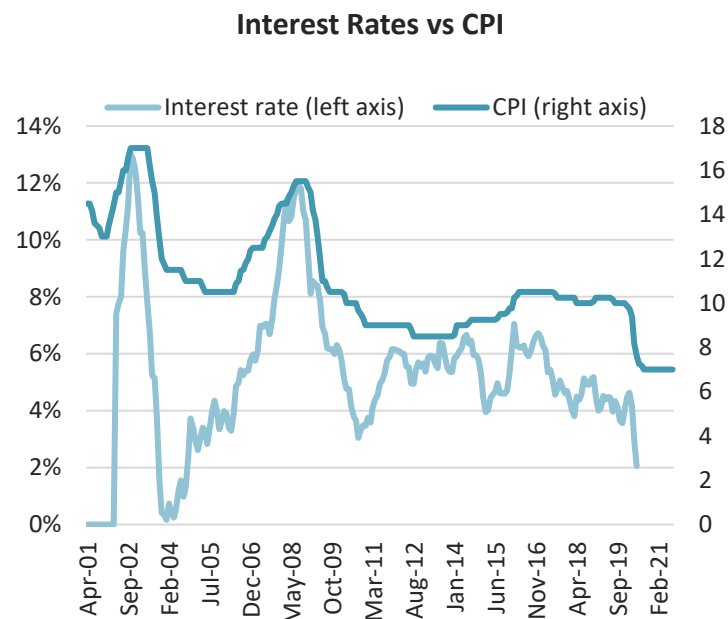
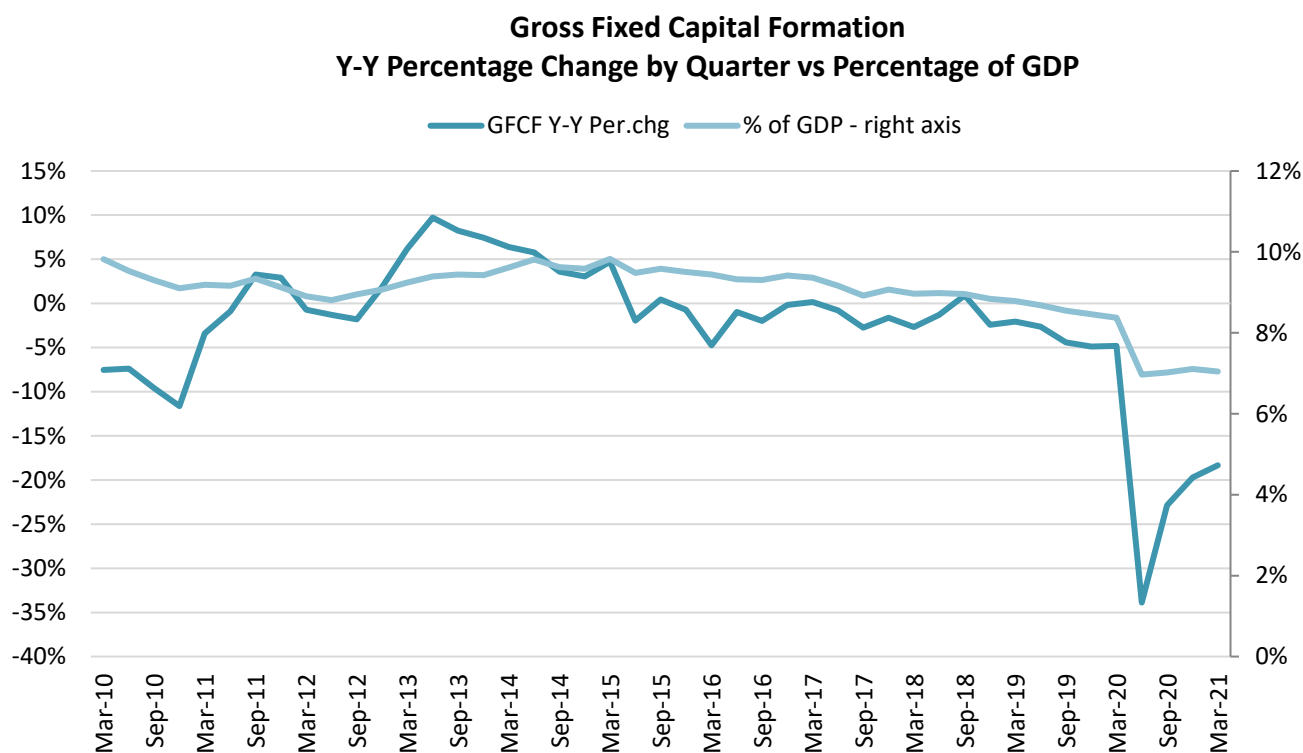


Figure 1: Interest rates versus CPI history

Table 2: Macro economic growth projections (Industry Insight Forecast Report)

Macro-Economic Forecasts	2019	2020	2021	2022	2023
GDP	0.1%	-7.0%	2.8%	0.9%	0.6%
Household consumption	1.0%	-4.2%	2.0%	1.1%	0.8%
Government consumption	1.5%	5.2%	-0.1%	-1.6%	-1.7%
Gross Fixed capital formation	-0.9%	-12.7%	0.1%	1.9%	-0.2%
Imports	-0.5%	-2.3%	9.1%	4.2%	3.8%
Exports	-2.5%	-12.2%	3.2%	5.3%	5.7%
Prime Lending rate	7.0%	7.25%	7.0%	7.25%	7.5%
ZAR/US\$	R 16.50	R 15.00	R 15.05	R 15.35	R 15.65
CPI Inflation	4.1%	4.0%	4.5%	4.6%	4.5%

1.3 Gross fixed capital formation

**Figure 3: GFCF (Y-Y percentage changes vs Percentage of GDP) Source SARB Quarterly Bulletin**

If we break down the gross fixed capital formation (investment) figures down, which are released in conjunction with the GDP data, we see investment/activity in the construction industry was down in every sector, including the civil construction industry, which we have been a lot more upbeat about, and is certainly disappointing. **Investment/activity in civil construction was somehow worse than the building segments and was down by 19.0 percent in the first quarter of 2021** on a year-on-year basis, seasonally adjusted. Investment, or activity in the residential and non-residential industries was down by 18.0 percent and 16.3 percent in the first quarter y-y respectively, which was more expected.

As the construction industry underperformed the economy in 2020, the contribution of **investment in construction** as a proportion of GDP continues to decline. Investment (in the construction industry as a proportion of GDP was just 7.0 percent in the 1st quarter.

Table 3: GFCF Residential, Non-Residential and Construction works, by client 2020, constant 2010 prices (millions)

2020	Government	SOE's	Private	Total
Residential	750	31	41729	42511
Non-residential	14134	1325	20173	35633
Civil works	51250	42786	43965	138002
Total	66134	44142	87711	216146

Source: South African Reserve Bank Quarterly Bulletin

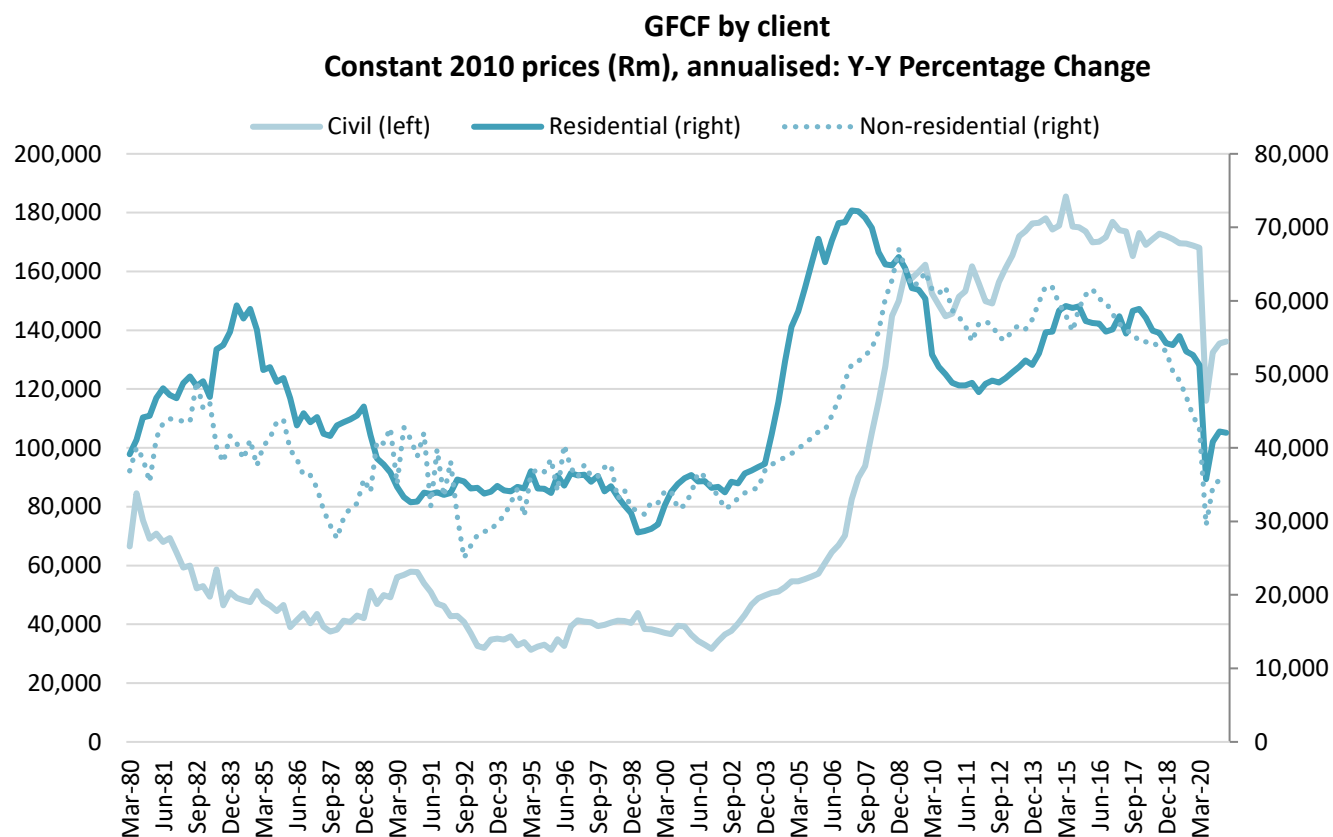


Figure 4: GFCF by client, constant 2010 prices (Source SARB)

2. CESA Survey: Background

A total of 53 questionnaires were returned via both an on-line and hard copy system. The sample represents a cumulative fee income of R2.66bn, and 5302 employees for the period January – June 2021.

The analysis of the questionnaires completed by active firms in the consulting engineering profession provides a proxy for current and expected working conditions for the profession, which can be measured and benchmarked on a regular basis.

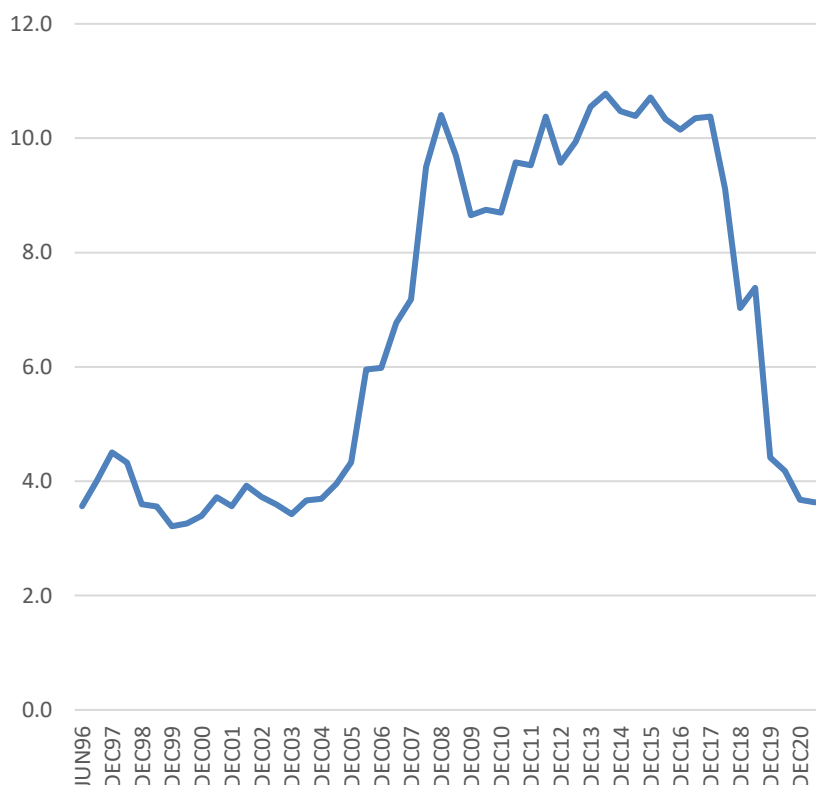
CESA welcomes commentary received from firms and invites all members to actively participate in sending commentary on either the survey or conditions in the workplace thereby increasing the relevance of these reports.

The survey is re-evaluated on a continuous basis to ensure that the questions asked are pertinent to current conditions in the industry. Several new questions were included in the current survey to improve the compilation of benchmark indicators.

3. Prevailing conditions in the Consulting Engineering Industry

3.1 Financial Indicators

Fee Income, Rbn, Real prices Annualised



Fee earnings for the first six months of 2021 increased by 1.0 percent (in current prices) compared to the previous quarter but was down by 9.7 percent y-y compared to the same quarter last year, which is concerning given that the first half of 2020 was characterised by hard lockdowns and economic collapse, so contextually a very poor performance by the consulting engineering firms in the first half of the year.

