



Bi-Annual Economic and Capacity Survey

January – June 2020

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1. Economic overview

1.1 International Developments

The past few months have all but confirmed economists fears, that the Covid-19 pandemic is the worst crisis we have faced on a global scale since World War 2, and the worst economic crisis since the Great Depression of the late 1920's. The virus continues to rage worldwide, with infections slowing in some parts of the world, but accelerating in others. **South Africa has recorded the 5th highest number of Covid-19 cases in the world and is above the global average of deaths per million population.** The global average being 95.9 deaths per million population, compared to 185 deaths per million population in South Africa, which is the 32nd highest in the world. Moreover, South Africa has had one of the **strictest lockdowns in the world**, which has significantly hampered the economy. In terms of the global economic impact, never has an economic crisis been so widespread, with the IMF forecasting the global economy to contract by 4.9 percent in 2020 overall, with advanced economies hit the hardest. Coming off a bit of a lower base compared to emerging market, average GDP in advanced economies is expected to contract by 8.0 percent, compared to just a 3 percent contraction in emerging market economies.

Notable, IMF's forecast was lowered quite significantly, compared to their initial forecast of a decline of 3.0 percent in April, with the pandemic having a more negative impact on economic activity in the first half of the year than originally expected, and the IMF also forecasts the recovery to be more gradual than expected. The IMF noted several dynamics affecting forecasts. In countries where infections have started to moderate or decline, the more gradual recovery reflects persistent social distancing in the 2nd half of the year which stunts economic activity. They also note worse than expected declines in productivity of businesses that have survived this period, with greater costs to comply with Covid-19 protocols, as well as social distancing, and they also note a worse than expected hit to global supply chains, and the general productive capacity of countries. In countries that are struggling to control infections, additional and longer lockdowns will inflict an additional toll on economic activity, like we have seen in South Africa, with the IMF expecting the South African economy to contract by a staggering 8.0 percent this year, worse than our forecasts at Industry Insight and some other institutions of around 7.0 percent.

Table 1: Global economic outlook

	2016	2017	2018	2019	2020	2021
World	3.1%	3.8%	3.6%	2.9%	-4.9%	5.4%
Advanced Economies	1.7%	2.4%	2.2%	1.7%	-8.0%	4.8%
US	1.6%	2.2%	2.9%	2.3%	-8.0%	4.5%
Eurozone	1.7%	2.4%	1.8%	1.2%	-10.2%	6.0%
UK	1.8%	1.8%	1.4%	1.3%	-10.2%	6.3%
Emerging markets	4.1%	4.7%	4.5%	3.7%	-3.0%	5.9%
Brazil	-3.6%	1.1%	1.1%	1.2%	-9.1%	3.6%
Russia	-0.2%	1.8%	2.3%	1.1%	-6.6%	4.4%
India	6.8%	6.7%	7.1%	4.8%	-4.5%	6.0%
China	6.7%	6.8%	6.6%	6.1%	1.0%	8.2%
Sub-Saharan Africa	1.4%	2.7%	3.0%	3.3%	-3.2%	3.4%
SA	0.6%	1.3%	0.8%	0.4%	-8.0%	3.5%

Source: IMF World Economic Outlook June 2020

1.2 Domestic Economy

Stats SA confirmed that the South African economy has seen the largest contraction in economic activity in more than 90 years. On an annualized basis, seasonally adjusted, the South African economy contracted by 51.0 percent in the 2nd quarter of the year, compared to the first quarter, which also saw a contraction. The figures are worse than expected, as the Covid-19 pandemic and subsequent lockdown dug deep, with an unprecedented slowdown in economic activity. The economic shutdown explains the unprecedented nature of the contraction in the 2nd quarter, with all industries not declared essential services being forced to cease all operations. The annualized are exaggerated to some degree, and if we look at the figures on a year on year non-annualized basis, the economy contracted by 17.1 percent.

Looking at the figures from the expenditure side, which calculates GDP based on how much/many South African goods and services are bought, GDP was down a similar 17.6 percent in the 2nd quarter, with huge contractions in household spending, imports, exports and investment into the South African economy. On an annualized basis, household consumption expenditure was down just under 50 percent, with huge contractions in spending on non-essential goods and services, such as restaurants and hotels (which was down by 99.9 percent), alcoholic beverages and tobacco (down by 92.4 percent), clothing and textiles (down by 91.5 percent) and recreation and culture (down by 86.0 percent) were some of the worst affected segments of the market.

The construction sector remains hardest hit and was the worst performing sector in the 2nd quarter, with the industry not being declared an essential service, completely shutting down over the 5 week period. Evidence further shows the construction sector was also slow to re-start, only at around 15 percent capacity a month after the go ahead to open up, with various logistical difficulties, as well as health and safety regulations hampering people getting back on site. Overall, on an annualized basis, the construction industry fell by 76.6 percent on a quarter on quarter basis, and was already very much in recessionary territory, contracting consistently over the 8-9 quarter prior to the Covid-19 pandemic. The other worst performing sectors were the manufacturing and mining industries, down by 74.9 percent and 73.1 percent respectively in the 2nd quarter. The best performing segment was the agricultural sector, which was mostly declared and essential service, and also experienced a record harvest for field crops.

GDP overall versus construction

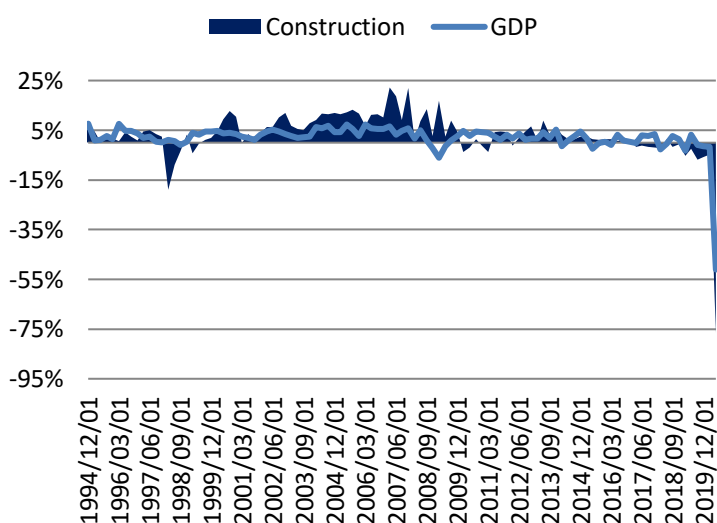


Figure 2: GDP overall versus construction

Interest Rates vs CPI

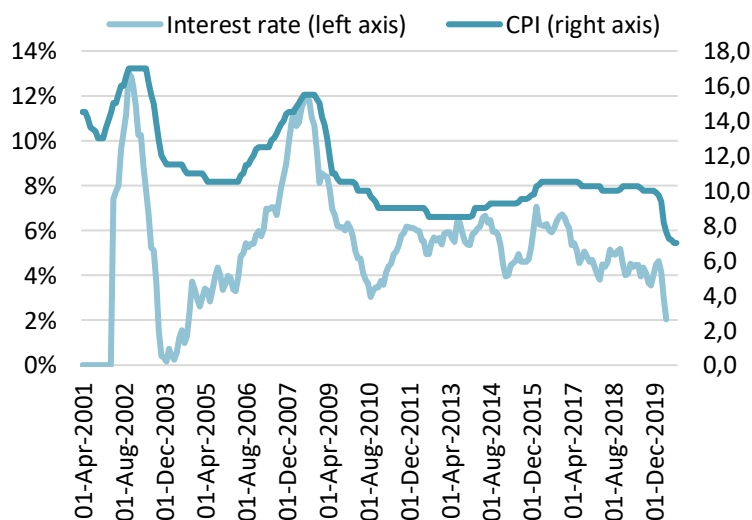


Figure 1: Interest rates versus CPI history

Table 2: Macro economic growth projections (Industry Insight Forecast Report March 2020)

Please note, these forecasts have not taken into the effect of the Covid-19 pandemic, which we are still reviewing

Macro-Economic Forecasts	2019	2020	2021	2022	2023
GDP	0.1%	-6.8%	1.8%	-2.2%	0.2%
Household consumption	1.0%	-4.2%	1.6%	-1.7%	-0.2%
Government consumption	1.5%	5.2%	-4.6%	-3.4%	2.1%
Gross Fixed capital formation	-0.9%	-12.7%	2.3%	-0.2%	0.3%
Imports	-0.5%	-2.3%	1.0%	2.2%	4.0%
Exports	-2.5%	-12.2%	6.2%	1.2%	3.9%
Prime Lending rate	7.0%	7.3%	8.3%	9.0%	7.0%
ZAR/US\$	R 16.50	R 15.00	R 15.30	R 15.61	R 16.50
CPI Inflation	4.1%	4.0%	4.6%	4.3%	4.5%

1.3 Gross fixed capital formation

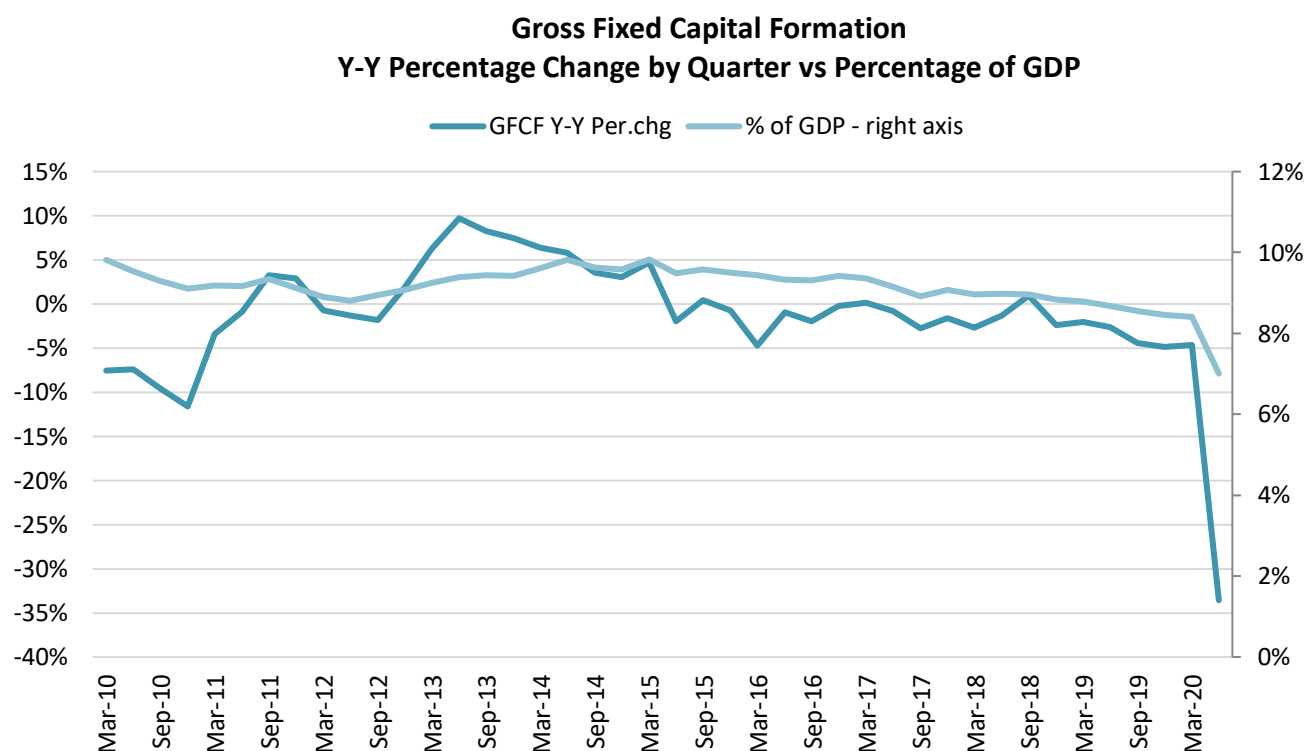


Figure 3: GFCF (Y-Y percentage changes vs Percentage of GDP) Source SARB Quarterly Bulletin

The 2nd quarter gross fixed capital formation figures were similarly shocking. Investment in construction fell by 34 percent in the 2nd quarter, compared to the same quarter last year, in constant 2010 prices, on an annualized basis. All sectors experienced large contractions, with building coming to a complete stop for 5 weeks, and subsequently getting back up to capacity very slowly. Not only have we lost a big chunk of activity, productivity is expected to be significantly lower on site with regards to having to adhere to all the health and safety and social distancing requirements. The economic impact is also expected to weigh heavily on the industry, with a severe lack of demand for building from the private sector specifically, and problems on the fiscal front in the public sector, amongst concerns.

