Bi-Annual Economic and Capacity Survey

July – December 2018

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1. Economic overview

1.1 International Developments

According to the IMF's latest world economic outlook report for January 2019, the global expansion has weakened. The global GDP growth forecast was increased by 0.2 percentage points to 3.5 percent in 2019, and down by 0.1 percentage points to 3.6 percent for 2020 as the risks mount. This is compared to projections made in October last year. The reasons for the downgrade include the trade war between the US and China, who are the world's two biggest economies. The effect of the tariffs is expected to be negative for both the Chinese and American economy. The IMF also cite softer momentum in the second half of the year due to new car emission standards in Germany, as well as the fact that sovereign and financial risks have weighed on Italy's economy. Turkey has also experienced weakening financial market sentiment and the contraction there is expected to be deeper than initially thought.

Some further risks to the forecast were cited including a potential no deal Brexit between the UK and Europe, as well as a greater than envisaged slowdown in China. The Chinese economy posted their worst growth figures in almost three decades, and many are worried about the impact this will have on the rest of the global economy The IMF largely downplayed the slowing growth in China, and also downplayed fears of a global recession, which have been making the rounds.

Growth in advanced economies is estimated to slow from an initial expectation of 2.3 percent growth to 2.0 percent growth, which is a relatively considerable slowdown, and this is mostly driven by downward revisions in the Euro Area. Growth in the Euro area was revised downwards to 1.6 percent from 1.8 percent for 2019. This is largely due to weaker performances of the German, Italian and French economies. There is uncertainty about the economy of the UK regarding a potential no deal Brexit, and the US economy is expected to growth by 2.5 percent in 2018, slowing to just 1.8 percent the following year. In terms of emerging markets, the growth forecast was only revised downwards marginally, from 4.6 percent to 4.5 percent for 2019. This is due to a slowing China, and the effect the tariffs will have on their economy. Emerging and developing Europe have also taken a bit of a knock, driven downwards by a large projected contraction in Turkey. In Sub-Saharan Africa, growth was revised downwards by 0.3 percentage points, and this was mostly due to a softer oil price, which are expected to negatively affect the likes of Nigeria as well as Angola. The IMF have forecasted growth of 1.4 percent for the South African economy, from an estimated 0.8 percent in 2017.

Table 1: Global economic outlook

	2015	2016	2017	2018	2019	2020
World	3.2%	3.1%	3.8%	3.7%	3.5%	3.6%
Advanced Economies	2.1%	1.7%	2.4%	2.3%	2.0%	1.7%
US	2.6%	1.6%	2.2%	2.9%	2.5%	1.8%
Eurozone	2.0%	1.7%	2.4%	1.8%	1.6%	1.7%
UK	2.2%	1.8%	1.8%	1.4%	1.5%	1.6%
Emerging markets	4.1%	4.1%	4.7%	4.6%	4.5%	4.9%
Brazil	-3.8%	-3.6%	1.1%	1.3%	2.5%	2.2%
Russia	-3.7%	-0.2%	1.8%	1.5%	1.6%	1.7%
India	7.6%	6.8%	6.7%	7.3%	7.5%	7.7%
China	6.9%	6.7%	6.8%	6.6%	6.2%	6.2%
Sub-Saharan Africa	3.4%	1.4%	2.7%	2.9%	3.5%	3.6%
SA	2.0%	0.6%	1.3%	0.8%	1.4%	1.7%

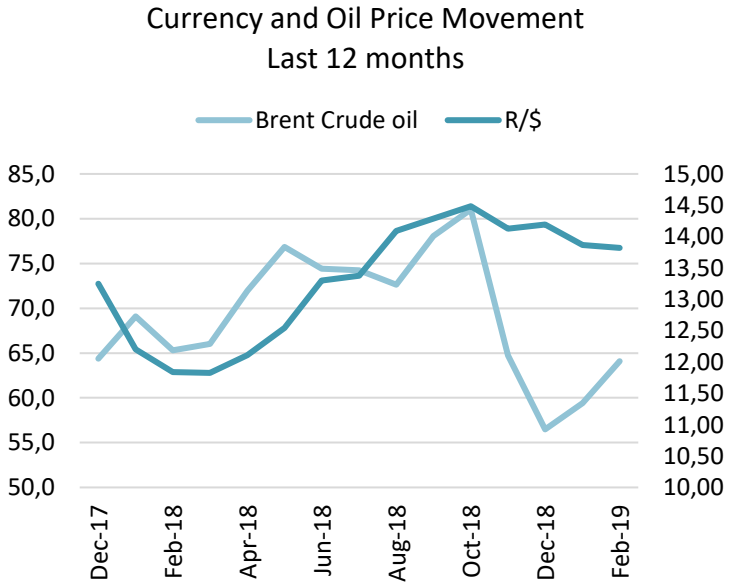
Source: IMF World Economic Outlook January 2019