Interestingly, large firms and micro firms were the only to report increases in income in the first six months of the year, with large firms reporting a 3 percent increase, and the micro firms a robust 17 percent increase, in nominal terms. Small firms had the worst six-month period, as fee income was down by 23 percent, while medium sized firms reported an 8 percent increase.

On average, engineers are expecting no change in projected fee income, on balance. The small firms are the most optimistic (given they had such a poor period, they expect conditions to improve), while large and medium sized firms don't expect any major change, with large firms expecting a 1 percent drop, and medium sized firm's an increase of 3 percent.

A summary of fee earnings by firm size, as well as projected earnings for the last six months of 2020 is provided in the table below.

Table 4: Fee earnings, actual vs projected by firm size

Firm size category	Actual (June 2021 vs Dec 2020)	Projected for Dec 2021
Large	3%	-1%
Medium	-8%	3%
Small	-23%	26%
Micro	17%	-4%
Total	0.7%	0.2%

3.1.2 Outsourcing

On average firms **outsourced** a higher percentage of turnover to black owned enterprises compared to that of external enterprises or that of public sector requirements. The percentage of turnover outsourced to black owned enterprises was down quite considerably in this survey, decreasing from 29.1 percent to 19.3 percent.

There was a mix between the different sized firms outsourcing work in the current survey, with medium sized firms again outsourcing the most to external enterprises, while small firms outsourced the most to black owned enterprises. Overall outsourcing was down quite significantly for both categories in the first half of the year.

Figure 6: Matrix distribution of average percentage outsourced by firms, according to main purpose

Table 5: Average percentage of turnover outsourced, for consulting services only, by firm, size and purpose

	<i>External enterprises or individuals including sub-consultants, joint ventures and contract workers</i>	<i>Black owned enterprises</i>
A	17.4	15.4
B	20.9	13.2
C	16.7	33.5
D	14.2	6.6
Average % of industry turnover	17.6	19.3
Average % of industry turnover June 2021 Survey	24.0	29.1

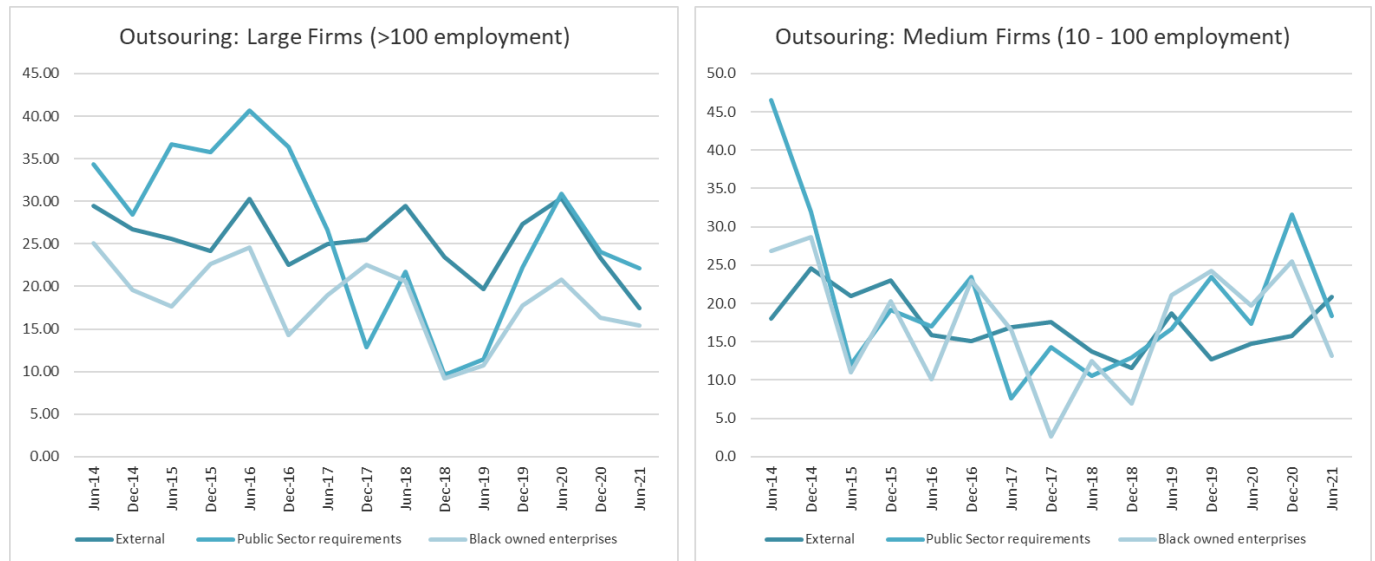


Figure 8: Outsourcing trend, large versus medium sized firms

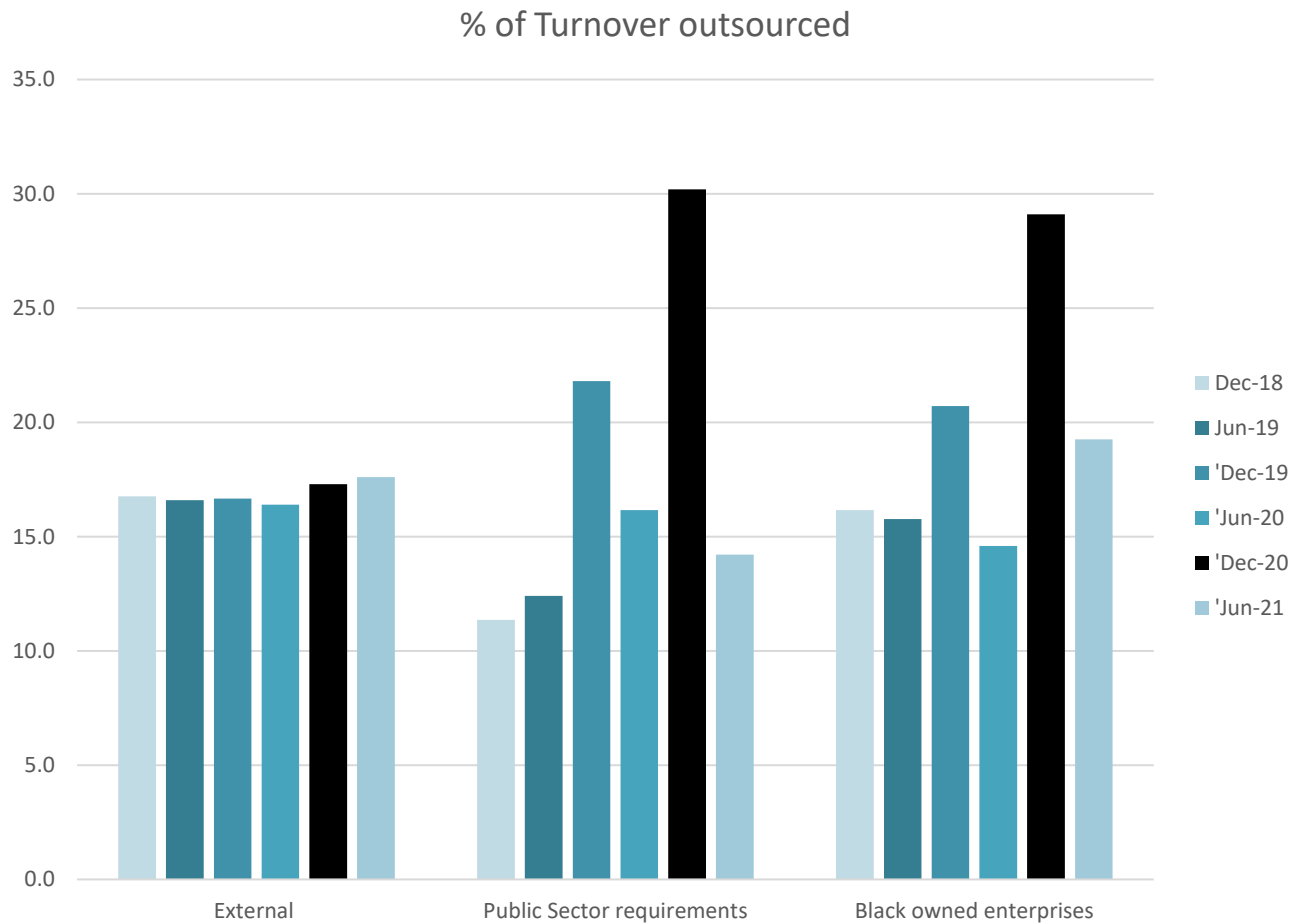


Figure 7: Percentage of turnover outsourced (average)

3.1.3 Return on Working Capital

Average Return on Working Capital

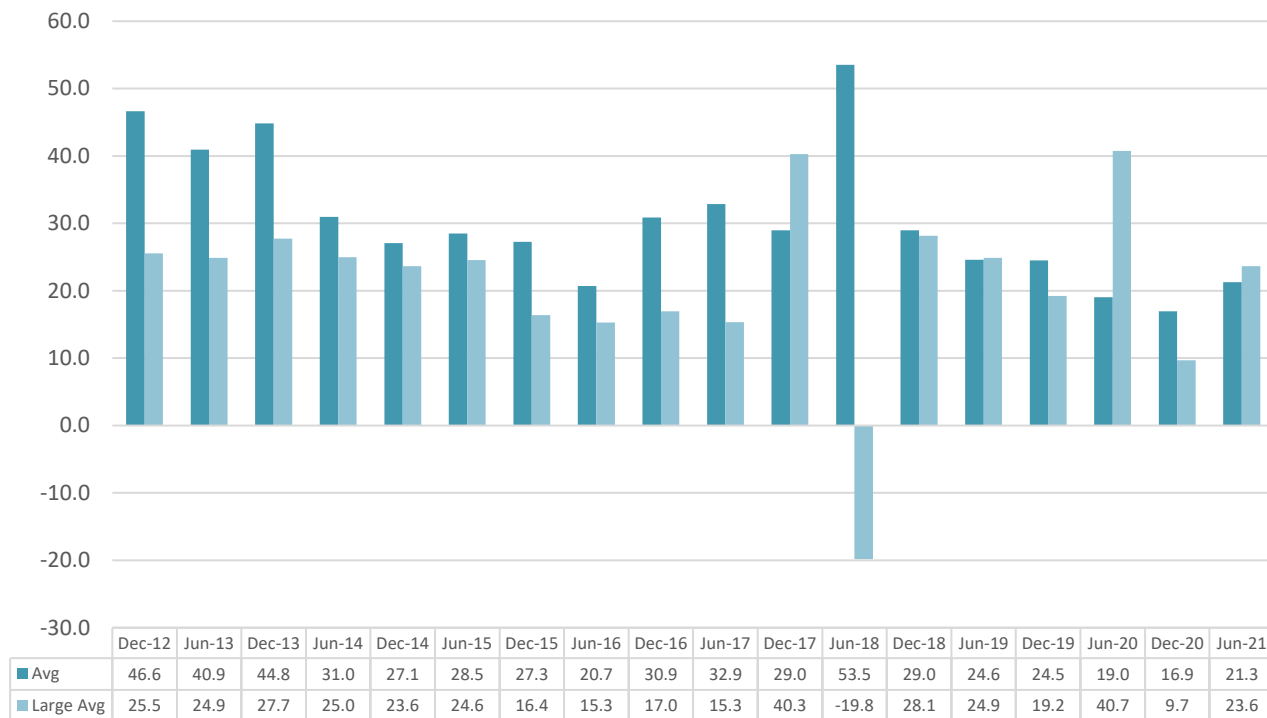


Figure 9: Average Return on Working Capital – Trend since December 2012

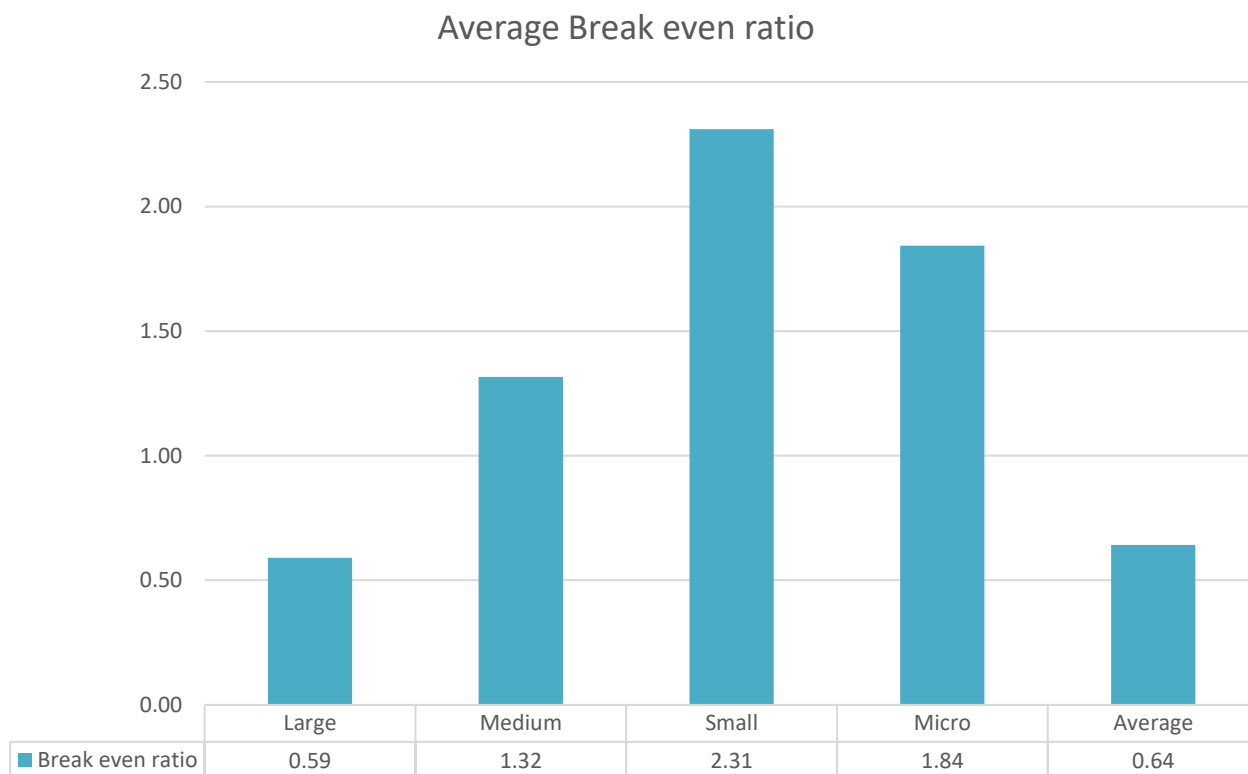
- The industry's **return on working capital**¹ (un-weighted average) increased to 21.3percent in the June 2021 survey after having slowed to 9.7 percent (which was a record low), but is still below the average of between 30 and 40 percent in 2012 and 2013.
- Large firms saw their return on working capital increase to 23.6 percent, after a big decline in the previous six month period.