All sectors experienced declines, but the most worrying would be the non-residential sector, with a contraction of 42.3 percent. This is also off the back of three consecutive double digit declines in the previous quarters. This comes off the

back of a 12.3 percent, 16.6 percent and 14.9 percent decline in the three preceding quarters, in what is now a sub-sector that is almost half the size it was just three years ago. Investment in residential building fell by 30.4 percent, while investment in civil works fell 35.5 percent.

As the construction industry underperforms the economy in the 2nd quarter, 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 2nd quarter. This is down quite significantly from 8.4 percent in the previous quarter.

Table 3: GFCF Residential, Non-Residential and Construction works, by client 2019, current prices (millions)

2019	Government	SOE's	Private	Total
Residential	14.7	64.0	84.4	86.0
Non-residential	26.3	31.0	47.6	77.1
Civil works	77.8	91.4	94.9	264.2
Total	105.6	94.6	227.0	427.3

Source: South African Reserve Bank Quarterly Bulletin

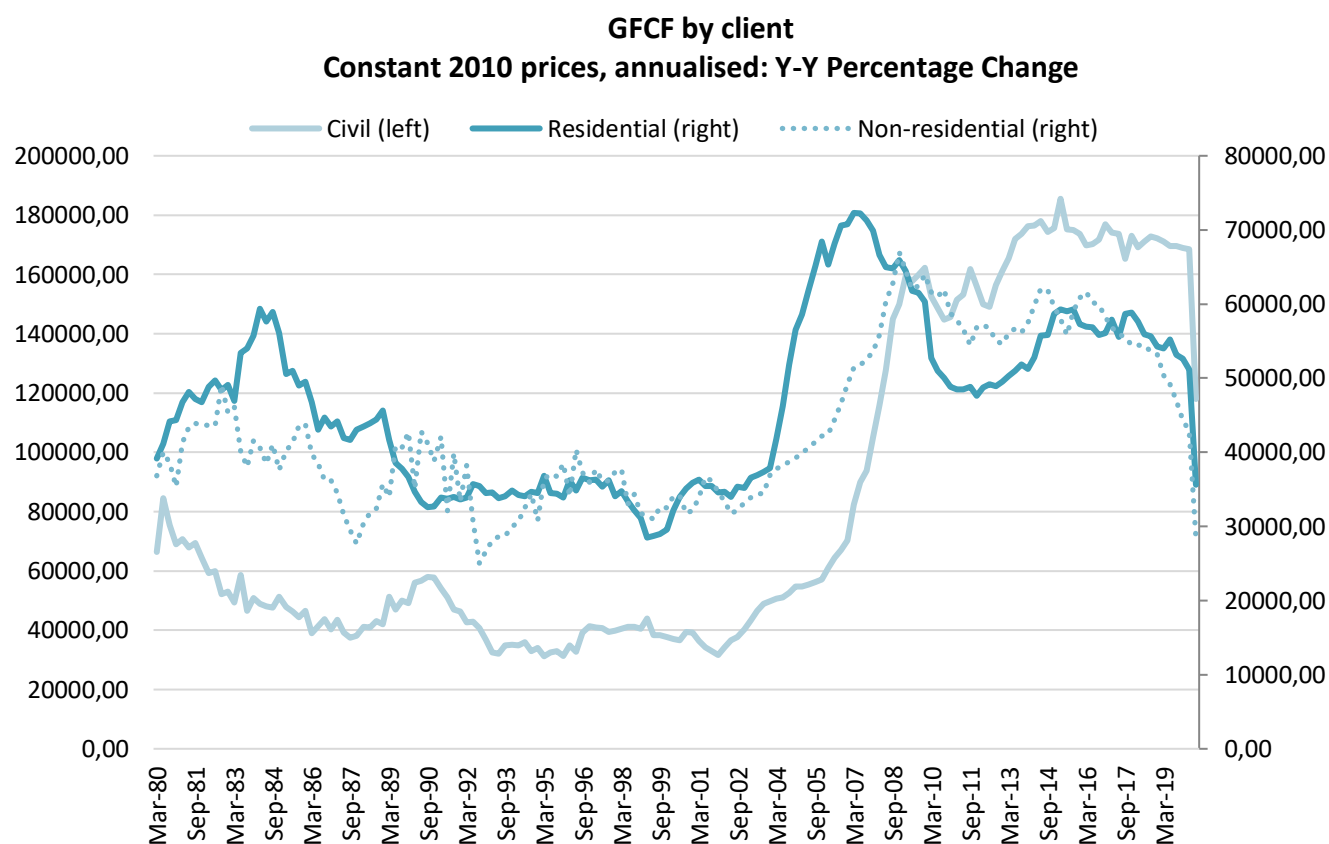


Figure 4: GFCF by client, constant 2010 prices (Source SARB)

2. CESA Survey: Background

A total of 54 questionnaires were returned via both an on-line and hard copy system. The sample represents a cumulative fee income of R2.21bn, and 4425 employees for the period January – June 2020.

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 2020 contracted by 4.0 percent (in current prices) compared to the last six months of 2019, against an expected drop of 7.4 percent reported in the December 2019 survey.

All firm sizes reported lower fee earnings in the first half of the year, with the micro firms the worst affected reporting a 19.0 percent decline in fee earnings, which is quite dire. Large firms were the best performing, but still reported a 3.6 percent drop, while medium and small firms reported a 9.6 percent and 9.7 percent decreases respectively.

The respondents are a bit more upbeat about the second half of the year, expecting earnings to effectively remain the same, with a 0.1 percent increase. The second half of the year would not include a period in which the construction industry was completely shut down, so would be coming off a very low base. It is not unrealistic then, even given the economic environment, that there could be an increase in the second half of the year, relative to the first half. Small and micro firms do however still expect fees to decrease further, with medium firms the most positive, expecting an expansion of 10.4 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 2020 vs Dec 2019)	Projected for Dec 2020
Large	-3.6%	0.3%
Medium	-9.6%	6.2%
Small / Micro	-9.7%	-10.4%
Total	-19.0%	-17.0%

3.1.2 Outsourcing

On average firms **outsourced** a lower 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 just over 5 percent in the June 2020 survey compared to the previous December 2019 survey.

On average, we have seen large firms outsourced more and more of their work over the last few surveys, and large firms continue to outsource the most out of all the different sized firms. In the current period (Jan-June 2020), large firms outsourced more than 30 percent of the turnover to external enterprises, and 20.8 percent the black owned companies. Medium sized firms outsourced 19.7 percent of their turnover to black owned companies.

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	30.3	20.8
B	14.7	19.7
C	16.8	-0.3
D	8.7	17.5
Average % of industry turnover	16.4	14.6
Average % of industry turnover June 2019 Survey	16.7	20.7