1.2 Domestic Economy

With the latest GDP data released by Stats SA, we now know that the economy barely moved forwards in 2018, with annual GDP growth of just 0.8 percent overall in 2018. The economy bounced back somewhat in the 2nd half of the year, with quarterly GDP growth of 2.6 percent and 1.4 percent in the 3rd and 4th quarters respectively. This was after a torrid start to the year in which the economy found itself in a technical recession after two consecutive quarters of negative growth in the 1st and 2nd quarters of the year, the economy declining by 2.7 percent and 0.5 percent respectively. Over the last 10 years, the economy, in terms of the GDP numbers, has grown just 1.8 percent on average, which is barely above the average population growth over the period. Essentially a lost decade in real terms, and it will take a concerted effort by the likes of the government and the private sector to get the economy out of the rut it currently finds itself in.

Looking from sectoral level, the main antagonists over the last year include the likes of the primary industries. The agriculture sector as well as the mining industry contracting by 4.8 percent and 1.7 percent respectively. This is relatively surprising on the mining front with stabilizing commodity prices, but global trade frictions have certainly played a role. The economy has become extremely reliant on consumer spending, with the tertiary industries keeping the overall economy afloat. The finance, business services and real estate sector grew by 1.8 percent in the year, with the wholesale and retail trade sector growing by 0.6 percent. Consumers are expected to come under pressure in 2019, which is worrying for the overall economy going forward, with local and foreign investment nowhere to be seen, it is difficult to build productive capacity to move the economy up onto a higher growth path.

The construction industry continues to underperform the rest of the economy, with the sector contracting by 1.2 percent in 2018, in terms of the GDP figures. This is off the back of a 0.6 percent contraction, suggesting recessionary levels with two consecutive annual contractions, the industry is certainly on its knees. Civil construction is currently in survival mode, with downsizing, job cuts and retrenchments the name of the game, in a market that may now be somewhat saturated. Massive pullback in infrastructure spending by government is mainly to blame. The building industry is also under severe pressure, which can be characterized by a more sideways moving environment. The residential market has been relatively buoyant, but it may be unrealistic to continue to expect this to continue into 2019.



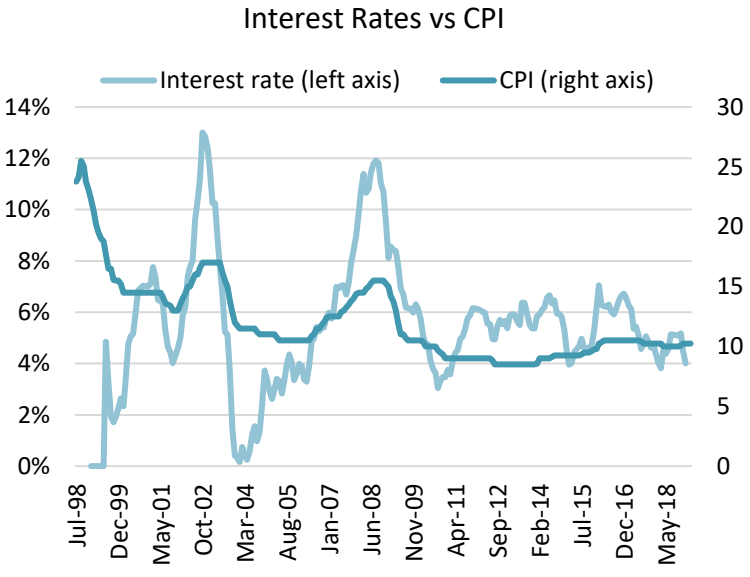


Table 2: Macro economic growth projections (Industry Insight Forecast Report 2018Q3)? Do we have a more up to date forecast?