Table 6: Return on Working Capital by firm size

Group	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20	Dec-20	Jun-21
A	-19.8	28.1	24.9	19.2	40.7	9.7	23.6
B	114.2	25.1	13.4	26.0	19.2	26.0	21.2
C	61.2	34.4	30.5	18.8	6.3	14.5	17.5
D	20.3	20.6	36.3	35.8	21.2	9.5	25.7
Grand Total	53.5	29.0	24.6	24.5	19.5	16.9	21.4

¹ Return on investment is defined as the company's annual profit after interest and tax, as a percentage of Net Working Capital (current assets – current liabilities) during the last completed financial year. Working capital is considered part of operating capital as it affects the day to day operating liquidity. An increase in working capital indicates the business has either increased current assets (i.e. accounts receivable or inventory), or has decreased its current liabilities (accounts payable).

3.1.3 Break even revenue



A break-even ratio of below 1.0 suggest a company is making insufficient revenue to break even, while a ratio above 1.0 suggests the company is making sufficient revenue to break even (and more). This is new question added to the survey, and as such trend lines are not yet available. However, based on the June 2021 responses, larger firms had a cumulative break-even ratio of 0.59, depicting difficult conditions in the first half of 2021.

The average break-even ratio for medium, small and micro firms were higher, with the small firms at an average of 2.3 percent, followed by the micro firms at 1.84 and the medium firms at 1.32. Conditions are significantly more challenging at the higher end of the market (due to economies of scale) where margins are potentially lower as well, with the lack of higher value projects over the last few years, making that segment of the market highly competitive.

3.1.4 Profitability and late payments

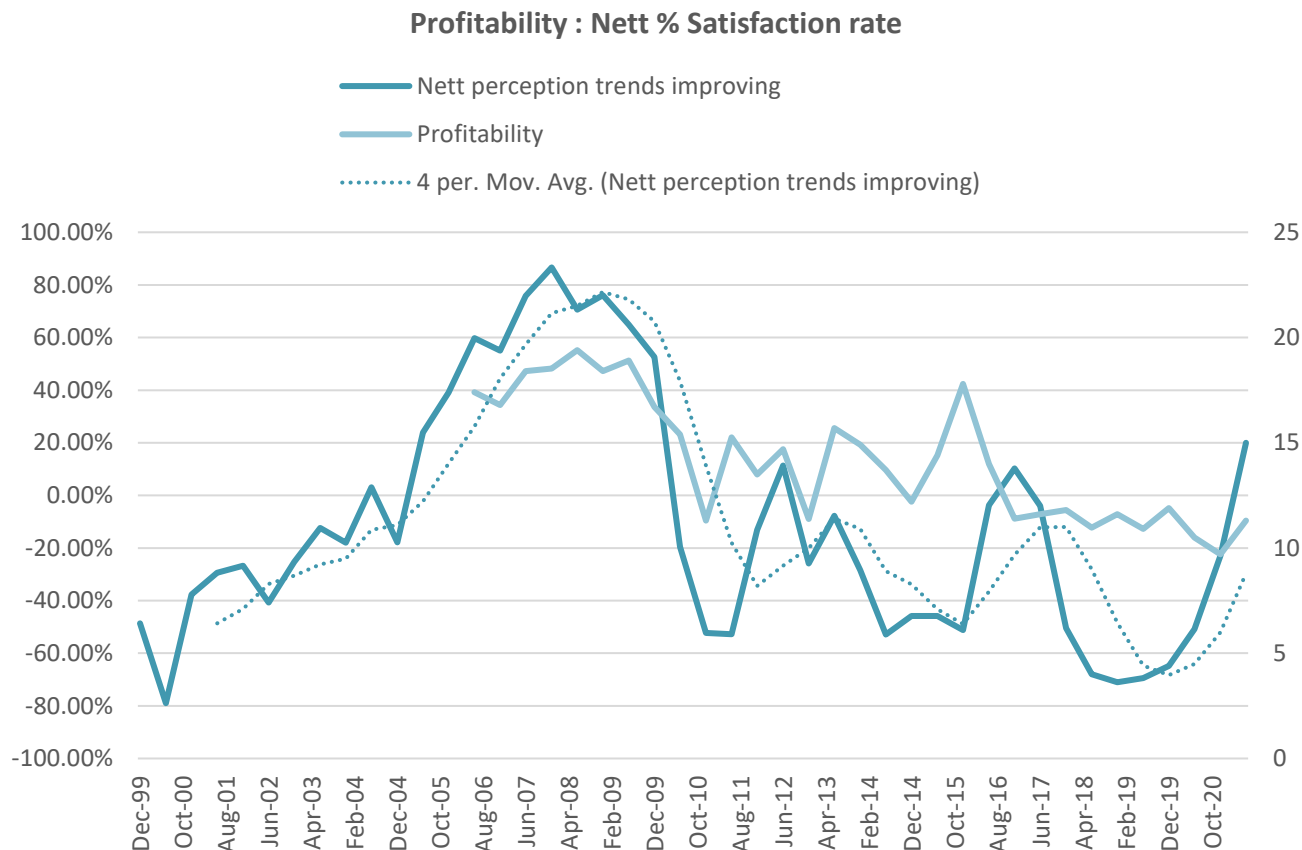


Figure 10: Profitability: Net % Satisfaction rate vs Average Profitability

Nett profitability improved to an average of 11.3 percent in the first six months of 2021, up from an average of 9.7 percent in the previous survey, but is still below the average of 12.7 percent in 2016. Although profitability improved this survey, margins kept plummeting, and were at the lowest they since the global financial crisis of 2008/09, with profit margins on average at just 6.0 percent for the current six month period.

Most firms expect profits to stabilise in the next six-month period (71.2 percent of firms), while 10.5 percent expect profits to increase, with the remainder (11.3 percent) more negative about the future of their business. In the previous survey, most respondents (52.1 percent) expected things to pick up from the record lows reported in early 2020 due to the initial impact of the pandemic and the hard lockdowns, this quickly reversed in the current six-month period. The satisfaction rate moderated since the previous survey, from 70 percent to 40.9 percent.

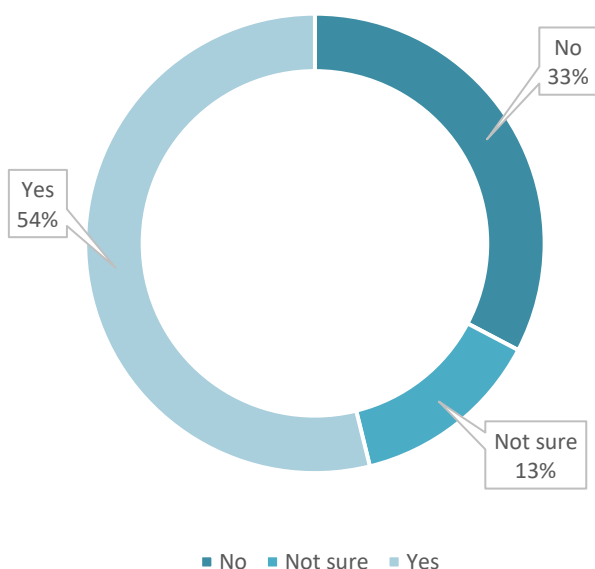
Table 7: Outstanding fees payable for work already completed and invoiced: January – June 2021

Firm size category	Total gross income	Outstanding fee income	Proportion of overall income
Large	2,295,082,610	1,243,631,443	54%
Medium	284,019,382	172,813,629	61%
Small	44,325,409	19,163,355	43%
Micro	32,901,924	11,080,397	34%
Total	2,656,329,325	1,446,688,824	54%

Overall, the medium sized firms had the highest proportion of their income outstanding after 90 days, which jumped significantly in the current survey, to 61 percent from 44 percent in the previous survey. Late payments are however down compared to the previous quarter, which was to be expected, as late payment became a serious constraint as the overall industry was in such a dire state, with many stakeholders struggling to meet their financial obligations, which was further exacerbated by the Covid-19 outbreak, and the economy shutting down to a large degree. Large firms still reported a very high level of late payments, as more than half of their income is later than 90 days, while small and micro firms reported that this was less of a problem for them in the first half of the year.

3.1.5 Project cancellations

Have you been involved in a tender that was later cancelled?



Anecdotally project postponements and cancellations have been rife within the construction industry for quite some time. The reasons for the cancellations vary, but can range from an uncertain economic environment, budget constraints, as well as a lack of skills in those implementing and awarding the tenders.

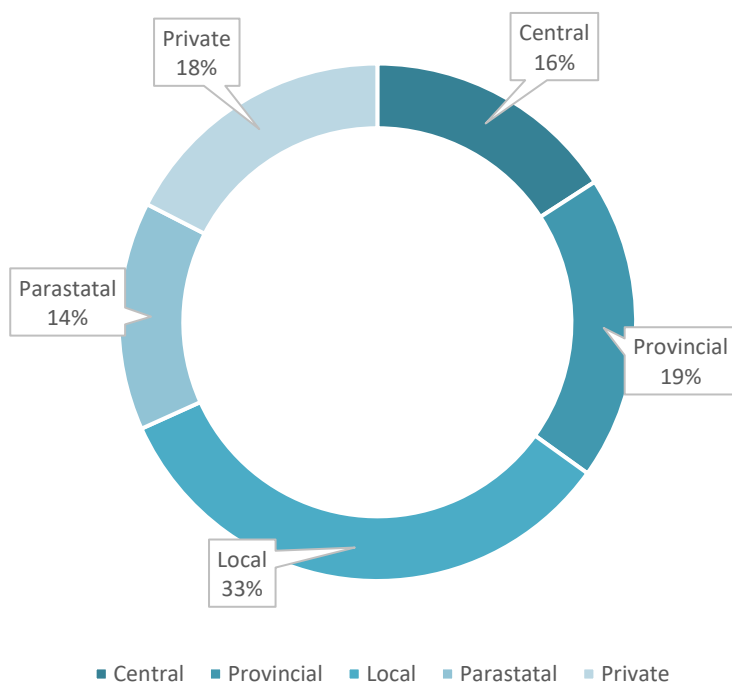
The majority of engineers (54 percent), experienced tender cancellations, while 13 percent were not sure and 33 percent said that they had not. This firmly supports the impact of tender cancellations, affecting more than 50 percent of firms. The ripple effect of these cancellations' filters right through to the contracting fraternity adversely impacting on the awarding of contracts for construction.

Comparison by firm size, shows a higher portion of larger firms (66.7 percent) experienced cancellations, compared to medium and smaller size firms.

The survey listed 63 cancellations for the first six months, based on the survey sample, which means (industry wide) cancellations could be in the hundreds of projects.

Table 8: Were you involved in a tender that was later cancelled?

Firm size category	Yes	No	Unsure
Large	66.7%	22.2%	11.1%
Medium	53.3%	26.7%	20.0%
Small	44.4%	44.4%	11.1%
Micro	60.0%	30.0%	10.0%
Total	53.8%	32.7%	13.5%

Origin of project cancellation

Local government accounted for 33 percent of tender cancellations, followed by provincial, private, central and SOE's. Difficulties within the public sector associated with project management, planning and implementation is well known resulting in an increased tendency of project cancellations, particularly within local governments. This is particularly concerning since local governments have over the last few years been allocated larger shares of the infrastructure budgets.

In terms of the experiences of the different sized firms, there were no big difference across the various groups, all reporting very similar shares of tender cancellations in specific spheres of the public and private sector. The micro firms did however report the most cancellations in the private sector at 40 percent of their total, while the large firms had an even split between the different categories.

Table 9: Percentage of total reported cancellation by category

	Central	Provincial	Local	Parastatals	Private	Total
Large	19.0%	14.3%	23.8%	23.8%	14.3%	100.0%
Medium	21.4%	28.6%	42.9%	7.1%	0.0%	100.0%
Small	16.7%	16.7%	27.8%	16.7%	22.2%	100.0%
Micro	0.0%	20.0%	40.0%	0.0%	40.0%	100.0%
Total	15.9%	19.0%	33.3%	14.3%	17.5%	100.0%

Smaller and micro firms are disproportionately affected by project cancellations due to the smaller number of projects they may be working on and shows the negative impact of project cancellations on these firms. On average micro firms reported that the cumulative costs associated with cancellations represented 52.2 percent of gross income, compared to between 13 and 15 percent for medium and smaller firms. Costs associated for larger firms contributed 0.5 percent of income in the first six months.