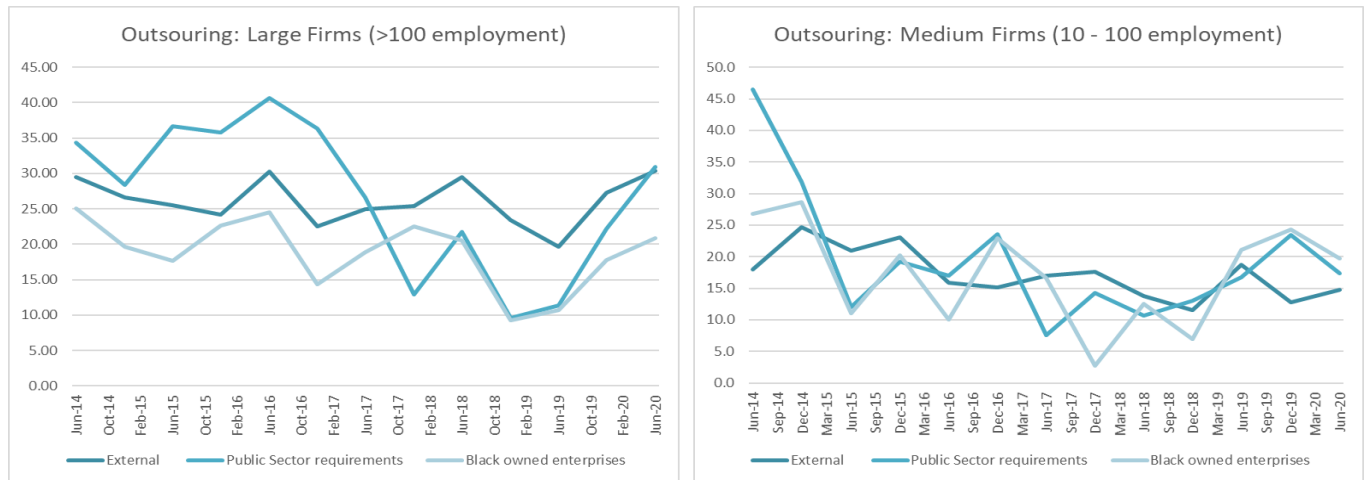


Figure 8: Outsourcing trend, large versus medium sized firms

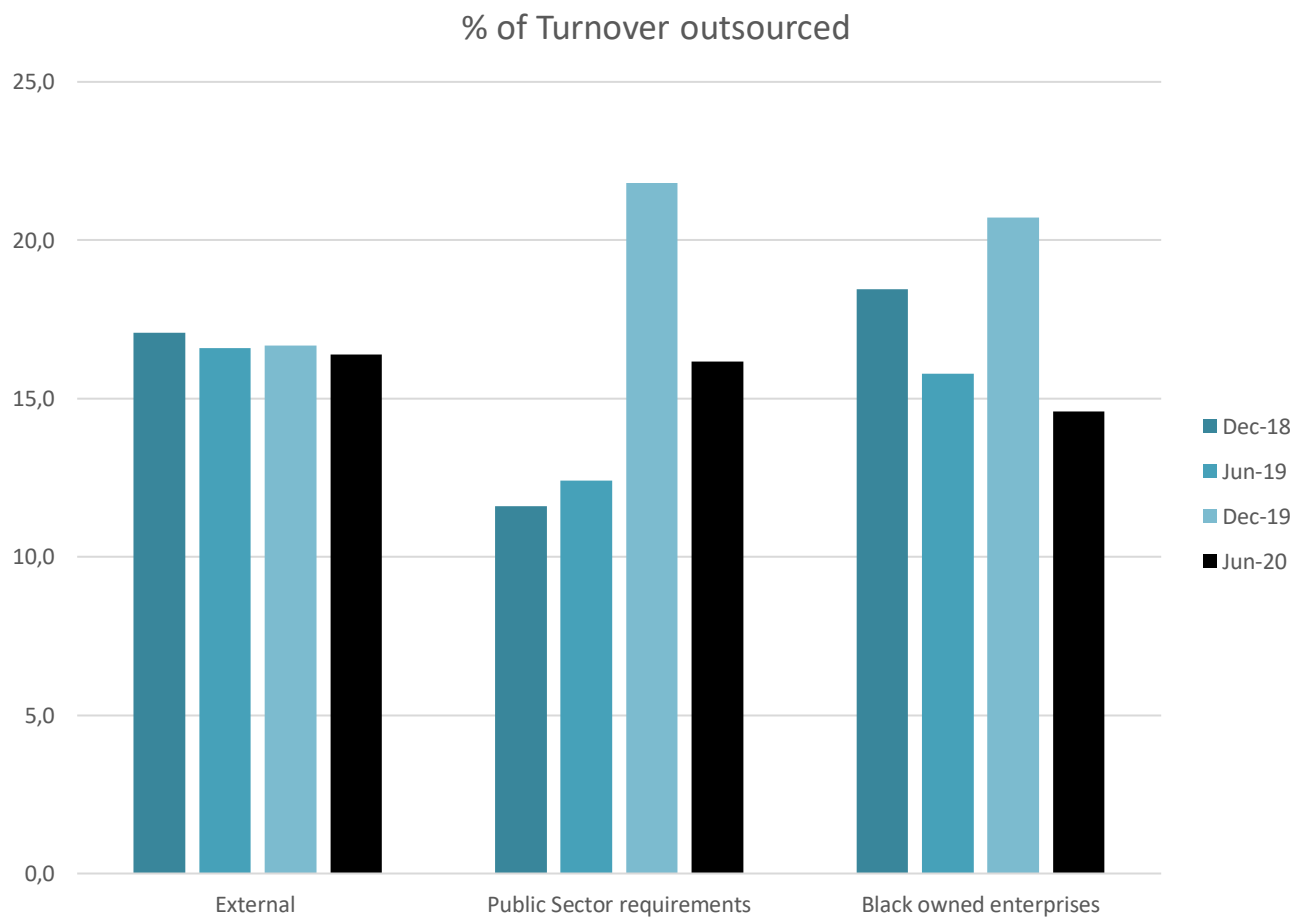


Figure 7: Percentage of turnover outsourced (average)

3.1.3 Return on Working Capital

Average Return on Working Capital

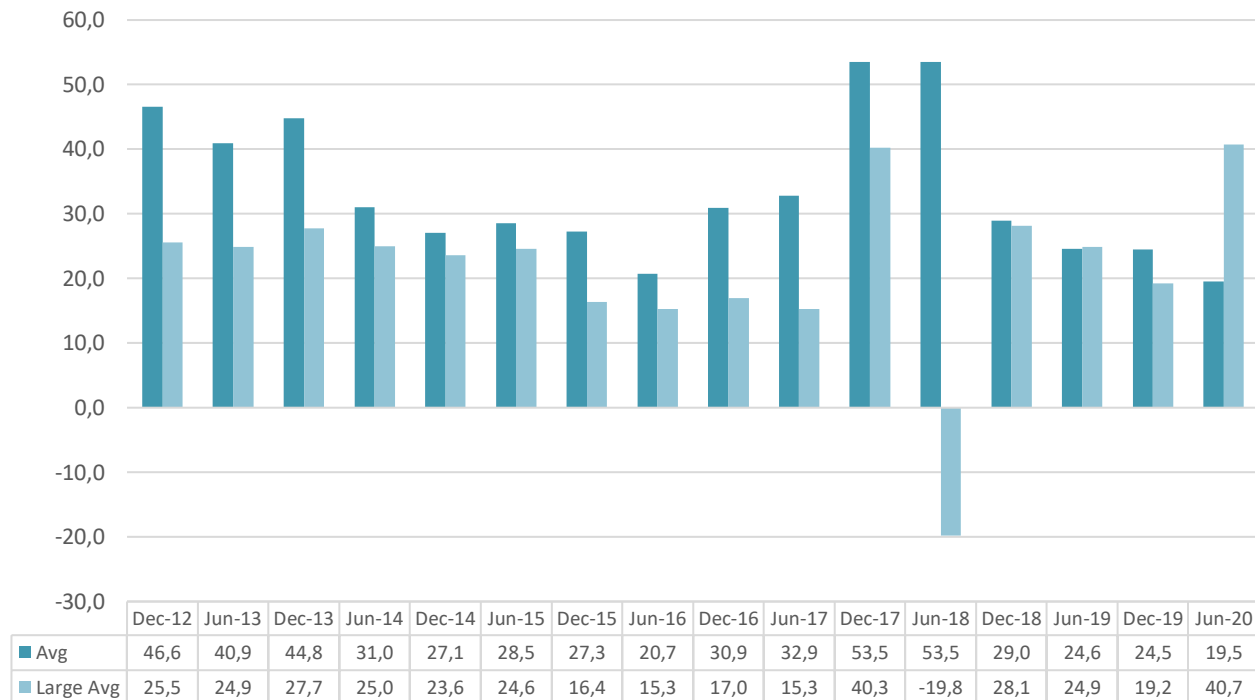


Figure 9: Average Return on Working Capital – Trend since December 2012

- The industry's **return on working capital**¹ (un-weighted average) moderated quite considerably to 19.5 percent in the June 2020 survey after having slowed to 24.5 percent the previous survey and is now below the average of between 30 and 40 percent in 2012 and 2013. There was a greater variance between the differently sized firms, with large firms reporting 40.7 percent, while smaller firms reported a very low 6.3 percent.
- Micro firms are the only companies to really report consistent return on income numbers over the last few quarters, with the larger and medium sized firms more volatile to some degree.

Table 6: Return on Working Capital by firm size

Group	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20
A	15.3	40.3	-19.8	28.1	24.9	19.2	40.7
B	53.5	127.3	114.2	25.1	13.4	26.0	19.2
C	41.8	26.1	61.2	34.4	30.5	18.8	6.3
D	22.8	5.2	20.3	20.6	36.3	35.8	21.2
Grand Total	32.9	55.1	53.5	29.0	24.6	24.5	19.5

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).

3.1.4 Value of outstanding payments

Fees not yet invoiced for confirmed appointments as % of revenue

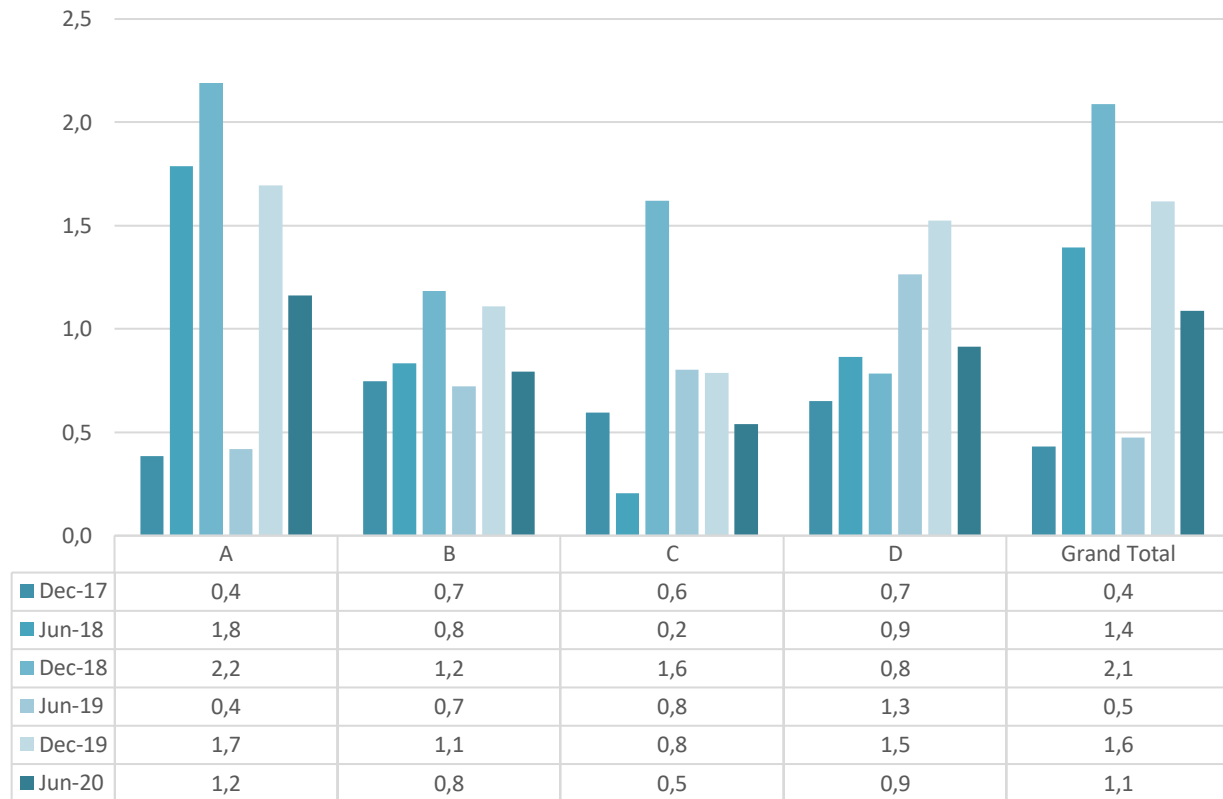


Figure 10: Order book: Income ratio

In terms of the ratio of fees not yet invoiced for confirmed appointments in order books in relation to current earnings, there was a deterioration in the current survey. Larger firms report the highest proportion of 1.2 (a bit more than their total income) but were the only group to report a ratio higher than 1, with the medium, small and micro firms all reporting much lower ratios. The small firms reported a ratio of 0.5, which was the lowest. A decrease in the order book to income ratio suggests a deterioration in pipeline earnings, suggesting worse conditions in the next 6 to 12 months, which is to be expected given the pandemic and the economic fallout.