Table 10: Cost of Cancellations by firm size

Firm size category	Total gross income	Project tendering cost (cancelled)	Percentage of Earnings
Large	2 295 082 610	12 046 391	0.5
Medium	284 019 382	36 677 743	12.9
Small	44 325 409	6 520 000	14.7
Micro	32 901 924	17 181 000	52.2
Total	2 656 329 325	72 425 134	2.7

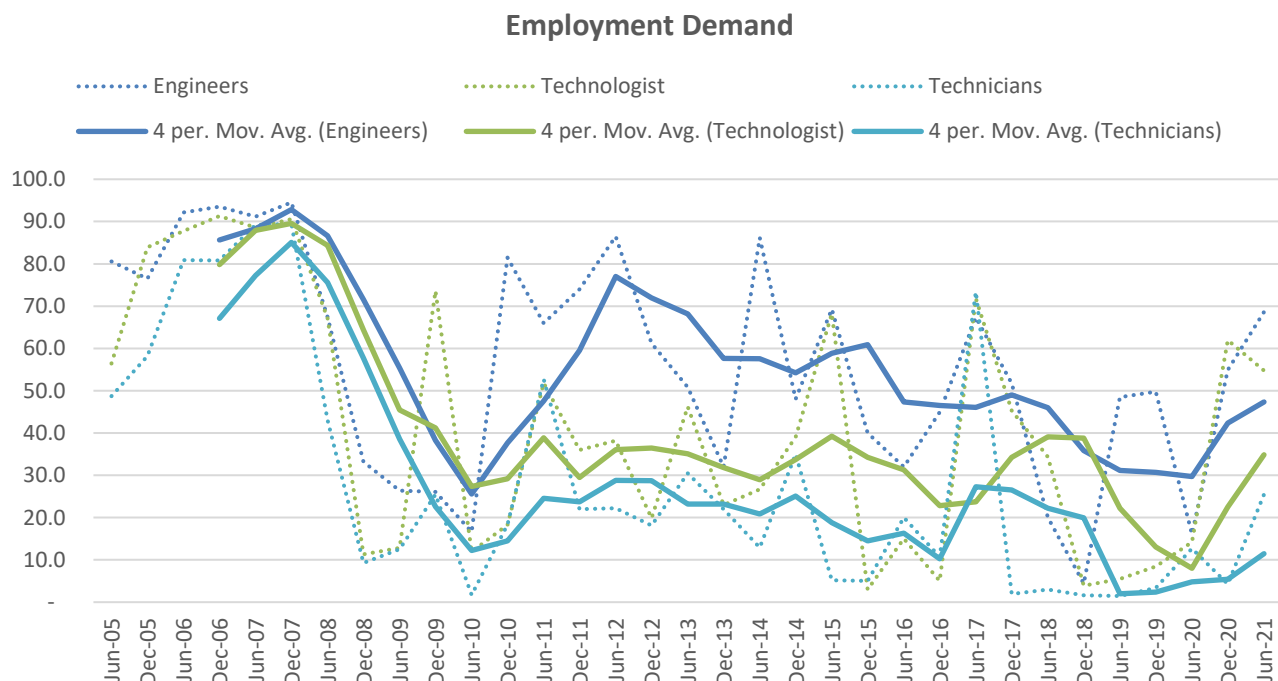
Table 11: Cost of Cancellations by Client Type

Client	Total gross income	Project tendering cost (cancelled)	Percentage of Earnings
Central Government	198 537 064	12 465 982	6.3
Provincial	223 409 389	1 654 001	0.7
Local	533 583 632	23 004 070	4.3
SOE's	382 738 716	34 526 484	9.0
Private	1 317 558 619	774 597	0.1
Total	2 655 827 421	72 425 134	2.7

3.2 Human Resources

3.2.1 Employment

- **Employment decreased significantly by an average of 10.0 percent in the first half of 2021** to an estimated 16 932, compared to the last six months of 2021, following the 0.2 percent decrease reported in the previous survey. This decline is more in line with expectations in the previous quarter. Although larger firms, on average, reported improve fee earnings in the first half of the year, employment fell by 11 percent, compared to the last six months of 2020. Employment conditions were relatively stable in medium and smaller firms, but micro firms were also quite negative, reporting a 15 percent decline in total employment.
- There are mixed perceptions in terms of employment for the second half of 2021. A total of 68.6 percent of respondents expect to increase the number of engineers and 54.8 percent the number of technologists.

**Figure 11: Employment Demand****Table 12: % of firms wanting to increase staff, by type of personnel**

Type of personnel	% of firms wanting to increase staff June 2018	% of firms wanting to increase staff December 2018	% of firms wanting to increase staff June 2019	% of firms wanting to increase staff December 2019	% of firms wanting to increase staff June 2020	% of firms wanting to increase staff December 2020	% of firms wanting to increase staff June 2021
Engineers	20.0	4.4	48.5	49.8	16.1	54.9	68.6
Technologists	18.0	3.9	5.5	8.5	12.4	2.8	24.3
Technicians	34.3	1.6	10.4	3.3	14.2	62.0	54.8
Other technical staff	3.0	2.3	1.5	4.3	12.7	4.3	25.5
Support staff	0.0	7.5	2.4	1.6	11.3	0.9	0.9

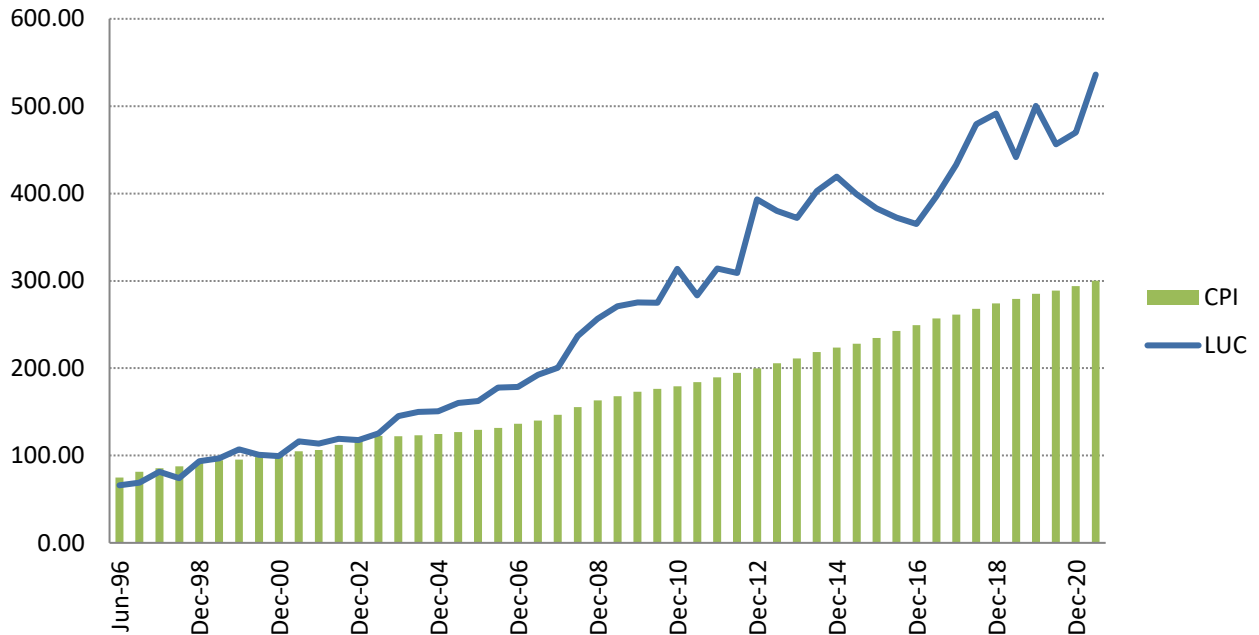
3.2.2 Salary and Wage bill

The salary and wage bill represent a significant contributor to the average cost of production in the consulting engineering profession.

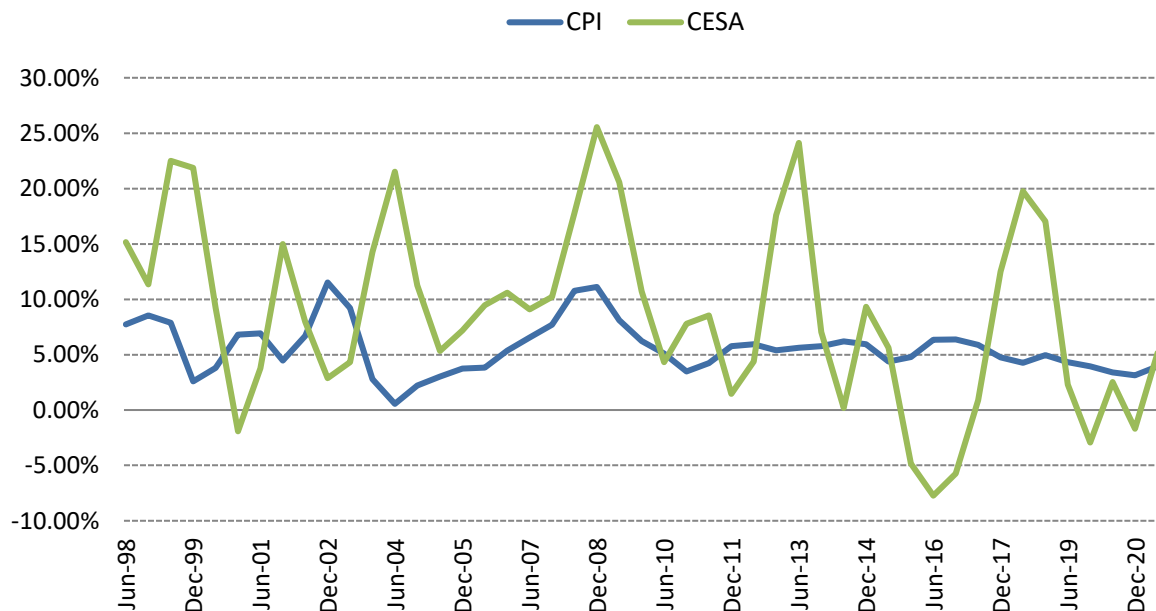
- The contribution of the salary and wage bill to fee earnings generally averages between 63 percent and 66 percent and was 67 percent of total income in the current survey, slightly higher than the overall trend.
- There are some disparities in the salary and wage bill in relation to earnings, amongst the different firm size categories. The contribution of the salary and wage bill was highest amongst larger firms, at 71 percent, well above the industry average, while smaller and micro firms reported an average of 77 percent and 34 percent respectively. Medium sized firms averaged 45 percent, well below the industry average.

- Average labour cost per unit (measured by the average salary and wage bill divided by number of full and part time employees and hours worked), increased by 17.5 percent in the June 2021 survey, following a decrease of 6.1 percent in the previous survey, compared to the same period in 2020. Inflation averaged 4.0 percent in the first six months of 2021 (from an average of 3.1 percent in the last six months of 2020) and is expected to remain under 5 percent for 2021 and 2022, according to the Reserve Bank

Change in CESA Labour costs vs CPI
Index 2000 = 100



Labour cost indicator comparison
(CPI vs CESA labour unit cost index): Annual Percentage Change



3.3 Capacity Utilisation

Capacity Utilisation Rate

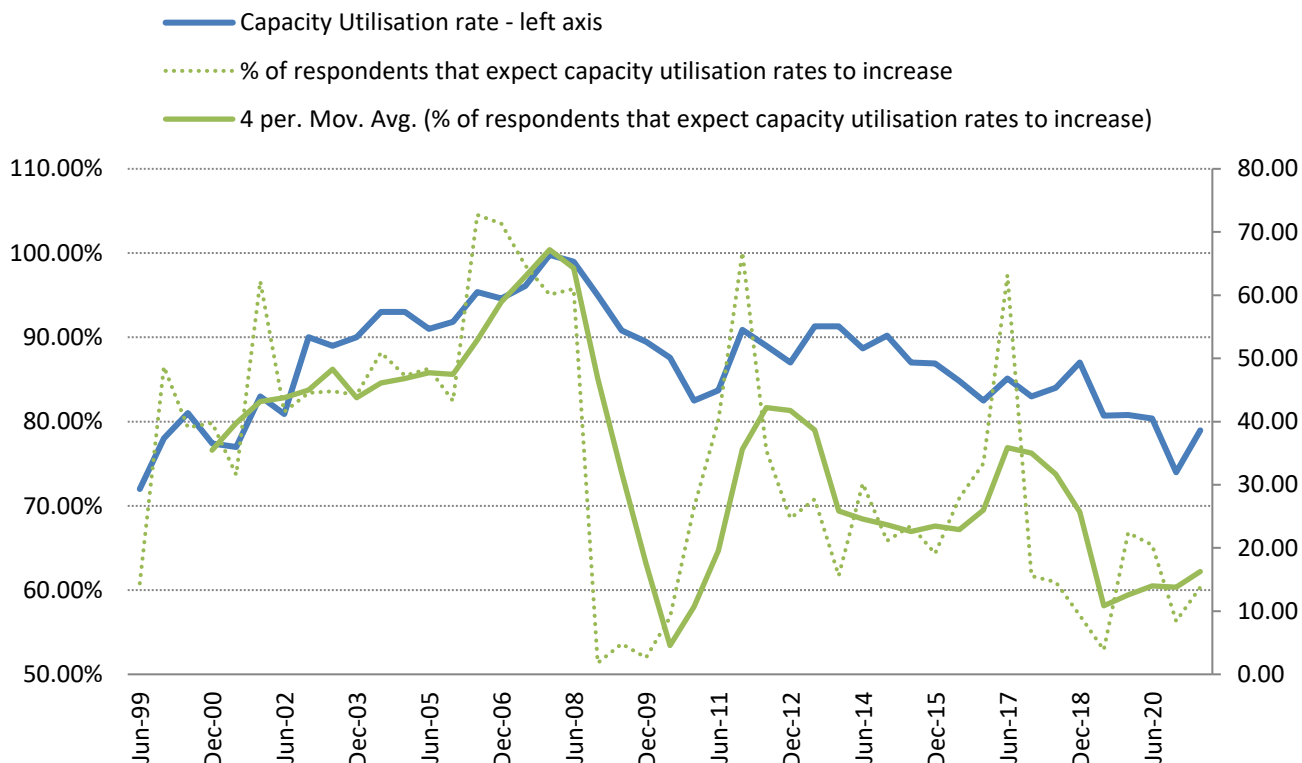


Figure 12: Capacity Utilisation Rate

Capacity utilisation of technical staff has steadily decreased since 2013 and dropped to its lowest level since 1999 to 74 percent in the previous survey. Utilisation levels improved marginally to an average of 79 in the current survey. The respondents do not however expect much change going forward, with the majority (76.9 percent) expecting capacity to be static over the next six-month period.