3.1.5 Profitability and late payments

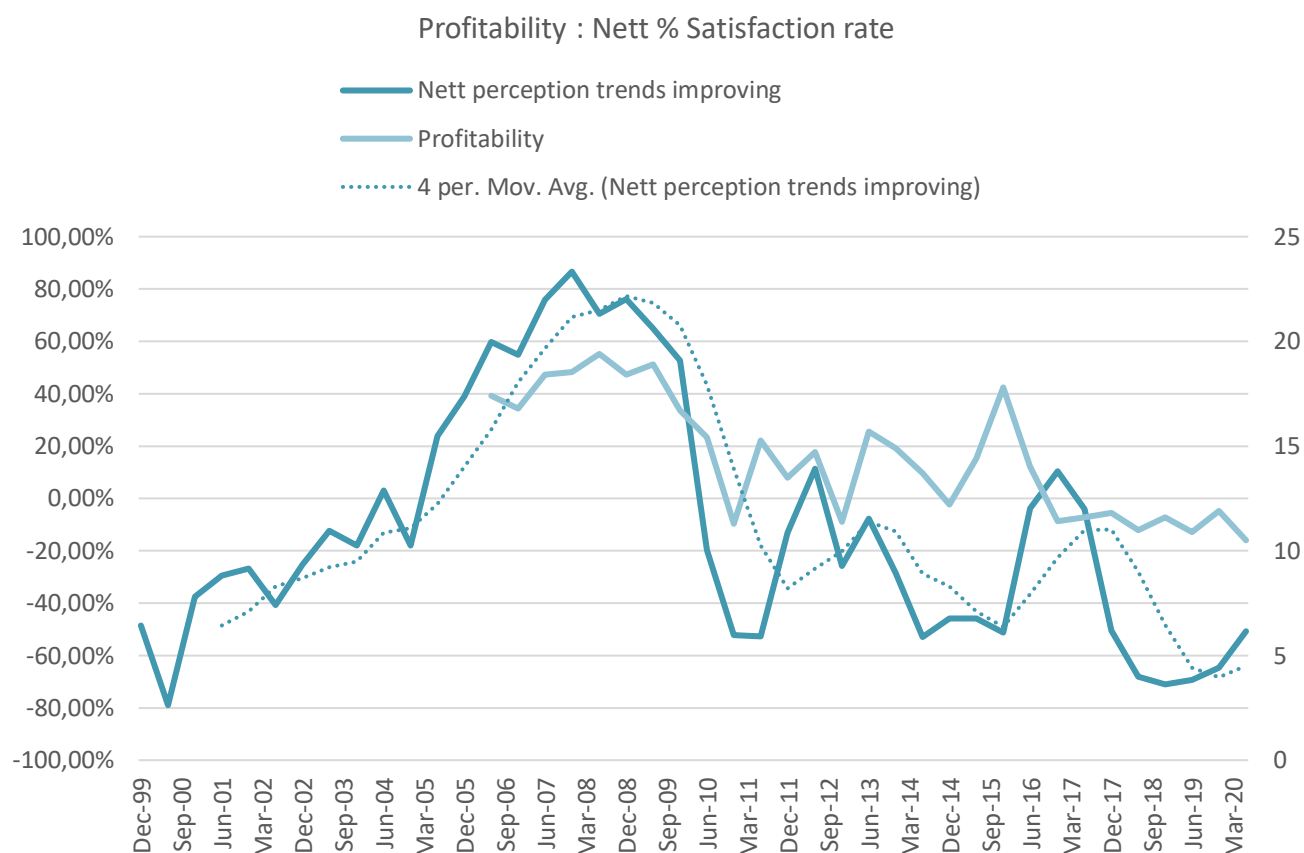


Figure 11: Profitability: Net % Satisfaction rate vs Average Profitability

Nett profitability deteriorated to an average of 10.5 percent in the first six months of 2020, down marginally from an average of 11.9 percent in the previous survey, and below the average of 12.7 percent in 2016. However margins have been relatively stable for the last 3 years, albeit at lower levels by historical terms. Allowing for fluctuations on a survey to survey basis, the trend has been more and more negative since 2015, when the downturn within the broader construction industry began, from a 'peak' nett profitability of 17.8 percent in the last six months of 2015.

The majority of consulting engineers expect their profits to remain static at 47.4 percent, and surprisingly, 12.4 percent of respondents expect their profits to improve in the coming half year period, which is the best figure since the June 2017 survey where 54.0 percent of respondents expected their profits to improve. This could be a positive indication that some of the engineers may already have been working on some of the strategic infrastructure projects announced by the government. Whether these projects can be awarded will determine whether this potential pipeline activity can be converted into actual construction activity, and although some of the respondents are more positive about their anticipated profits, this is still a very low percentage, with the vast majority expecting either a decrease (40.2 percent) or static profits (47.4 percent).

Very similar to the previous three surveys, majority of firms (63.3 percent) continue to be unsatisfied with profit margins, compared to 67.2 percent in the previous survey, but also compared to just 14.0 percent in the Dec 2017 survey for example, just two years and a half ago. Only 1.4 percent of firms reported their margins as good, which is also another record low, while 24.2 percent are satisfied with their margins. **Very interesting is that 11.1 percent of firms reported their margins as been exceptional, which is of course surprising.**

Table 7: Outstanding fees payable for work already completed and invoiced: January – June 2020

Firm size category	Total gross income	Outstanding fee income	Proportion of overall income
Large	1815737513	1265437874	70%
Medium	263696864	82800840	31%
Small	103669304	24274120	23%
Micro	28702554	12498414	44%
Total	2211806237	1385011249	63%

Overall, the large firms continue to have the highest proportion of their income outstanding after 90 days, which jumped significantly in the current survey, to 70.0 percent, higher than the 62.9 percent reported in the previous survey. Late payment has become a serious constraint as the overall industry is in such a dire state, with many stakeholders struggling to meet their financial obligations, which will be further exacerbated by the Covid-19 outbreak, and the economy shutting down to a large degree. Medium sized firms reported that 31.0 percent of their overall income was still outstanding. Small firms had a small proportion at just 23.0 percent, with micro firms reporting a ratio of 63.0 percent.

3.2 Human Resources

3.2.1 Employment

- Employment decreased by an average of 5.0 percent in the first half of 2020 to an estimated 18 851, compared to the last six months of 2019, following the 5.0 percent decrease reported in the previous survey. This is a continuation of the decrease reported in the last survey. Medium sized firms reported the biggest decrease in employment, down 6.4 percent in the first half of 2020. Large firms also reported a decrease, of 5.3 percent, while small and micro firms both reported increases of 0.1 percent and 1.6 percent respectively. There may be some bump in employment in the 2nd half of the year, but it will be driven mostly by a base effect if there were temporary layoffs due to the lockdown, but the medium run outlook is a lot more dire.
- If we look at the percentage of firms wanting to increase staff in the next half of the year, the numbers are mixed, but down considerably for engineers. Only 16.1 percent of respondents said that they wanted to increase the number of engineers, compared to 49.8 percent in the previous survey. There was a bump in respondents wanting to increase the number of technologists, technicians and support staff however.

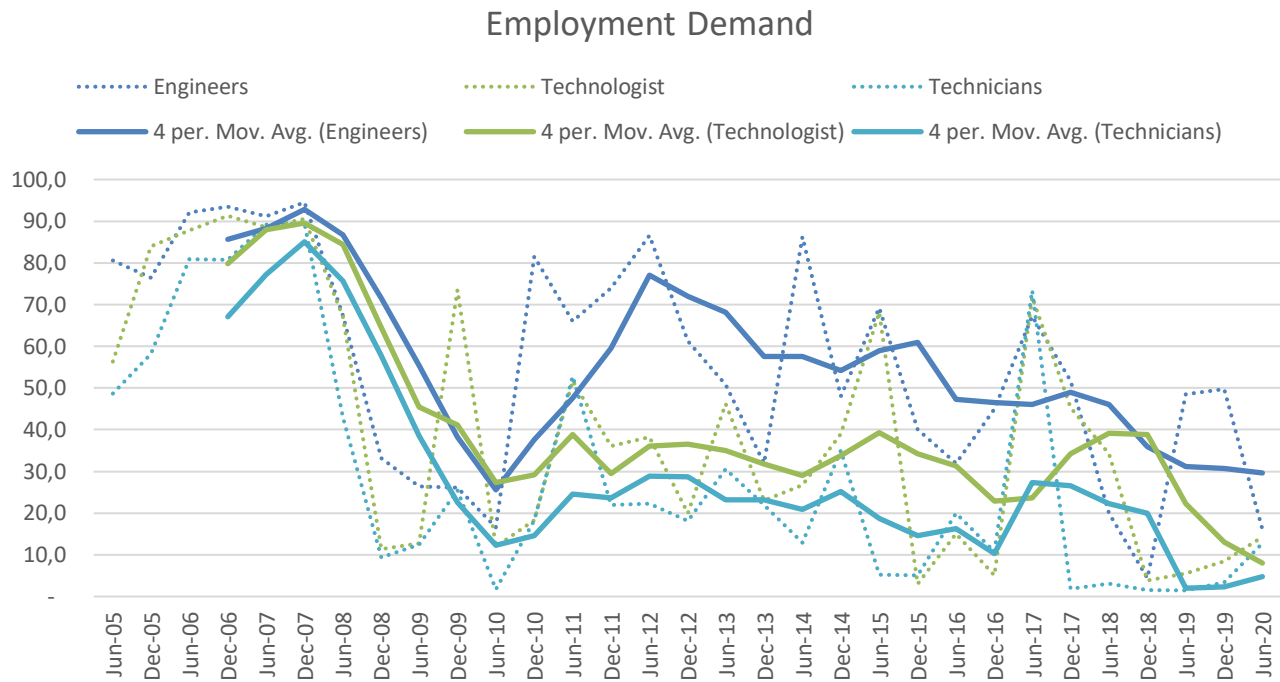
**Figure 12: Employment Demand**

Table 8: % of firms wanting to increase staff, by type of personnel

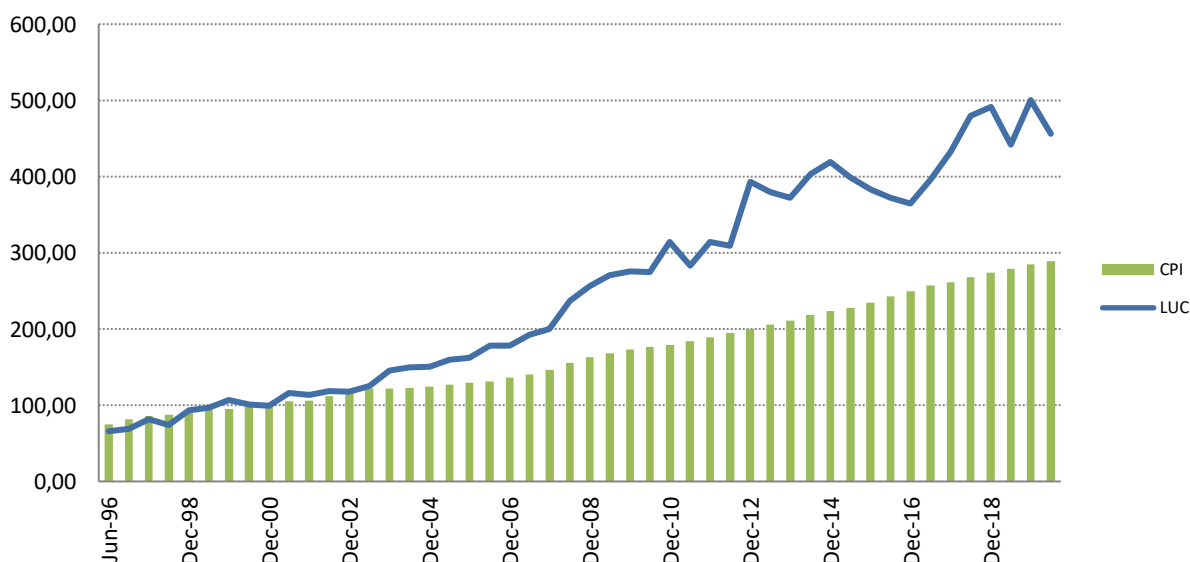
Type of personnel	% of firms wanting to increase staff June 2017	% of firms wanting to increase staff December 2017	% of firms wanting to increase staff June 2018	% of firms wanting to increase staff December 2018	% of firms wanting to increase staff June 2019	% of firms wanting to increase staff December 2019	% of firms wanting to increase staff June 2020
Engineers	67.3	51.7	20.0	4.4	48.5	49.8	16.1
Technologists	71.8	3.7	18.0	3.9	5.5	8.5	12.4
Technicians	73.4	45.3	34.3	1.6	10.4	3.3	14.2
Other technical staff	75.2	1.9	3.0	2.3	1.5	4.3	12.7
Support staff	35.3	2.3	0.0	7.5	2.4	1.6	11.3

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 64 percent of total income in the current survey, so no major deviation from the trend.
- The contribution of the salary and wage bill was highest amongst medium sized firms, averaged at 67.5 percent, which is quite high. This is while small and micro firms reported an average of 59 percent and 44 percent of total income respectively.
- 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 3.3 percent in the June 2020 survey, following an increase of 1.9 percent in the previous survey, compared to the same period in 2019. Inflation averaged 3.4 percent in the first six months of 2020 (from an average of 4.0 percent in the last six months of 2019), and is expected to remain under 5 percent for 2020 and 2021, according to the Reserve Bank.

Change in CESA Labour costs vs CPI
Index 2000 = 100



3.4 Capacity Utilisation

Capacity Utilisation Rate

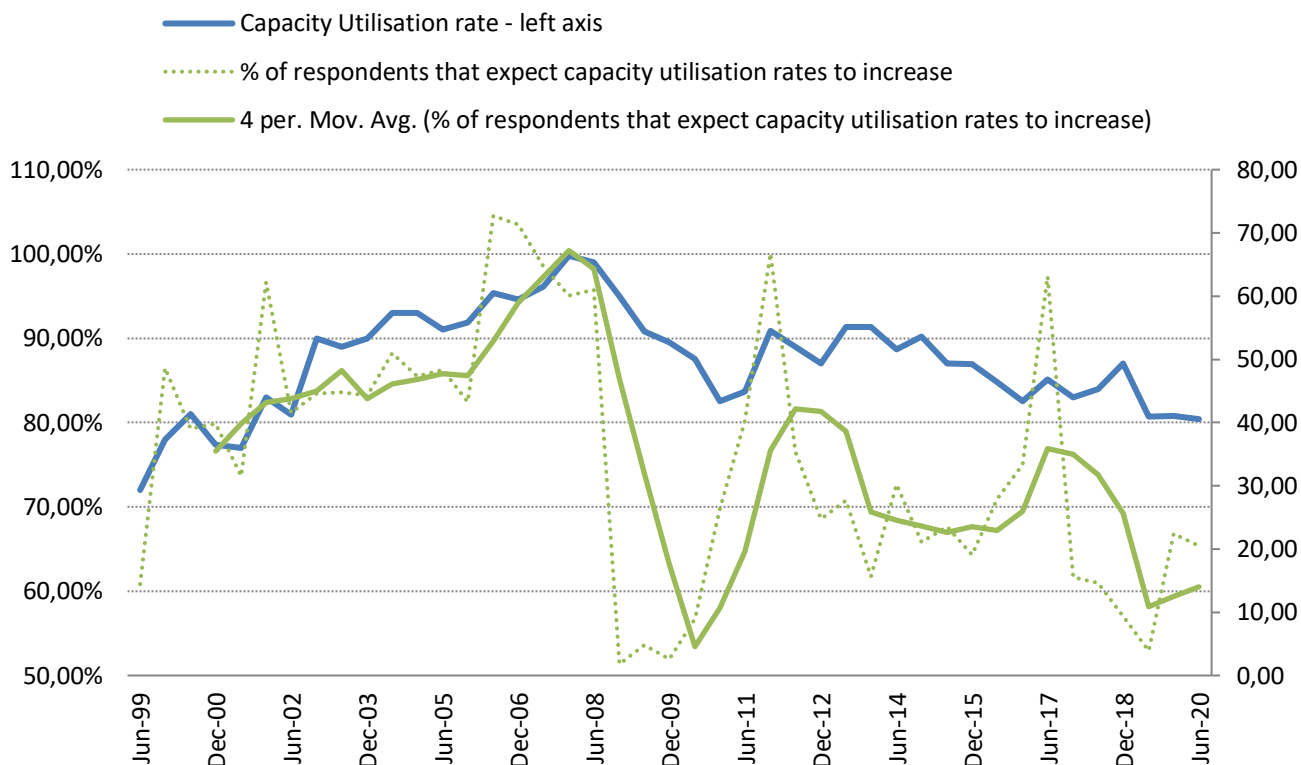


Figure 13: Capacity Utilisation Rate

Capacity utilisation of technical staff has steadily decreased since 2013, and averaged 80 percent, marginally lower than the previous survey. The vast majority of firms (55.2 percent) continue to expect capacity utilization levels to remain static over the next period. A total of 20.5 percent of firms expect an increase, while 24.4 percent of firms expect capacity to decrease, which is the highest reported since the aftermath of the global financial crisis in 2010, which should be worrying.

Small firms reported the highest capacity at 84.8 percent, and large firms reported 81.1 percent, which was the 2nd highest. Medium sized firms are the most positive, with 30.6 percent of respondents expecting an increase in capacity in the next 6 month period, while the small and micro firms are the least negative, with only 6.5 percent and 3.3 percent of respondents expecting a decrease (with the majority expecting capacity to remain static).

3.5 Competition in tendering

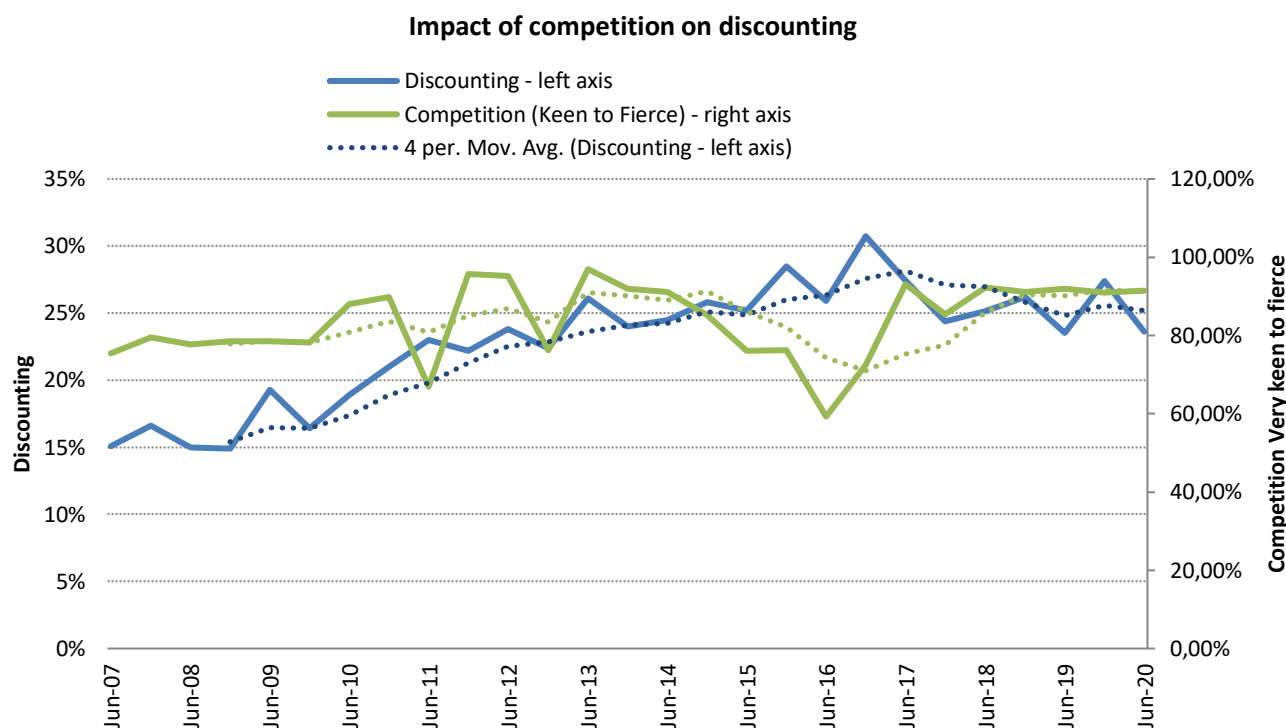


Figure 14: Competition and Discounting

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 due to the fact that an increasing number of firms tender on the same project. The tendering process is costly and time consuming, and higher levels of competition significantly increase the risk for the engineering firm.

In line with a very competitive environment, an increasing number of firms continue to report on very keen fierce competition. In this survey 91.4 percent reported on very keen to fierce competition, in line with 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. This is however significantly up from an average of 65.8 percent in 2016, for example.

Higher levels of competition are however more experienced by larger firms, with 96.3 percent reporting on very keen to fierce completion, while 76.6 percent of medium size firms experienced similar levels of competition. Micro firms reported 61.5 percent, which was also low, but small firms reported very low levels of competition at just 33.7 percent in the first half of the year.

Higher levels of competition is 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 did however moderate slightly again in the current survey, as well as the previous June 2018 survey, to an average of 23.6 percent in the current survey. Large size firms again reported the highest level of discounting at 41.2 (larger firms also reported the most intense competition), followed by small firms at 26.2 percent. *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	81.1%	18.8%	41.2%	96.3%
Medium	79.7%	30.6%	20.3%	76.6%
Small	84.8%	23.9%	26.1%	33.7%
Micro	75.0%	23.1%	13.4%	61.5%
Industry Average	80.0%	96.4%	25.3%	91.4%

3.6 Pricing

No specific escalation index is available for the consulting engineering industry. After exploring many different avenues it was proposed to calculate a CESA Cost index that is based on a “labour unit cost” and extracted directly from the CESA BECS Survey. This should accommodate at least between 60% and 65% of the firms’ costs and should therefore, in theory, be a reliable indicator of escalation. The CPI is currently used to deflate all financial information, until such time CESA officially applies the CESA Labour cost index as an industry price deflator.

The index is based on the sample of total number of employees versus the salaries and wages paid during the period under review.

According to CESA’s labour cost indicator, the average unit cost of labour (smoothed over a two-survey period to remove short term volatility) for the industry, increased by 2.5 percent since the last six months of 2019, and is off the back of the first decline in 6 surveys, with a decline of 2.9 percent reported in the previous six month period.

Figure 15: CESA Labour Cost Indicator (LCI)

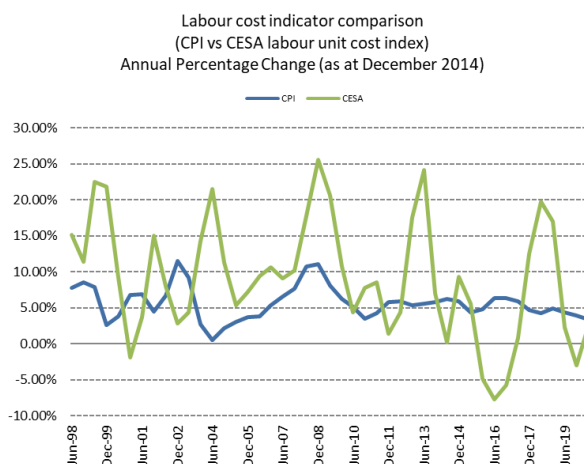
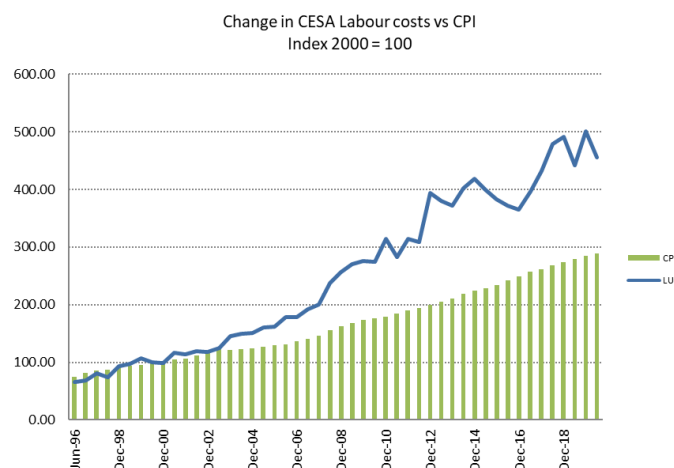