Overall, only 13.8 percent of respondents expect capacity to increase, which is higher than the number of respondents which expect capacity to decrease (9.3 percent), up from just 3.7 percent who expected it to decrease in the previous survey, which suggests respondents didn't think conditions could get much worse in a way.

3.4 Competition in tendering

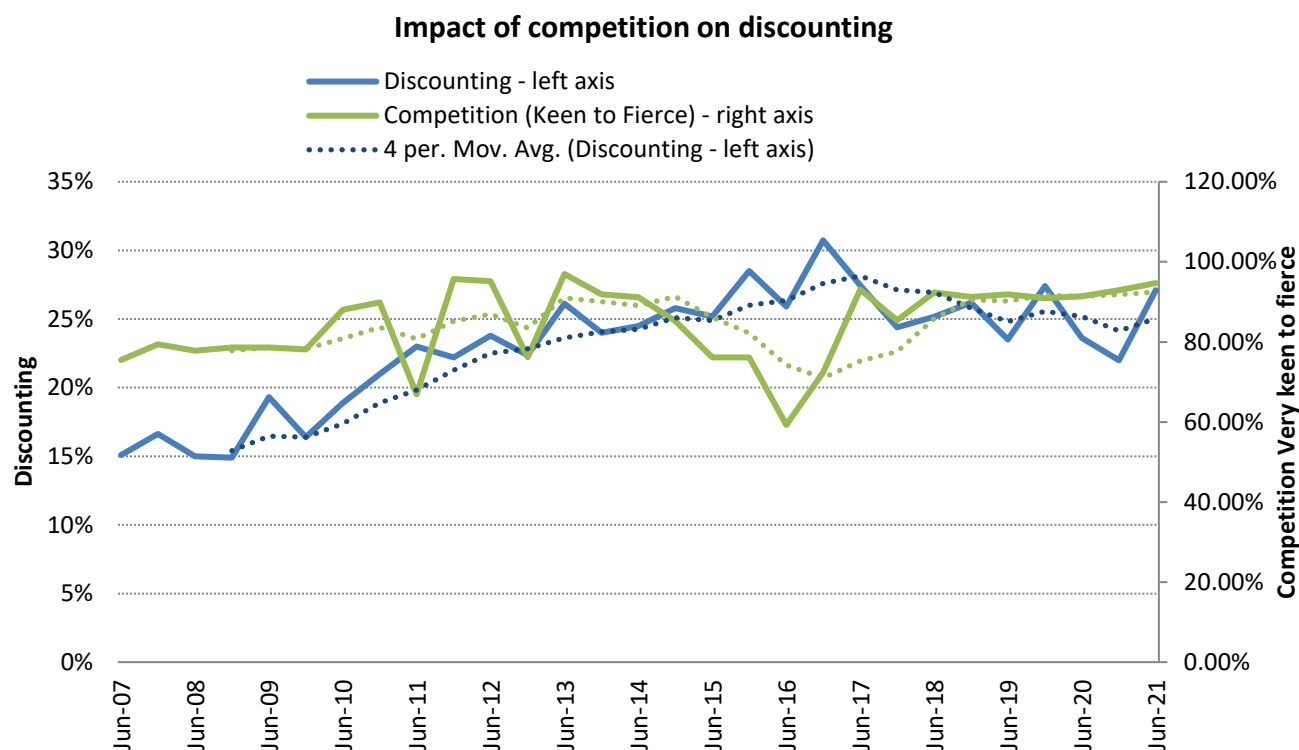


Figure 13: Competition and Discounting

Competition in tendering generally eases during a time when the availability of work increases and intensifies during periods of work shortages. An easing of competition will generally lead to an increase in prices, while price inflation is capped during periods of work shortages since an increasing number of firms tender on the same project driving prices down. The tendering process is costly and time consuming, while higher levels of competition significantly increase the risk for the engineering firm.

In line with a highly competitive environment, an increasing number of firms continue to report on very keen and fierce competition. **In this survey 94.7 percent reported on very keen to fierce competition**, higher than the previous survey. This is as the mega projects have dried up, and large firms are fighting with some of the medium sized firms for work, to some degree. Competition has intensified since the start of the pandemic and subsequent lockdowns and has steadily increased from an average of 65.8 percent in 2016. The majority (65.4 percent) reported fierce competition, down from 80 percent in the last six months of 2020, suggesting some alleviation in competition alongside a potential increase in pipeline projects.

Larger firms experience much higher levels of competition compared to smaller firms, as 91.4 percent of large firms reported fierce competition, compared to 88.3 percent of medium firms. Smaller and micro firms reported lower levels of competition.

Higher levels of competition are supported by higher tendencies to discount hence the clear correlation between the level of discounting and competition. As competition started to intensify after 2009, the propensity to discount also started to accelerate. The average discounting rate increased significantly in the current survey, to an average of 27.1 percent, from 22.0 percent reported in the previous survey. Medium sized firms reported the highest level of discounting at 30.1 percent followed by micro and large firms at 30 percent and 24.4 percent respectively. *Discounted rates are benchmarked against the 2015 ECSA Guideline fee scales.*

Firm Size Category	Capacity Utilisation of existing technical staff during the past 6 months	% of Respondents that expect capacity utilisation of technical staff to increase over the next 6 months	Average discount being offered by respondents in tendering situation to clients, benchmarked against the ECSA guideline fee scales	% of Respondents that reported Very Keen to FIERCE Competition for work during the first six months
Large	74.8%	0.0%	24.4%	100.0%
Medium	76.0%	32.3%	30.1%	88.3%
Small	82.7%	53.9%	23.8%	18.4%
Micro	66.8%	25.7%	30%	35.4%
Industry Average	79.0%	9.3%	27.1%	94.7%

4. Industry Outlook

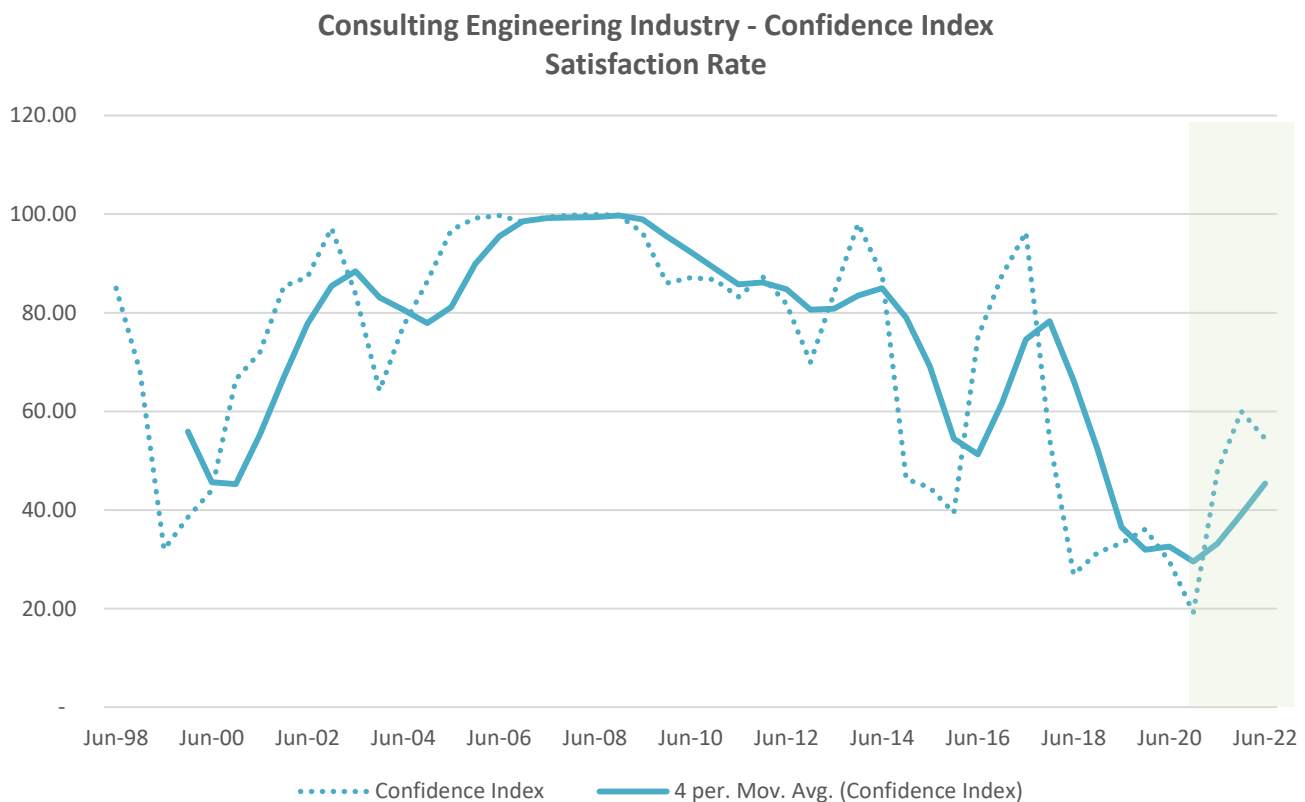


Figure 14: Confidence Index

Explanatory note: The confidence index, is an indicator of members' assessments regarding current and future prospects with regard to market developments and is a "weighted" index. The response of each company is weighted according to its total employment, including full and part time staff, and the index represents the net percentage of members satisfied with

business conditions.² The confidence index is used as a leading indicator to determine a short to medium term outlook for the consulting engineering industry.

The consulting engineering confidence index improved significantly in the first six months of 2021, coming off the back of fallout from the Covid-19 pandemic and subsequent lockdowns, which seem to have been most felt in the latter half of 2020 in the consulting engineering industry. Although awarded tenders seem to be somewhat lacking, tender activity in the civil construction sector has improved, and talk of Mega Projects by government, as well as a clear prioritization of infrastructure has boosted sentiment. The confidence index improved from 19.2 points last quarter to 47.8 points, more than doubled in the first six months of the year. Although still “depressed” by historical terms, conditions have improved since 2020.

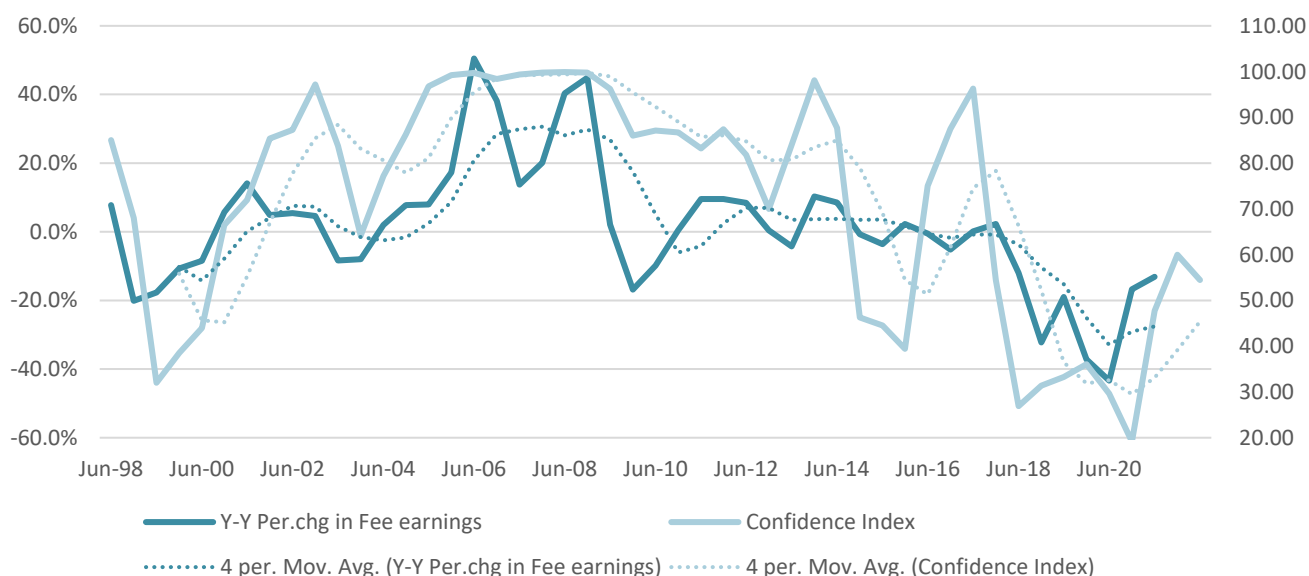
In terms of the split between firm sizes, the data does not vary considerably. The large firms were the least confident, with a satisfaction rate of 46.0 percent, while micro and medium sized firms were the most satisfied with current conditions, at 60.6 percent and 58.8 percent respectively.

The outlook for the following six to twelve months is more positive, as satisfaction rates are expected to increase to 60 percent in the last six months of 2021, moderating to around 55 percent in the first half of 2022. Overall these rates may be an improvement of the highly depressed levels experienced from 2018, but is not strong enough to suggest a strong recovery in the industry. Firms tend to be more optimistic regarding future prospects, with actual satisfaction rates frequently adjusted lower.

Table 13: Confidence as at June 2021 by firm size category (% of respondents that experienced satisfactory business conditions)

Firm size category	First six months of 2021	Next 6 months	Next 12 months
Large	46.0%	58.7%	54.0%
Medium	58.8%	64.1%	69.5%
Small	51.1%	64.4%	74.7%
Micro	60.6%	93.9%	84.8%
Industry Average	55.9%	79.2%	79.8%

Annual Change in Real Fee Earnings vs Confidence



² The net percentage reflects only those members that expect conditions to be satisfactory, quite busy or very busy.

Table 14: CESA Confidence index: % respondents satisfied with working conditions

Survey Period	CESA Confidence Index	% Change on previous survey	% Change on survey same time last year
Jun-07	99.4	1.0%	-0.3%
Dec-07	99.8	0.4%	1.4%
Jun-08	99.9	0.1%	0.5%
Dec-08	99.8	-0.1%	0.0%
Jun-09	96.2	-3.6%	-3.7%
Dec-09	86.0	-10.6%	-13.8%
Jun-10	87.1	1.3%	-9.4%
Dec-10	86.7	-0.5%	0.8%
Jun-11	83.2	-4.0%	-4.5%
Dec-11	87.4	5.0%	0.8%
Jun-12	81.8	-6.4%	-1.7%
Dec-12	70.0	-14.4%	-19.9%
Jun-13	84.0	20.0%	2.7%
Dec-13	98.1	16.8%	40.1%
Jun-14	87.7	-10.6%	4.4%
Dec-14	46.3	-47.2%	-52.8%
Jun-15	44.5	-3.9%	-49.3%
Dec-15	39.4	-11.5%	-14.9%
Jun-16	75.0	90.4%	68.5%
Dec-16	87.5	16.7%	122.1%
Jun-17	96.3	10.1%	28.4%
Dec-17	54.4	-43.5%	-37.8%
Jun-18	26.8	-50.6%	-72.1%
Dec-18	31.3	16.6%	-42.4%
Jun-19	33.2	6.1%	23.8%
Dec-19	36.1	8.4%	15.0%
Jun-20	29.6	-17.9%	-11.1%
Dec-20	19.2	-35.3%	-46.9%
Jun-21	47.8	149.4%	61.4%
Dec-21 (forecast)	60.0	25.6%	213.2%
Jun-22 (forecast)	54.5	-9.2%	14.1%

So how do the business environment perceptions in the consulting engineering industry compare with the contracting industry and business in general?

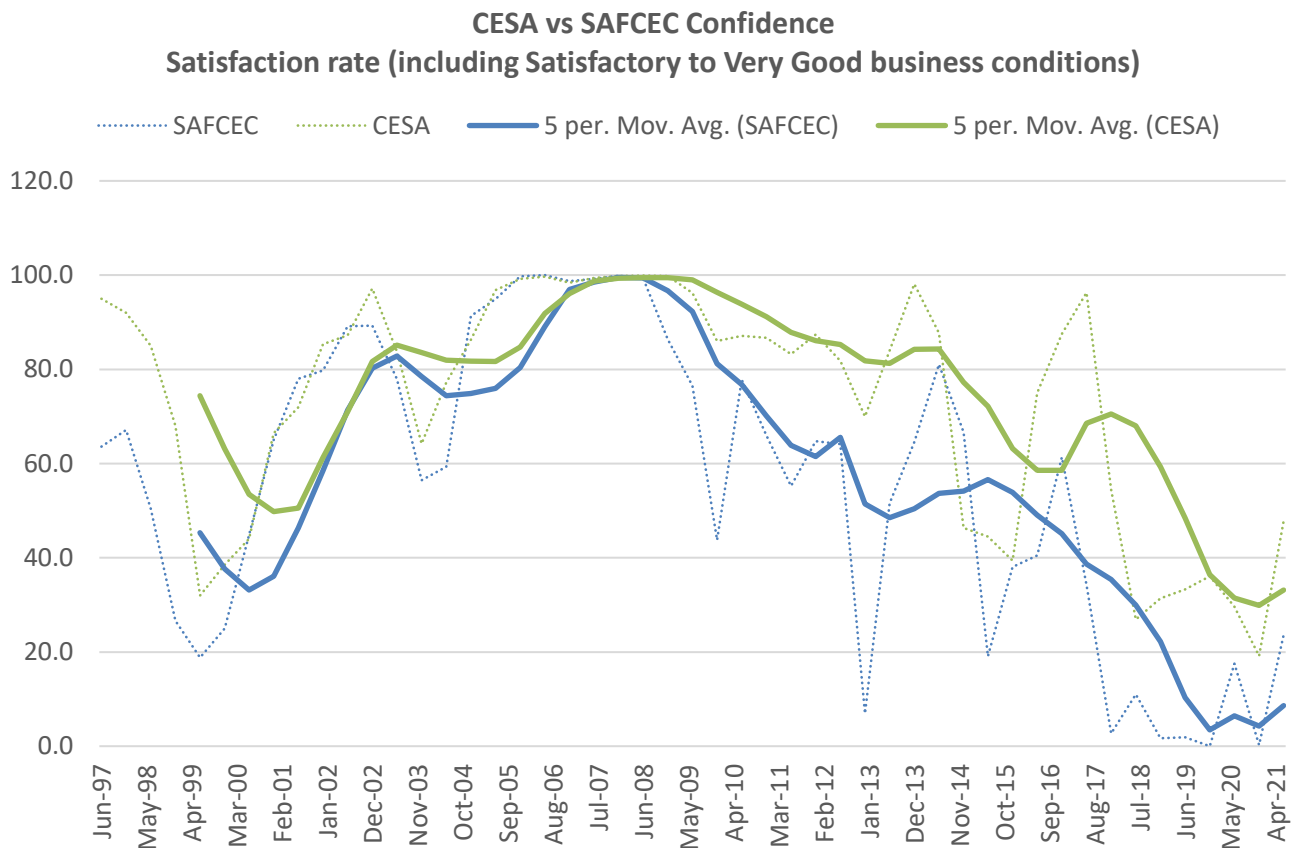


Figure 15: CESA vs SAFCEC

Until the global financial crisis of 2008/09, the relationship/correlation between civil engineers and consulting engineers was very high consulting the graph above. But after 2008, there was a breakdown in this relationship, with civil engineers increasingly more negative compared to the more optimistic consulting engineers. Contractors have for some time reported on the slow pace by which contracts are awarded, as well as the extremely slow roll out of government projects, especially in the last survey. This creates disconnect between opinions expressed by engineers and contractors, where projects are in planning stages, supporting earnings in the consulting engineering industry, but implementation is extremely slow, negatively affecting turnover in the construction sector. Despite a bit on a divergence in the series from around 2009, the trend has mostly been in the same direction, which has deteriorated further in recent years. However, the optimism in the first six months of the year is shared amongst both civil and consulting engineers, with good increases in both indices for the same period. Both are coming off record lows, but both fraternities are certainly more optimistic. There is still however quite a large gap between the levels of optimism, with the consulting engineers still more optimistic.

Broader confidence indices in the economy have been a bit better than expected in the latter quarters of 2020, after reaching rock bottom levels early in the year when hard lockdown hit but has not improved much in the first half of 2021. Confidence, although better, remains at historically low levels, below the neutral level of 50 out of 100 index points, which generally means we can expect no real improvement in investment in the economy.

5. Market Profile

5.1 Sub-disciplines of fee income earned

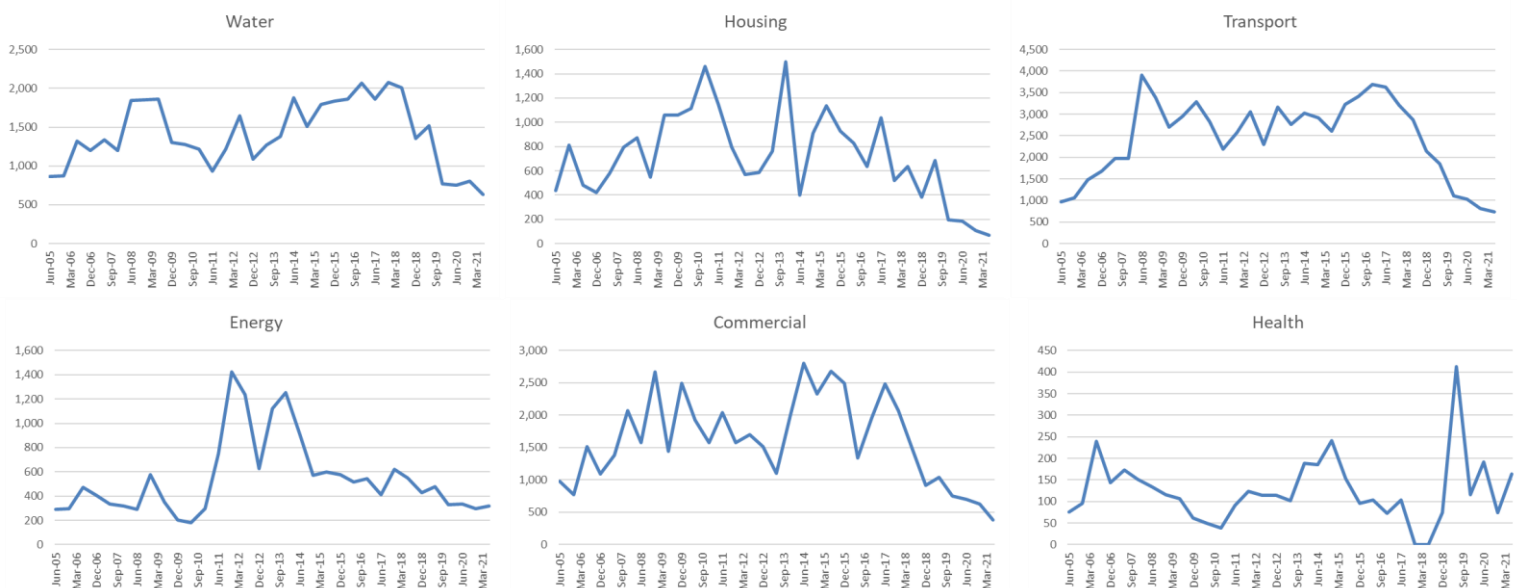
The South African consulting engineering industry is represented by many different sub-disciplines. The most common disciplines within larger firms include civil and structural services, contributing 40.0 percent and 11.9 percent in earnings during the last first months of 2021. The contribution of electrical work decreased to 7.8 percent (compared to the 5-year average of just 6 percent). Industrial process/chemical jumped to just under 10 percent, which is high from a historical perspective.

Details of the various sub-disciplines are provided for under Statistical Tables.

5.2 Economic Sectors

The economic sectors include all infrastructure associated within that sector including expenditure related to soft issues such as feasibility studies or environmental assessments. From this, three key sectors evolved namely transportation, commercial and water services. Interestingly, it is in the health, education and tourism/leisure categories who saw the biggest declines over the last six-month period, which makes sense given the governments disinvestment from those sectors, as well as the effect of the pandemic on tourism.

The charts below depict trends in rand terms.



The table below provides a snapshot of earnings by sector categorized between large, medium, small and micro firms.

Table 15: Distribution of fee earnings by economic sector, by firm size

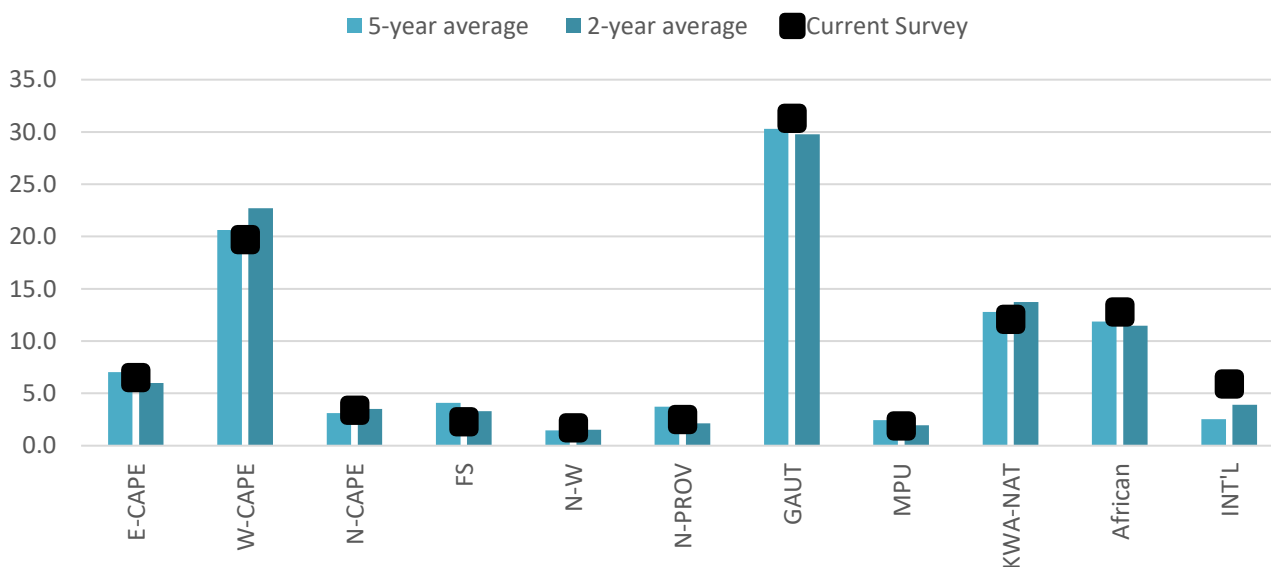
	GAU	KZN	WC	EC	NC	MPU	FS	LIM	NW	AFRICA	INT	Total
A	33%	11%	19%	6%	4%	2%	1%	2%	2%	14%	7%	100%
B	28%	17%	24%	9%	0%	3%	9%	4%	1%	2%	2%	100%
C	6%	12%	26%	19%	3%	10%	0%	9%	5%	9%	1%	100%
D	6%	21%	46%	9%	0%	11%	0%	6%	0%	1%	0%	100%
Grand Total	31%	12%	20%	6%	3%	2%	2%	2%	2%	13%	6%	100%

Table 16: Distribution of fee earnings by province, by firm size

	WATER	Transportation	Energy	Mining	Education	Health	Tourism	Housing	Commercial	Agriculture	Eco other	Total
A	15%	20%	9%	26%	2%	5%	0%	2%	10%	0%	11%	100%
B	37%	24%	10%	2%	2%	1%	0%	1%	15%	0%	8%	100%
C	22%	16%	5%	1%	2%	4%	0%	6%	18%	12%	13%	100%
D	11%	5%	3%	2%	1%	1%	3%	21%	5%	0%	47%	100%
Grand Total	17%	20%	9%	23%	2%	4%	0%	2%	10%	0%	11%	100%

5.3 Geographic Location

Provincial Distribution of earnings

**Figure 16: Provincial Distribution of earnings**

There were no major movements in the breakdown between the respective provinces in the first half of the year, compared to the last six months of 2020. The most notable change was an increase in KwaZulu Natal from 11 percent to 14.9 percent of fee earnings in the current period. Gauteng remains the hub of consulting engineering work at over 38 percent of fee income, while the Western Cape made up 24.2 percent of fee income.