Figure 16: Change in CESA LCI vs CPI



4. Industry Outlook

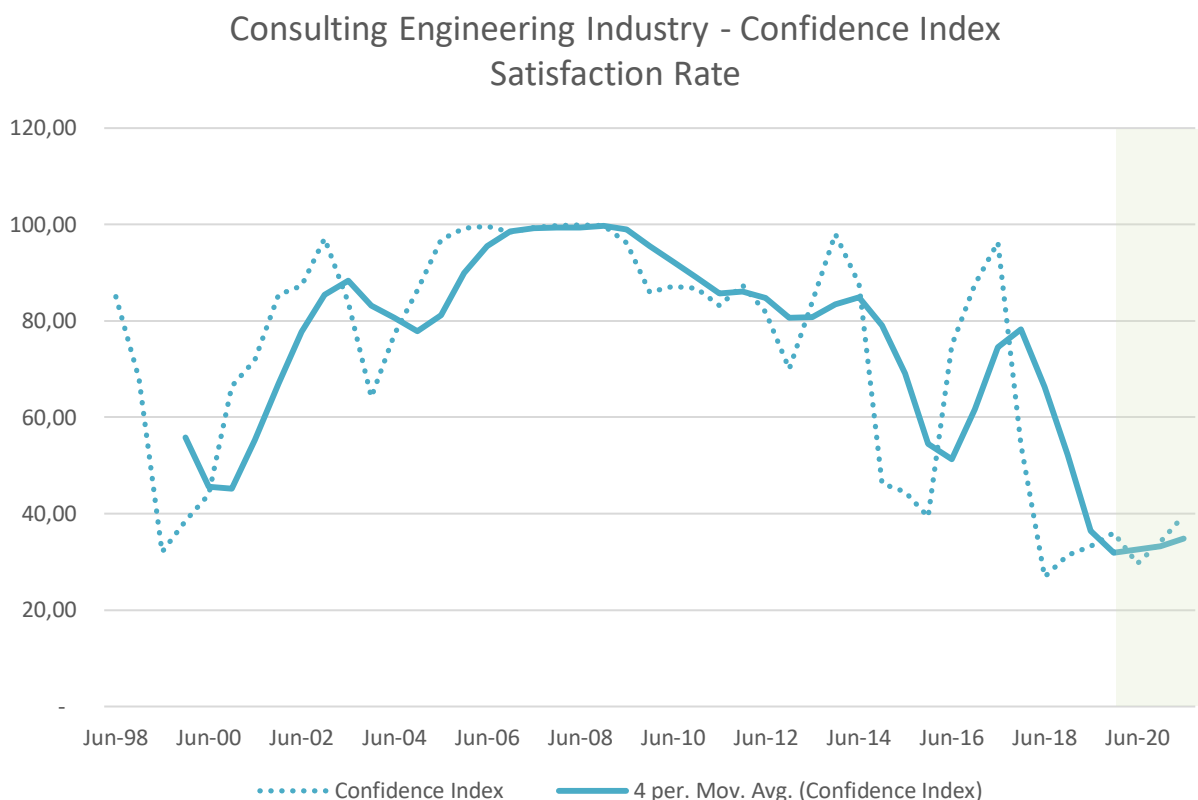


Figure 17: Confidence Index

Explanatory note: The confidence index, as 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 was unsurprisingly down in the first half of the year, compared to last year, with the respondents reporting an index value of 29.6, down from 36.0 points in the December 2019 survey, so down by 17.9 percent, which is a relatively sizeable decrease. It is on the other hand somewhat surprising that the index did not go even lower, with many other sentiment indicators showing all time lows, such as the SAFCEC civil engineering indices, as well as the BER/FNB building and civil confidence indices. While this is one of the worst datapoints in the history of the index, it was the lowest in recent years in the June 2018 survey where a value of 26.9 points was reported.

The large firms are by far the least confident over the last few surveys and are the reason the index is so low in the current six month period again. Confidence levels for larger firms were just 27.7 percent, which is down from 30.3 percent reported in the previous survey. The large firms have been by the far the most negative over the last few surveys. Small firms are by far far the most positive, with a small majority reporting satisfactory business conditions (53.4 percent). Medium sized firms reported 37.8 percent, and micro firms were the most negative at 26.4 percent.

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

The outlook for the following 6 to 12 months is more positive, with an index of just under 40 points reported for June 2021, so the firms expecting an improvement from current conditions. The index is also improved for the next 6 months, up to 34.2 points from 29.6 points.

Table 9: Confidence as at June 2020 by firm size category (% of respondents that experienced satisfactory business conditions)

Firm size category	First six months of 2019	Next 6 months	Next 12 months
Large	27.7%	27.7%	36.2%
Medium	37.8%	71.6%	56.5%
Small	53.4%	66.1%	59.8%
Micro	26.4%	39.6%	56.0%
Industry Average	39.9%	52.8%	57.9%

Annual Change in Real Earnings of Consulting Engineering vs Confidence

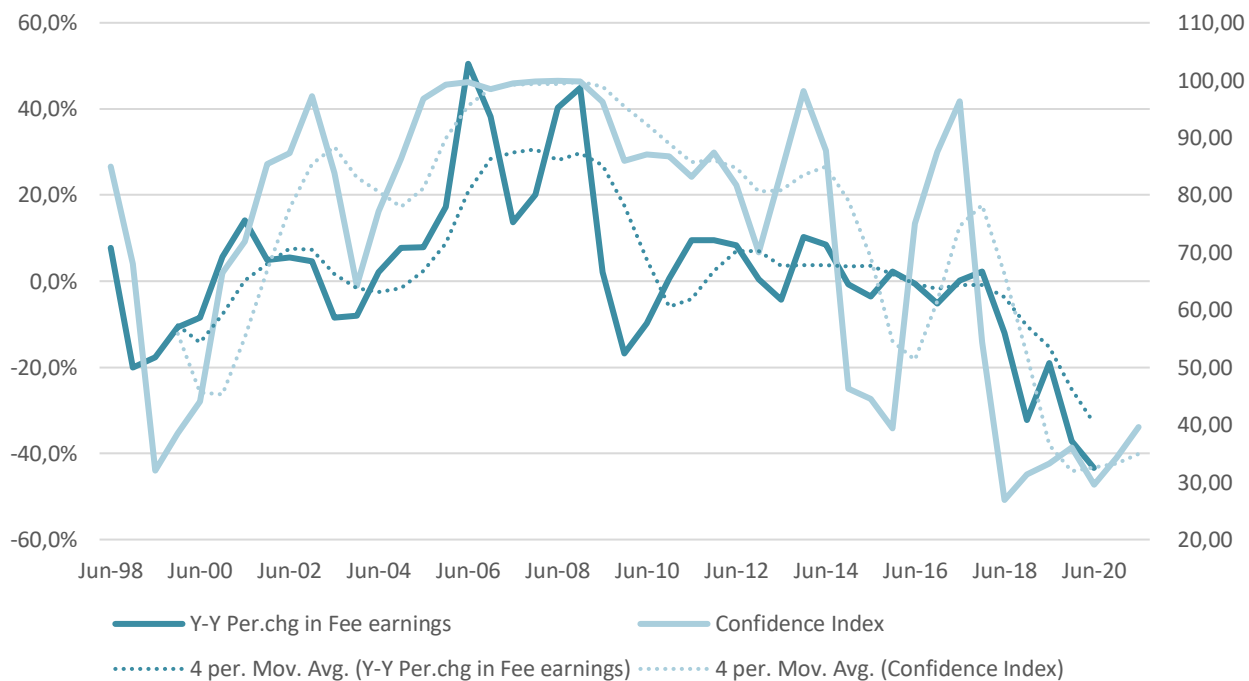


Table 10: CESA Confidence index: % respondents satisfied with working conditions

Survey Period	CESA Confidence Index	% Change on previous survey	% Change on survey same time last year
Jun-06	99.7	0.5%	3.0%
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	-3.6%	-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 (forecast)	34.2	15.5%	-5.2%
Jun-21 (forecast)	39.6	15.7%	33.7%

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

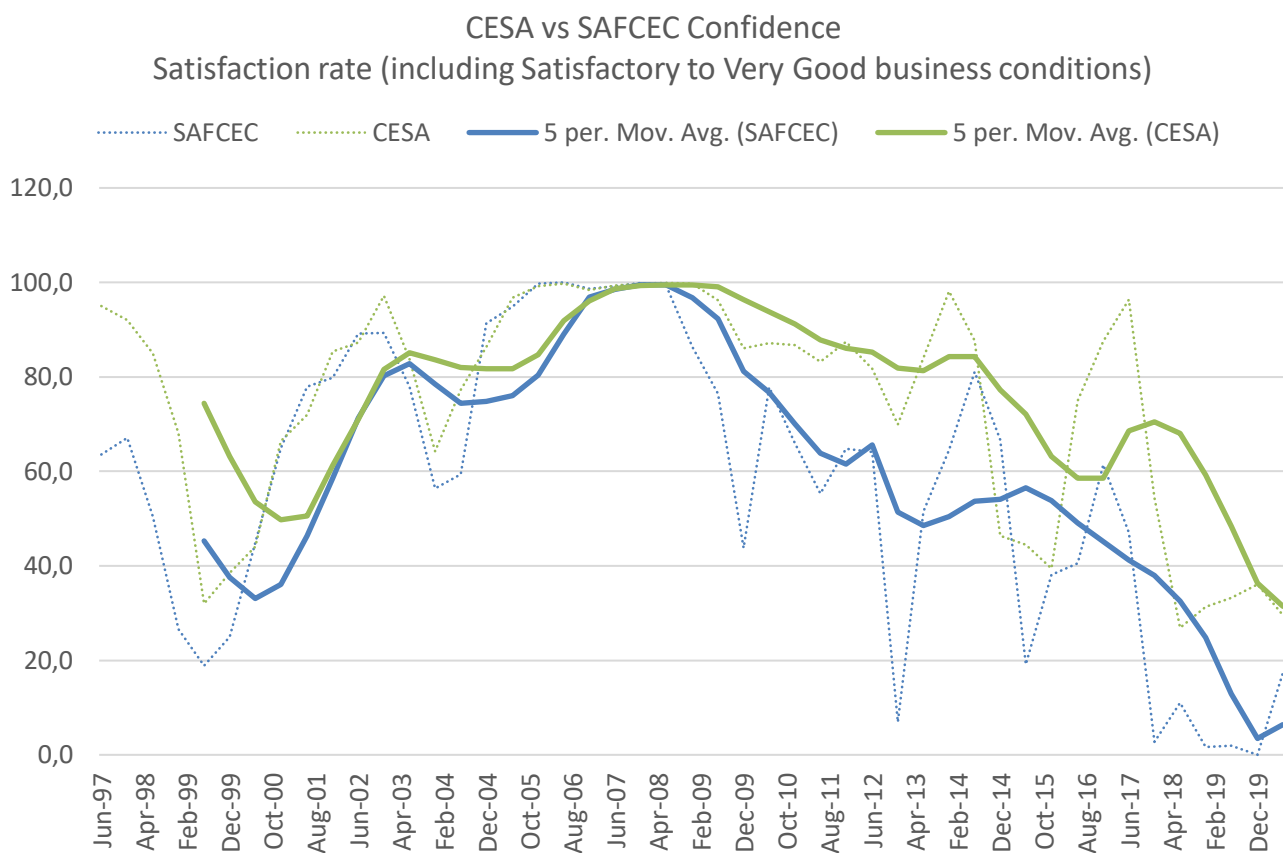


Figure 18: CESA vs SAFCEC

The relationship between confidence levels of engineers and civil contractors deteriorated from 2009 onwards as the business environment, in terms of consulting engineering, did not seem to deteriorate at the same pace as that experienced by the civil construction industry. 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. Both consulting engineers and contractors experienced improved conditions during 2014, although this was short lived and confidence levels took another dip in 2015. The trend does seem to be correlated for the last two data points, with confidence turning very negative. In line with evidence of stabilisation within the broader civil engineering industry, the SAFCEC confidence index ticked up to one of its highest points over the last few years, to -65% net satisfaction rate. But unsurprisingly, the index was back to rock bottom levels in the 2nd quarter of the year after the pandemic and subsequent lockdowns hit hard, with a net satisfaction rate of -100%, with every respondent very negative.