5.4 Clients

The contribution to fee earnings by the private sector remained high in the current survey at 49.6 percent, compared to 42.2 percent in the previous survey. This is more or less in line with the longer-term average but has increased over the last 10 years or so, with the private sector playing a more prominent role in the construction industry, as the state disinvested from the broader industry over time.

The contribution by SOE's remained flat at low levels of just 14.4 percent, which has come down considerably over the years. There is a broad consensus that there has been less work coming from SOE's over the past few years, as they have become increasingly cash strapped having to rely less on government transfers and more on tariff increases. This along with high incidences of corruption and broad-based inefficiencies, severely dampened infrastructure investment from these entities. Nonetheless, there has been some developments as SANRAL has a healthy pipeline of road projects out to tender, while Transnet is actively pursuing private sector investors in its port upgrades and developments. DBSA has also called for proposals in the embedded generation investment programme.

Client Distribution based on fee earnings

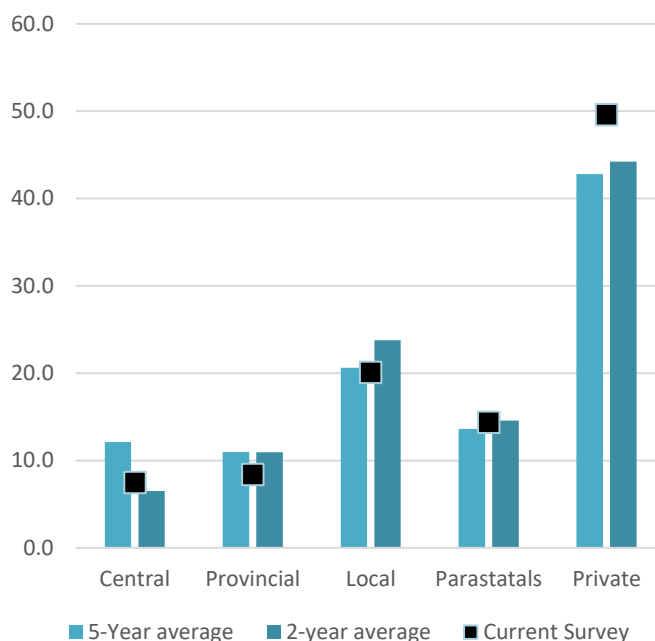


Figure 17: Distribution of earnings by client type

The public sector is generally regarded as the most important client to the industry, but due to the increased contribution by the private sector in the last few surveys, the combined representation of the public sector (including central, provincial, local government and SOE's) decreased to 50.0 percent from 58.0 percent in the previous survey. The role of the public sector however remains critical to the engineering profession and particular for medium and smaller firms. A breakdown of earnings by client type and firm size is provided in the table below.

Table 17: Fee earnings distribution by client by firm size

	Central	Provincial	Local	Parastatals	Private	Total
Large	8%	7%	19%	14%	53%	8%
Medium	4%	23%	23%	23%	27%	4%
Small	5%	17%	33%	3%	42%	5%
Micro	6%	2%	44%	0%	48%	6%
Total	7%	8%	20%	14%	50%	7%
Average 2-Year	6.5%	11.0%	23.8%	14.6%	44.2%	100.0%
Average 5-year	12.1%	11.0%	20.6%	13.6%	42.8%	100.0%

6. Industry challenges as noted by respondents

Many of the challenges were noted before but as they are still applicable are included again in this report. No **additional** challenges were raised by respondents in the June 2021 survey.

- Many commented that they are currently in survival mode.
- Regulation issues, including the procurement of consulting engineering services, remain one of the biggest challenges faced by the industry. Procurement is currently based on price and broad-based black economic empowerment (BBBEE) points, with functionality or quality having a minimum threshold, thus being largely price driven. This is affecting tender prices, as firms sometimes tender below cost in view of the diminished availability of projects.
- Unrealistic tendering fees remain a concern for members, while the extended time it takes in which to finalise a proposal is affecting profitability in the industry.
- The quality of technical personnel is argued by some firms to have deteriorated, putting greater risk on the built environment sector. Skills shortage is regarded as one of the most significant institutional challenges faced by the private and the public sector. CESA has offered their services to government to procure and implement projects.
- Fraud and corruption are affecting the ethos of our society, with a lot of talk and little action accompanying the growing evidence of corruption. CESA is aware that members are under pressure from contractors and corrupt officials, to certify payment for work not completed. This is regarded as an extremely serious matter for CESA and as such will be relentless in holding those in power accountable.
- Unlocking greater private sector participation is seen as a critical element to fast-track delivery which will support engineering fees and as such engineering development in the industry. Transnet for example has recently called for private sector investment to support their capital investment programme. Private sector participation in this context refers to involvement on a more technical level (and not as a client), to improve municipal capacity and efficiency. Government must create an environment for the private sector so that it can play a much bigger role in infrastructure delivery. Many of the projects highlighted in the NDP can be carried out by the private sector through public-private partnerships.
- Service delivery, especially at municipal level remains a critical burning issue. The consulting engineering industry is threatened by incapacitated local and provincial governments. As major clients to the industry, it is important that these institutions become more effective, more proactive in identifying needs and priorities and more efficient in project implementation and – management.
- The involvement of non-CESA members in government tenders and procurement continues to threaten the standard and performance of the industry. Non-CESA members do not seem to comply with the same standards and principles as those firms that are members of CESA. Whether this is linked to complaints of “below cost” tendering during 2009, is not certain, but CESA members should be better informed about engaging in below cost tendering.
- Firms from across South African borders are tendering at rates that are not competitive for local firms. Complaints have been received of some of these firms not producing proper drawings and not attending site visits. Clients, unfortunately, are not always properly experienced or educated to conduct proper procurement assessments and unknowingly award contracts to these “unscrupulous” firms. While these occurrences may be limited to smaller rural areas, it remains an unacceptable practice.
- Lack of attention to maintain infrastructure poses a serious problem for the industry. Not only is it much more costly to build new infrastructure, but dilapidated infrastructure hampers economic growth potential. The cost of resurfacing a road after seven years at current prices, is estimated at R175 000 per kilometer, compared to R3 million per kilometer to rebuild, less than 6% of the construction price. In many cases, infrastructure is left to deteriorate to such a state, that maintenance becomes almost impossible.
- A further challenge to the industry is to find a way to standardize the procurement procedures applied by the different government departments. Procurement procedures should be standard for the country, or at least for the specific tier of government.
- Adapting to a low growth environment as outlook for infrastructure spending is hampered by poor economic growth, lower than expected revenue by government, international economic instability and price volatility, and low private sector confidence.
- Requirement as set out in the Construction Sector Charter inhibit small firms to competitively tender on government projects, requiring them as such to be more reliant on private sector work. In this survey small and micro enterprises earned between 44 percent and 62 percent from the private sector.

Statistical Tables

Table 18: General financial indicators

Survey period	Employment ³	Salaries / Wages 2000 prices (Annualised)	Fee Income, R mill (Annualised)			Cost Deflator	
			Current prices	Constant 2000 prices	Y/Y real % change	CPI Index 2000 = 100	CPI y/y % Change
Jun-12	20.796	6.124	20.221	10.380	8.4%	194.8	5.9%
Dec-12	19.964	6.316	19.109	9.569	0.4%	199.7	5.4%
Jun-13	24.356	6.557	20.446	9.935	-4.3%	205.8	5.6%
Dec-13	23.625	6.226	22.286	10.552	10.3%	211.2	5.8%
Jun-14	23.389	7.006	23.557	10.799	8.5%	218.2	6.2%
Dec-14	22.921	6.808	23.439	10.474	-0.7%	223.8	5.9%
Jun-15	23.838	6.857	23.697	10.389	-3.6%	228.1	4.4%
Dec-15	24.315	6.748	25.119	10.712	2.3%	234.5	4.8%
Jun-16	24.072	6.511	25.068	10.335	-0.5%	242.6	6.3%
Dec-16	23.349	6.699	25.319	10.150	-5.2%	249.4	6.4%
Jun-17	24.283	6.522	26.585	10.352	0.2%	256.8	5.9%
Dec-17	21.369	6.226	27.117	10.377	2.2%	261.3	4.8%
Jun-18	23.934	6.288	24.405	9.113	-12.0%	267.8	4.3%
Dec-18	21.540	4.851	19.280	7.030	-32.3%	274.3	5.0%
Jun-19	21.002	5.109	20.687	7.384	5.0%	279.4	4.3%
Dec-19	19.843	2.756	12.584	4.414	-40.2%	285.1	4.0%
Jun-20	18.851	2.859	12.081	4.182	-5.3%	288.9	3.4%
Dec-20	18.813	2.498	10.800	3.674	-12.2%	294.0	3.1%
Jun-21	16.932	2.434	10.908	3.632	-1.1%	300.3	4.0%

Table 19: Consulting Engineering Profession: Financial indicators: Annual Percentage Change (Real)

Survey period	Employment	Salary and Wage bill	Fee income	Cost escalation based on CPI index (Stats Sa)
Jun-12	4.3%	8.4%	8.4%	5.90%
Dec-12	1.8%	5.2%	0.4%	5.40%
Jun-13	17.1%	7.1%	-4.3%	5.60%
Dec-13	18.3%	-1.4%	10.3%	5.80%
Jun-14	-4.0%	7.0%	8.7%	6.20%
Dec-14	-2.9%	9.4%	-0.7%	5.90%
Jun-15	1.9%	-2.1%	-3.6%	4.4%
Dec-15	6.1%	-0.9%	2.3%	4.8%
Jun-16	1.0%	-5.0%	-0.5%	6.3%
Dec-16	-3.9%	-0.7%	-5.2%	6.4%
Jun-17	0.9%	0.2%	0.2%	5.9%
Dec-17	-8.5%	-7.1%	2.2%	4.8%
Jun-18	-1.4%	-3.6%	-12.0%	4.3%
Dec-18	0.8%	-22.1%	-32.3%	5.0%
Jun-19	-12.3%	-18.7%	-18.7%	4.3%
Dec-19	-7.9%	-38.1%	-37.2%	4.0%
Jun-20	-10.7%	-43.4%	-43.3%	3.4%
Dec-20	-0.2%	-16.8%	-8.6%	3.1%
Jun-21	-10.0%	-13.1%	-23.1%	4.0%

³ Revised June 2007

Table 20: Sub-disciplines: Percentage share of earnings

Sub-discipline	Jun-20	Dec-20	Jun-21	5-year average	2-year average	Deviation 5-year	Deviation 2-year	Deviation last six months
Agricultural	0.6%	0.9%	0.2%	0.6%	0.6%	-0.4%	-0.4%	-0.7%
Architecture	1.7%	1.7%	2.3%	1.0%	1.8%	0.5%	0.5%	0.6%
Mechanical building Services	1.5%	1.3%	1.0%	3.3%	1.9%	-0.9%	-0.9%	-0.3%
Civil	45.9%	54.6%	40.0%	51.5%	47.7%	-7.7%	-7.7%	-14.6%
Electrical / Electronic	9.6%	9.6%	7.8%	7.0%	8.8%	-1.0%	-1.0%	-1.8%
Environmental	1.2%	0.3%	2.0%	2.6%	1.4%	0.6%	0.6%	1.7%
Facilities Management (New)	0.4%	0.8%	0.2%	0.5%	0.5%	-0.3%	-0.3%	-0.6%
Geotechnical	1.6%	0.3%	0.6%	1.1%	1.0%	-0.4%	-0.4%	0.3%
Industrial Process / Chemical	2.4%	0.0%	9.9%	1.7%	3.1%	6.8%	6.8%	9.9%
GIS	0.2%	0.0%	0.0%	0.5%	0.1%	-0.1%	-0.1%	0.0%
Hydraulics (New)	1.4%	0.4%	0.4%	0.8%	0.9%	-0.5%	-0.5%	0.0%
Information Systems / Technology	1.4%	0.4%	0.3%	1.1%	0.5%	-0.2%	-0.2%	-0.1%
Marine	0.3%	0.5%	1.1%	0.4%	0.5%	0.6%	0.6%	0.6%
Mechanical	3.2%	2.0%	1.0%	1.7%	1.9%	-0.9%	-0.9%	-1.0%
Mining	0.7%	2.3%	11.0%	3.3%	4.0%	7.0%	7.0%	8.7%
Project Management	11.1%	9.4%	6.0%	7.7%	9.1%	-3.1%	-3.1%	-3.4%
Quantity Surveying	3.8%	3.8%	3.8%	1.5%	3.4%	0.4%	0.4%	0.0%
Structural	12.4%	11.3%	11.9%	12.9%	12.1%	-0.2%	-0.2%	0.6%
Town planning	0.7%	0.5%	0.5%	0.7%	0.6%	-0.1%	-0.1%	0.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%			