Broader confidence indices in the economy remain extremely negative, and until confidence is restored, there is unlikely to be any substantial investment into the South African economy, and subsequently, the construction industry. We can also compare the civil and building confidence indices from the BER/FNB, which show all time low confidence of stakeholders in the civil and building industries, with just 5 percent of civil contractors satisfied, and a similar 6 percent of building contractors. This is from levels of 24 and 13 points respectively, which was already extremely low.

5. Market Profile

5.1 Sub-disciplines of fee income earned

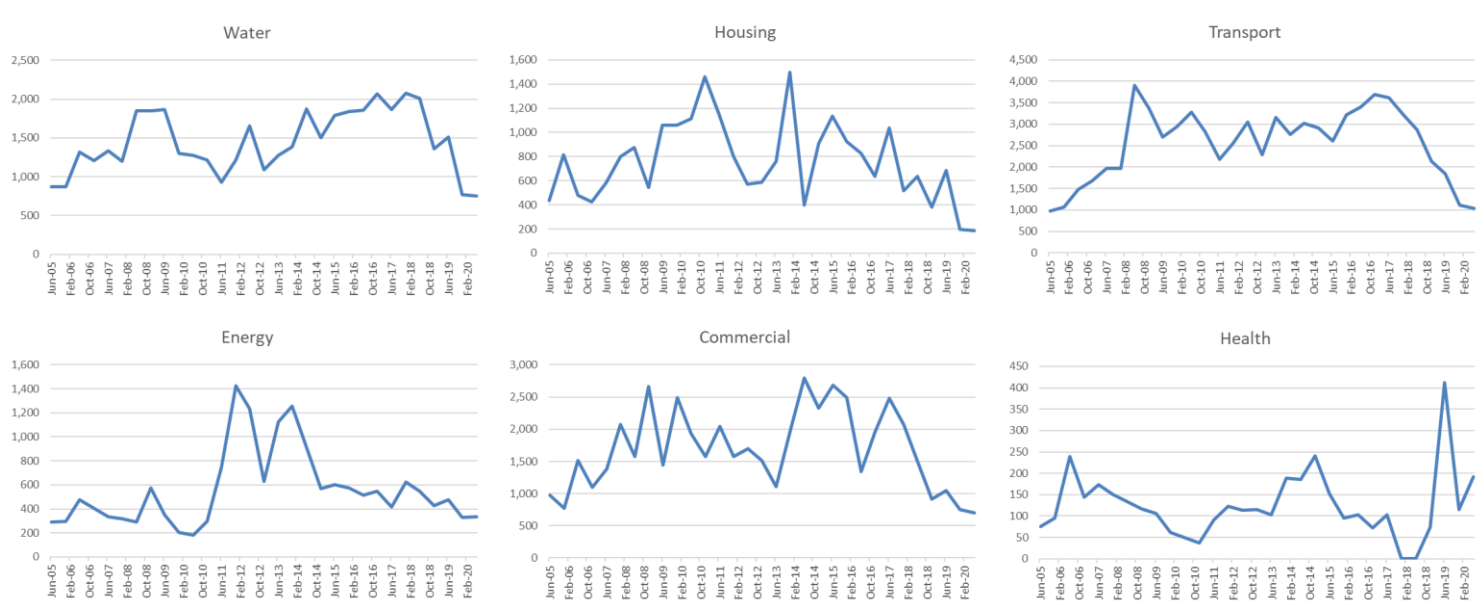
The South African consulting engineering industry is represented by many different sub-disciplines. The most common disciplines within larger firms include civil and structural services, contributing 45.9 percent and 12.4 percent in earnings during the first six months of 2020. The contribution of electrical work increased to 9.6 percent (compared to the 5 year average of just 6 percent). The growing contribution of the civil sector as a percentage of earnings is encouraging for the civil engineering contracting industry as this will have a direct impact on pipeline work in the civil industry, although this has not been observed yet. Project management jumped to 11.1 percent from 10.2 percent in the previous survey.

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. The contribution by the transport and water services was relatively unchanged. What was noticeable this survey, is that energy continues to have a bigger and bigger share at 8 percent in the current survey, compared to less than half that just a few years ago.

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 11: Distribution of fee earnings by economic sector, by firm size

	GAU	KZN	WC	EC	NC	MPU	FS	LIM	NW	AFRICA	INT	Total
A	27%	17%	22%	6%	2%	1%	3%	2%	1%	15%	3%	100%
B	32%	12%	29%	6%	3%	3%	10%	3%	2%	1%	0%	100%
C	37%	17%	9%	9%	7%	10%	0%	3%	0%	2%	5%	100%
D	17%	7%	48%	16%	0%	0%	5%	6%	0%	1%	0%	100%
Grand Total	28%	16%	22%	6%	2%	2%	4%	2%	1%	13%	3%	100%

Table 12: Distribution of fee earnings by province, by firm size

	WATER	Transportation	Energy	Mining	Education	Health	Tourism	Housing	Commercial	Agriculture	Eco other	Total
A	16%	24%	7%	7%	2%	5%	0%	4%	18%	0%	17%	100%
B	28%	37%	10%	0%	1%	1%	0%	8%	9%	0%	7%	100%
C	31%	10%	33%	3%	1%	1%	0%	3%	11%	4%	3%	100%
D	17%	18%	0%	1%	1%	0%	0%	6%	14%	6%	35%	100%
Grand Total	18%	25%	8%	6%	2%	5%	0%	4%	17%	0%	15%	100%

5.3 Geographic Location

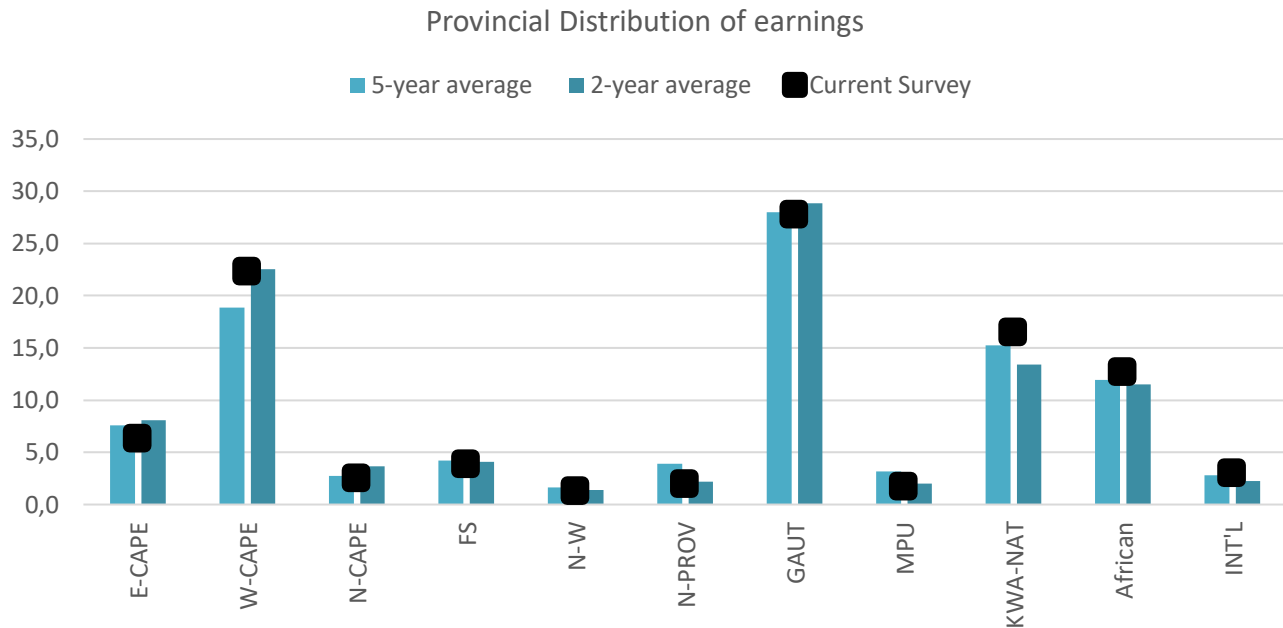


Figure 19: Provincial Distribution of earnings

The contributions of the various provinces were mostly unchanged in the current survey compared to previous, with very little movement. Gauteng increased it's share, with respondents reporting more fee earnings from Gauteng, with a contribution of 33.0 percent in the June 2020 survey, compared to 30.2 percent in the previous December 2019 survey. Contributions from the Western Cape remain high at 26.5 percent, and most provinces remain in line with their longer term averages. Please see the Statistical tables for a full breakdown.

5.4 Clients

The contribution to fee earnings by the private sector remained high in the current survey at 41 percent, compared to 44 percent in the previous survey. This is more or less in line with the longer term averages, but has increased over the last 10 years or so, with the private sector playing a bigger role in the construction industry, as the state disinvested from the broader industry over time.

The contribution by SOE's remained at low levels, slightly up to 16 percent from 14 percent. There is a general consensus that there has been significantly less work coming out of the SOE's over the past few years, as they have become more and more inefficient, with corruption and other factors hindering their performance significantly and catching up with the entities, aggravated by strains on government fiscus thereby limiting support coming from government. Financial support from government is now in the form of bailouts rather than financial support for infrastructure development.

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 slightly to 59.0 percent from 56.0 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.

Client Distribution based on fee earnings

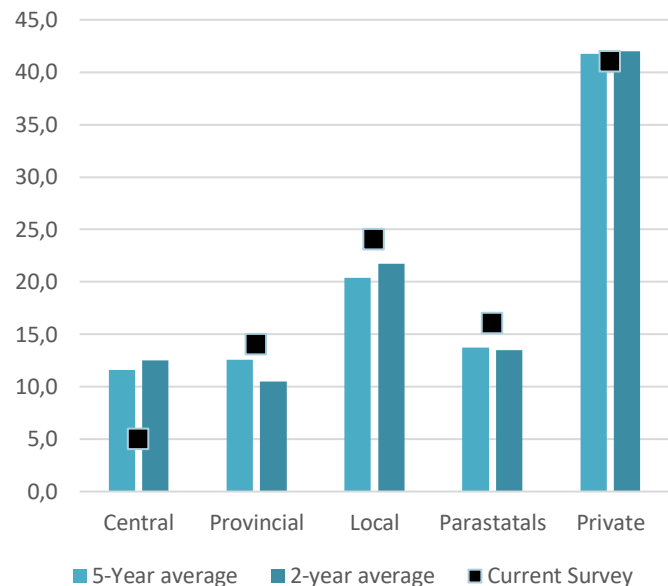


Table 13: Fee earnings distribution by client by firm size

	Central	Provincial	Local	Parastatals	Private	Total
Large	4%	11%	24%	18%	42%	100.0%
Medium	5%	32%	27%	9%	26%	100.0%
Small	7%	18%	18%	1%	56%	100.0%
Micro	26%	1%	18%	8%	47%	100.0%
Total	5%	14%	24%	16%	41%	100.0%
Average 2-Year	12.5%	10.5%	21.8%	13.5%	42.0%	100.0%
Average 5-year	11.6%	12.6%	20.4%	13.7%	14.7%	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 2020 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 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 is 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 14: 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-11	19.937	5.650	17.614	9.576	9.5%	183.9	4.2%
Dec-11	19.618	6.002	18.054	9.527	9.5%	189.5	5.8%
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	5.04%	279.4	4.3%
Dec-19	19.843	2.756	12.584	4.414	-40.22%	285.1	4.0%
Jun-20	18.851	2.859	12.081	4.182	-5.27%	288.9	3.4%

Table 15: 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-11	1.6%	19.6%	9.5%	4.20%
Dec-11	1.4%	15.0%	9.5%	5.80%
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%

³ Revised June 2007

Table 16: Sub-disciplines: Percentage share of earnings

Sub-discipline	Jun-19	Dec-19	Jun-20	5-year average	2-year average	Deviation 5-year	Deviation 2-year	Deviation last six months
Agricultural	0.7%	0.6%	0.6%	0.7%	0.7%	-0.1%	-0.1%	0.0%
Architecture	1.0%	1.7%	1.7%	0.6%	0.8%	0.9%	0.9%	0.0%
Mechanical building Services	3.1%	4.0%	1.5%	3.6%	3.9%	-2.4%	-2.4%	-2.5%
Civil	51.8%	50.4%	45.9%	52.7%	52.9%	-7.0%	-7.0%	-4.5%
Electrical / Electronic	8.4%	8.2%	9.6%	6.0%	7.2%	2.3%	2.3%	1.4%
Environmental	1.7%	1.9%	1.2%	3.3%	3.3%	-2.1%	-2.1%	-0.7%
Facilities Management (New)	0.6%	0.5%	0.4%	0.5%	0.5%	-0.1%	-0.1%	-0.1%
Geotechnical	0.9%	1.3%	1.6%	1.3%	1.1%	0.4%	0.4%	0.2%
Industrial Process / Chemical	0.4%	0.1%	2.4%	1.2%	0.2%	2.2%	2.2%	2.3%
GIS	0.6%	0.2%	0.2%	0.6%	0.5%	-0.3%	-0.3%	0.0%
Hydraulics (New)	1.4%	1.4%	1.4%	0.8%	1.1%	0.4%	0.4%	0.0%
Information Systems / Technology	0.1%	0.1%	1.4%	1.6%	0.1%	1.3%	1.3%	1.3%
Marine	0.1%	0.3%	0.3%	0.6%	0.4%	-0.2%	-0.2%	0.0%
Mechanical	1.3%	1.4%	3.2%	3.0%	1.0%	2.1%	2.1%	1.8%
Mining	8.5%	1.8%	0.7%	2.0%	4.0%	-3.3%	-3.3%	-1.1%
Project Management	5.3%	10.2%	11.1%	7.3%	7.5%	3.6%	3.6%	0.9%
Quantity Surveying	0.1%	2.4%	3.8%	0.4%	0.8%	3.0%	3.0%	1.4%
Structural	11.1%	12.8%	12.4%	13.0%	12.9%	-0.6%	-0.6%	-0.4%
Town planning	2.7%	0.7%	0.7%	0.8%	1.0%	-0.3%	-0.3%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%			

Table 17: Sub-disciplines. Fee income R mill. Real 2000 prices

Sub-discipline	JUN19	DEC19	JUN20	Change last six months	Change last 12 months
Agricultural	54	26	25	-4%	-54%
Architecture	77	74	72	-3%	-7%
Mechanical building Services	232	176	61	-65%	-74%
Civil	3.828	2.224	1.920	-14%	-50%
Electrical / Electronic	621	363	401	10%	-35%
Environmental	124	84	50	-41%	-60%
Facilities Management (New)	43	23	19	-19%	-57%
Geotechnical	68	59	66	12%	-3%
Industrial Process / Chemical	26	6	100	1505%	281%
GIS	45	8	7	-15%	-85%
Hydraulics (New)	103	62	60	-3%	-42%
Information Systems / Technology	8	2	58	2268%	604%
Marine	11	14	12	-17%	9%
Mechanical	94	61	133	118%	42%
Mining	631	79	31	-61%	-95%
Project Management	392	449	462	3%	18%
Quantity Surveying	9	105	158	51%	1748%
Structural	818	566	518	-9%	-37%
Town planning	200	33	30	-9%	-85%
Total	7.384.07	4.414.22	4.181.77	-5%	-43%

Table 18: Provincial Distribution. R mill. Real 2000 prices (Annualized. two survey average)

Province	Survey period							
	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20
EC	721	704	751	650	683	893	296	280
WC	1.685	1.884	1.819	1 738	2 119	1 757	1 015	974
NC	284	197	171	155	179	532	132	118
FS	548	590	560	379	365	347	154	159
NW	142	145	176	158	128	103	71	62
LIM	497	321	295	768	814	170	110	97
GAU	3.309	3.602	3.332	2 688	3 194	1 972	1 148	1.155
MPU	416	279	295	315	240	89	132	102
KZN	1.066	1.387	1.617	1 425	967	923	742	716
AFRICAN	1.228	1.128	1.197	1 234	1 400	554	393	462
INT'L	254	114	150	235	168	44	221	173
Total	10.150	10.352	10.364	9 745	10 256	7 384	4 414	4.298

Table 19: Provincial Distribution Y-Y percentage Change*(Trend – SMOOTHED over two consecutive surveys. to remove short term volatility)*

Province	Survey period							
	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20
EC	37.0%	-17.6%	-16.8%	-8.7%	-9.1%	19.0%	18.1%	-60.0%
WC	11.7%	22.1%	13.2%	-2.6%	16.5%	26.3%	-13.5%	-39.9%
NC	71.6%	-4.2%	-44.4%	-35.7%	4.9%	7.3%	118.0%	-64.7%
FS	-8.2%	58.9%	27.4%	-33.5%	-34.8%	21.6%	-5.4%	-51.1%
NW	0.0%	-42.9%	-23.8%	10.4%	-27.3%	-18.3%	-13.3%	-35.8%
LIM	15.9%	29.0%	-18.5%	87.8%	175.6%	-74.1%	-80.0%	-36.1%
GAU	-3.4%	56.1%	26.9%	-22.2%	-4.1%	35.1%	-34.6%	-47.8%
MPU	39.5%	-34.3%	-43.5%	-9.4%	-18.8%	-62.7%	-52.6%	-13.9%
KZN	14.8%	-49.3%	-18.7%	16.2%	-40.2%	-44.8%	7.8%	-2.2%
AFRICAN	-34.1%	-9.9%	15.4%	4.8%	16.9%	12.0%	-60.5%	-47.2%
INT'L	-74.9%	-66.8%	-30.0%	27.7%	11.5%	-91.7%	-16.6%	335.7%
Total	-3.0%	-2.6%	1.2%	-4.9%	-1.0%	1.0%	-26.9%	-40.4%

Table 20: Provincial Distribution percentage share of earnings

Province	Survey period								5-year average	2-year average
	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20		
EC	7.1	6.8	7.7	5.5	7.8	12.3	6.7	6.3	7.6	8.1
WC	16.6	18.2	16.9	18.9	22.4	23.7	23.0	22.3	18.9	22.6
NC	2.8	1.9	1.4	1.8	1.7	7.1	3.0	2.5	2.7	3.7
FS	5.4	5.7	5.1	2.5	4.6	4.6	3.5	3.9	4.2	4.1
NW	1.4	1.4	2.0	1.2	1.3	1.5	1.6	1.3	1.6	1.4
LIM	4.9	3.1	2.6	13.9	2.1	2.6	2.5	2.0	3.9	2.2
GAU	32.6	34.8	29.5	25.4	36.8	26.5	26.0	27.8	28.0	28.9
MPU	4.1	2.7	3.0	3.5	1.2	1.7	3.0	1.7	3.1	2.0
KZN	10.5	13.4	17.8	11.0	7.9	12.3	16.8	16.5	15.2	13.4
AFRICAN	12.1	10.9	12.2	13.2	14.1	7.3	8.9	12.7	11.9	11.5
INT'L	2.5	1.1	1.8	3.1	0.2	0.5	5.0	3.0	2.8	2.3
Total	100%	100%	100%	100%	100%	100%	100%	100%		

Table 21: Client Distribution Fee income earned. R mill. Real 2000 prices (Annualized)

Client	Survey period						
	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20
Central	1.035	1 038	2 369	2 165	591	265	209
Provincial	725	1 764	1 002	506	738	486	585
Local	1.863	1 868	1 094	710	2 068	1 104	1.004
State Owned	1.656	1 557	456	689	1 034	618	669
Private	5.072	4 151	4 192	2 953	3 027	1 942	1.715
Total	10.352	10 377	9 113	7 023	7 458	4 414	4.182

Table 22: Client distribution Percentage share of earnings

Client	Survey period						Jun-20	5-year average	2-year average
	Jun-17	Dec-17	Jun-18	Dec-18	Jun-19	Dec-19			
Central	10.0	10.0	26.0	30.8	8.0	6.0	5.0	11.6	12.5
Provincial	7.0	17.0	11.0	7.2	10.0	11.0	14.0	12.6	10.5
Local	18.0	18.0	12.0	10.1	28.0	25.0	24.0	20.4	21.8
State Owned	16.0	15.0	5.0	9.8	14.0	14.0	16.0	13.7	13.5
Private	49.0	40.0	46.0	42.0	41.0	44.0	41.0	41.7	42.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

Table 23: Economic sector Percentage share of earnings

Economic sector	Jun-19	Dec-19	Jun-20	5-year average	2-year average	Deviation 5-year	Deviation 2-year	Deviation last six months
Water (Full water cycle)	21%	17%	18%	19.1%	18.8%	-1.0%	-0.7%	0.7%
Transportation (land, air, road, rail, ports)	25%	25%	25%	30.2%	26.3%	-5.5%	-1.6%	-0.4%
Energy (electricity, gas, hydro)	6%	7%	8%	6.0%	7.0%	2.1%	1.0%	0.6%
Mining / Quarrying	11%	7%	6%	7.6%	9.5%	-1.6%	-3.5%	-1.2%
Education	1%	3%	2%	1.5%	1.8%	0.1%	-0.2%	-1.6%
Health	6%	3%	5%	1.7%	3.5%	2.8%	1.1%	2.0%
Tourism/Leisure	0%	1%	0%	0.2%	0.4%	0.1%	0.0%	-0.6%
Housing (residential inc. land)	9%	4%	4%	6.8%	5.9%	-2.4%	-1.4%	0.0%
Commercial ⁴	14%	17%	17%	17.7%	15.2%	-1.0%	1.5%	-0.3%
Agriculture / Forestry / Fishing	1%	0%	0%	0.6%	0.5%	-0.3%	-0.1%	0.0%
Other	6%	14%	15%	8.5%	11.1%	6.6%	3.9%	0.8%
Total	100%	100%	100%					

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

Table 24: Economic Sector Rm. Real 2000 prices. Annualized

Economic sector	Jun-18	Dec-18	Jun-19	Dec-19	Jun-20	Per. Change last 6 months	Per. Change Last 12 months
Water (Full water cycle)	2 005	1 406	1 515	766	755	-1.4%	-50.2%
Transportation (land. air. road. rail. ports)	2 871	2 305	1 843	1 110	1.036	-6.7%	-43.8%
Energy (electricity. gas. hydro)	547	434	478	328	337	2.7%	-29.4%
Mining / Quarrying	820	653	787	319	252	-21.1%	-68.1%
Education	91	59	108	141	66	-52.8%	-38.5%
Health	0	79	412	116	192	65.6%	-53.5%
Tourism/Leisure	0	9	3	44	15	-66.5%	372.6%
Housing (residential inc. land)	638	412	683	195	186	-4.7%	-72.8%
Commercial	1 504	962	1 043	751	699	-6.8%	-33.0%
Agriculture / Forestry / Fishing	182	39	44	16	15	-8.0%	-66.7%
Other	456	671	466	629	629	0.0%	35.0%
Total	9 113	7 030	7 384	4 414	4.182	-5.3%	-43.4%

Table 25: 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-05	R 103.07	161.20	7.2%	6.3%
Jun-06	R 112.97	170.14	9.5%	
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%
Dec-19	R 289.76	456.39	2.5%	

Table 26: 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-05	99.3	2.5%	14.9%
Jun-06	99.7	0.5%	3.0%
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 (forecast)	34.2	15.5%	-5.2%
Jun-21 (forecast)	39.6	15.7%	33.7%

End of report

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