Table 21: Sub-disciplines. Fee income R mill. Real 2000 prices

Sub-discipline	JUN20	DEC20	JUN21	Change last six months	Change last 12 months
Agricultural	25	33	7	-78%	-71%
Architecture	72	62	84	34%	16%
Mechanical building Services	61	48	36	-24%	-40%
Civil	1.920	2.006	1.453	-28%	-24%
Electrical / Electronic	401	353	283	-20%	-29%
Environmental	50	11	73	559%	45%
Facilities Management (New)	19	29	7	-75%	-61%
Geotechnical	66	11	22	98%	-67%
Industrial Process / Chemical	100	0	360	-	259%
GIS	7	0	0	-	-100%
Hydraulics (New)	60	15	15	-1%	-76%
Information Systems / Technology	58	13	11	-15%	-81%
Marine	12	18	40	122%	245%
Mechanical	133	73	36	-51%	-73%
Mining	31	85	400	369%	1207%
Project Management	462	344	218	-37%	-53%
Quantity Surveying	158	140	138	-1%	-13%
Structural	518	415	432	4%	-17%
Town planning	30	17	18	10%	-39%
Total	4.181	3.672	3.632	-1%	-13%

Table 22: Provincial Distribution. R mill. Real 2000 prices (Annualized. two survey average)

Province	Survey period							
	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20	Dec-20	Jun-21
EC	751	650	683	893	296	280	222	201
WC	1.819	1 738	2 119	1 757	1 015	974	865	832
NC	171	155	179	532	132	118	138	155
FS	560	379	365	347	154	159	125	106
NW	176	158	128	103	71	62	57	58
LIM	295	768	814	170	110	97	78	75
GAU	3.332	2 688	3 194	1 972	1 148	1 155	1 183	1 193
MPU	295	315	240	89	132	102	61	56
KZN	1.617	1 425	967	923	742	716	494	396
AFRICAN	1.197	1 234	1 400	554	393	462	472	443
INT'L	150	235	168	44	221	173	135	140
Total	10.364	9 745	10 256	7 384	4 414	4 298	3 830	3 655

Table 23: Provincial Distribution Y-Y percentage Change
(Trend – SMOOTHED over two consecutive surveys. to remove short term volatility)

Province	Survey period							
	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20	Dec-20	Jun-21
EC	-16.8%	-8.7%	-9.1%	19.0%	18.1%	-60.0%	-62.7%	-28.2%
WC	13.2%	-2.6%	16.5%	26.3%	-13.5%	-39.9%	-37.6%	-14.6%
NC	-44.4%	-35.7%	4.9%	7.3%	118.0%	-64.7%	-58.3%	31.2%
FS	27.4%	-33.5%	-34.8%	21.6%	-5.4%	-51.1%	-50.1%	-33.2%
NW	-23.8%	10.4%	-27.3%	-18.3%	-13.3%	-35.8%	-34.8%	-7.4%
LIM	-18.5%	87.8%	175.6%	-74.1%	-80.0%	-36.1%	-44.5%	-22.9%
GAU	26.9%	-22.2%	-4.1%	35.1%	-34.6%	-47.8%	-24.2%	3.3%
MPU	-43.5%	-9.4%	-18.8%	-62.7%	-52.6%	-13.9%	-44.6%	-44.6%
KZN	-18.7%	16.2%	-40.2%	-44.8%	7.8%	-2.2%	-40.7%	-44.7%
AFRICAN	15.4%	4.8%	16.9%	12.0%	-60.5%	-47.2%	-0.2%	-4.1%
INT'L	-30.0%	27.7%	11.5%	-91.7%	-16.6%	335.7%	2.0%	-19.1%
Total	1.2%	-4.9%	-1.0%	1.0%	-26.9%	-40.4%	-35.1%	-15.0%

Table 24: Provincial Distribution percentage share of earnings

Province	Survey period							5-year average	2-year average
	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20	Dec-20		
EC	7.7	5.5	7.8	12.3	6.7	6.3	4.5	6.5	6.0
WC	16.9	18.9	22.4	23.7	23.0	22.3	25.8	19.7	22.7
NC	1.4	1.8	1.7	7.1	3.0	2.5	5.1	3.4	3.5
FS	5.1	2.5	4.6	4.6	3.5	3.9	3.5	2.3	3.3
NW	2.0	1.2	1.3	1.5	1.6	1.3	1.5	1.7	1.5
LIM	2.6	13.9	2.1	2.6	2.5	2.0	1.6	2.5	2.2
GAU	29.5	25.4	36.8	26.5	26.0	27.8	34.0	31.3	29.8
MPU	3.0	3.5	1.2	1.7	3.0	1.7	1.2	1.9	1.9
KZN	17.8	11.0	7.9	12.3	16.8	16.5	9.6	12.1	13.7
AFRICAN	12.2	13.2	14.1	7.3	8.9	12.7	11.5	12.8	11.5
INT'L	1.8	3.1	0.2	0.5	5.0	3.0	1.8	5.9	3.9
Total	100%	100%	100%	100%	100%	100%	100%	100%	

Table 25: Client Distribution Fee income earned. R mill. Real 2000 prices (Annualized)

Client	Survey period						
	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20	Dec-20	Jun-21
Central	2 369	2 165	591	265	209	276	272
Provincial	1 002	506	738	486	585	382	305
Local	1 094	710	2 068	1 104	1 004	955	730
State Owned	456	689	1 034	618	669	509	523
Private	4 192	2 953	3 027	1 942	1 715	1 552	1 802
Total	9 113	7 023	7 458	4 414	4 182	3 673	3 632

Table 26: Client distribution Percentage share of earnings

Client	Survey period						Jun-21	5-year average	2-year average
	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20	Dec-20			
Central	26.0	30.8	8.0	6.0	5.0	7.5	7.5	12.1	6.5
Provincial	11.0	7.2	10.0	11.0	14.0	10.4	8.4	11.0	11.0
Local	12.0	10.1	28.0	25.0	24.0	26.0	20.1	20.6	23.8
State Owned	5.0	9.8	14.0	14.0	16.0	13.9	14.4	13.6	14.6
Private	46.0	42.0	41.0	44.0	41.0	42.2	49.6	42.8	44.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

Table 27: Economic sector Percentage share of earnings

Economic sector	Jun-20	Dec-20	Jun-21	5-year average	2-year average	Deviation 5-year	Deviation 2-year	Deviation last six months
Water (Full water cycle)	18%	22%	17%	19.6%	19.5%	-2.2%	-2.1%	-4.6%
Transportation (land. air. road. rail. ports)	25%	22%	20%	29.4%	24.2%	-9.2%	-4.0%	-1.8%
Energy (electricity. gas. hydro)	8%	8%	9%	6.2%	7.5%	2.5%	1.2%	0.7%
Mining / Quarrying	6%	10%	23%	8.1%	8.5%	15.0%	14.6%	13.1%
Education	2%	4%	2%	1.7%	2.6%	0.2%	-0.7%	-2.1%
Health	5%	2%	5%	1.9%	3.7%	2.6%	0.8%	2.5%
Tourism/Leisure	0%	1%	0%	0.3%	0.6%	0.1%	-0.2%	-0.6%
Housing (residential inc. land)	4%	3%	2%	6.3%	5.3%	-4.4%	-3.4%	-1.1%
Commercial ⁴	17%	17%	10%	17.1%	16.2%	-6.7%	-5.8%	-6.6%
Agriculture / Forestry / Fishing	0%	0%	0%	0.5%	0.3%	-0.3%	-0.1%	0.2%
Other	15%	11%	11%	8.9%	11.7%	2.3%	-0.5%	0.2%
Total	100%	100%	100%					

⁴ Commercial includes: Manufacturing, industrial buildings, communication, financial, facilities management

Table 28: Economic Sector Rm. Real 2000 prices. Annualized

Economic sector	Jun-19	Dec-19	Jun-20	Dec-20	Jun-21	Per. Change last 6 months	Per. Change Last 12 months
Water (Full water cycle)	1 515	766	755	808	632	-21.8%	-16.3%
Transportation (land. air. road. rail. ports)	1 843	1 110	1.036	808	734	-9.2%	-29.1%
Energy (electricity. gas. hydro)	478	328	337	294	316	7.5%	-6.3%
Mining / Quarrying	787	319	252	367	839	128.4%	233.6%
Education	108	141	66	147	69	-53.0%	4.2%
Health	412	116	192	73	163	122.5%	-14.9%
Tourism/Leisure	3	44	15	37	15	-60.4%	-1.1%
Housing (residential inc. land)	683	195	186	110	69	-37.4%	-62.8%
Commercial	1 043	751	699	624	378	-39.5%	-46.0%
Agriculture / Forestry / Fishing	44	16	15	0	7	-	-50.6%
Other	466	629	629	404	407	0.7%	-35.4%
Total	7 384	4 414	4 182	3 674	3 629	-1.2%	-13.2%

Table 29: Proposed CESA Labour unit cost index

Survey period	Labour Unit cost (LUC) per hour	Index (2000 = 100) Smoothed	Year on Year percentage change in Index	Annual Average Annual Increase
Dec-06	R113.40	178.28	10.6%	10.0%
Jun-07	R122.3	185.61	9.1%	
Dec-07	R127.21	196.49	10.2%	9.7%
Jun-08	R150.43	218.65	17.8%	
Dec-08	R162.80	246.68	25.5%	21.7%
Jun-09	R171.98 r	263.65 r	20.6% r	
Dec-09	R174.77	273.07	10.7%	15.6%
Jun-10	R174.50	275.06	4.3%	
Dec-10	R199.3	294.37	7.8%	6.1%
Jun-11	R179.8	298.5	8.5%	
Dec-11	R199.5	298.7	1.5%	5.0%
Jun-12	R196.2	311.6	4.4%	
Dec-12	R249.8	351.2	17.6%	10.9%
Jun-13	R241.3	386.7	24.1%	
Dec-13	R236.1	375.9	7.0%	15.6%
Jun-14	R255.8	387.4	0.2%	
Dec-14	R266.1	411.0	9.3%	4.8%
Jun-15	R253.5	409.2	5.6%	
Dec-15	R243.08	391.06	-4.9%	0.4%
Jun-16	R236.34	377.56	-7.7%	
Dec-16	R231.78	368.66	-5.7%	-6.7%
Jun-17	R251.81	380.84	0.9%	
Dec-17	R 274.81	432.84	12.5%	6.68%
Jun-18	R 304.36	479.39	19.8%	
Dec-18	R 311.95	491.35	17.0%	18.40%
Jun-19	R 280.5	441.83	2.3%	
Dec-19	R 317.74	500.47	-2.9%	-0.32%
Jun-20	R 289.76	456.39	2.5%	
Dec-20	R 298.39	469.98	-1.7%	0.42%
Jun-21	R 300.30	536.17	5.2%	

Table 30: CESA Confidence index: % respondents satisfied with working conditions

Survey Period	CESA Confidence Index	% Change on previous survey	% Change on survey same time last year
Dec-06	98.4	-1.30	-0.8
Jun-07	99.4	1.0%	-0.3%
Dec-07	99.8	0.4%	1.4%
Jun-08	99.9	0.1%	0.5%
Dec-08	99.8	-0.1%	0.0%
Jun-09	96.2	-3.61%	-3.7%
Dec-09	86.0	-10.6%	-13.8%
Jun-10	87.1	1.3%	-9.4%
Dec-10	86.7	-0.5%	0.8%
Jun-11	83.2	-4.0%	-4.5%
Dec-11	87.4	5.0%	0.8%
Jun-12	81.8	-6.4%	-1.7%
Dec-12	70.0	-14.4%	-19.9%
Jun-13	84.0	20.0%	2.7%
Dec-13	98.1	16.8%	40.1%
Jun-14	87.7	-10.6%	4.4%
Dec-14	46.3	-47.2%	-52.8%
Jun-15	44.5	-3.9%	-49.3%
Dec-15	39.4	-11.5%	-14.9%
Jun-16	75.0	90.4%	68.5%
Dec-16	87.5	16.7%	122.1%
Jun-17	96.3	10.1%	28.4%
Dec-17	55.4	-43.5%	-37.8%
Jun-18	26.9	-50.6%	-72.1%
Dec-18	31.4	16.6%	-42.4%
Jun-19	33.3	6.1%	23.8%
Dec-19	36.1	8.4%	15.0%
Jun-20	29.6	-17.9%	-11.1%
Dec-20	19.2	-35.3%	-46.9%
Jun-21	47.8	149.4%	61.4%
Dec-21 (forecast)	60.0	25.6%	213.2%
Jun-22 (forecast)	54.5	-9.2%	14.1%

End of report

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