Macro-Economic Forecasts	*2016*	*2017*	*2018*	*2019*	*2020*
GDP	0,6%	1,3%	0.8%	1,5%	2,1%
Household consumption	0,7%	2,2%	0,9%	1,4%	1,6%
Government consumption	2,0%	0,6%	1,9%	1,2%	1,4%
Gross Fixed capital formation	-4,1%	0,4%	0,1%	1,2%	2,1%
Imports	-3,7%	2,1%	4,3%	4,2%	4,2%
Exports	-0,1%	1,4%	5,0%	4,4%	4,4%
Prime Lending rate	11,00%	10,25%	10,25%	10,50%	11,25%
ZAR/US$	13,20	12,50	13,55	14,20	14,40
CPI Inflation	6,00	5,30	5,20	5,50	5,50

1.3 Gross fixed capital formation

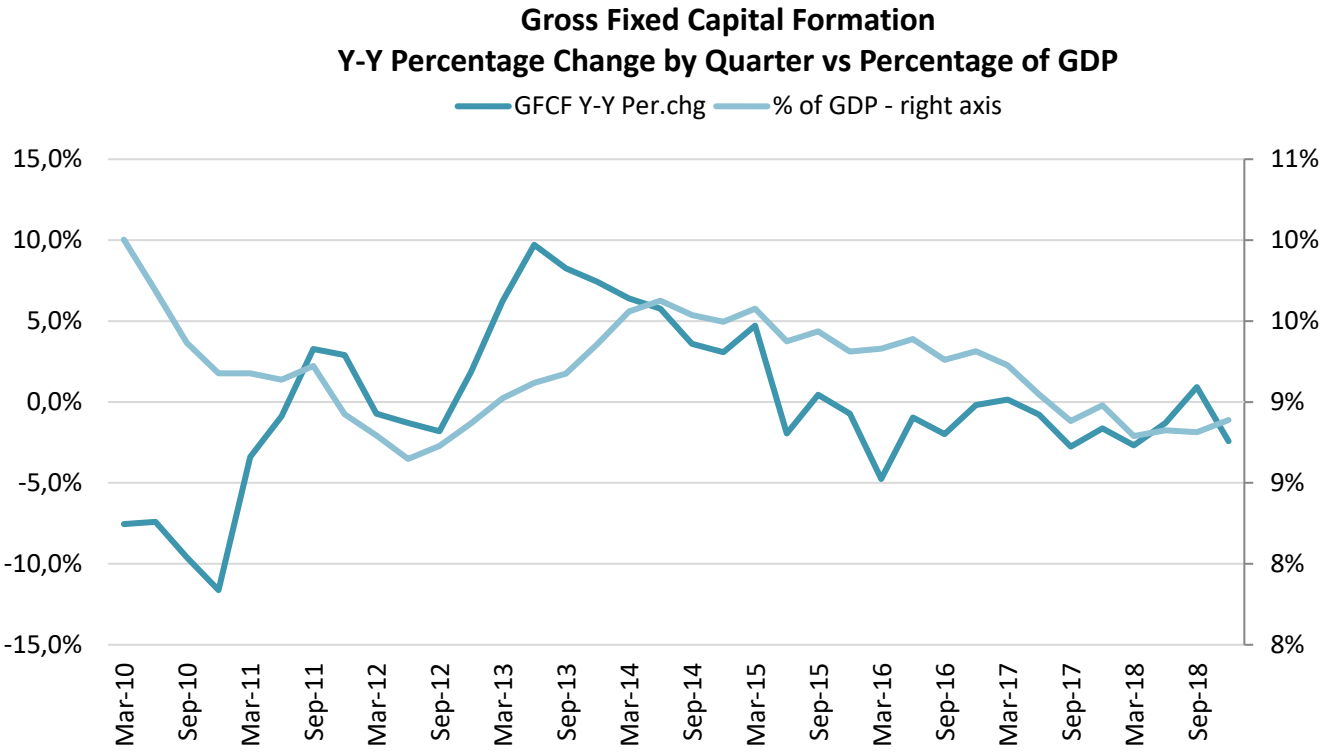


Figure 1: GFCF (Y-Y percentage changes vs Percentage of GDP) Source SARB Quarterly Bulletin

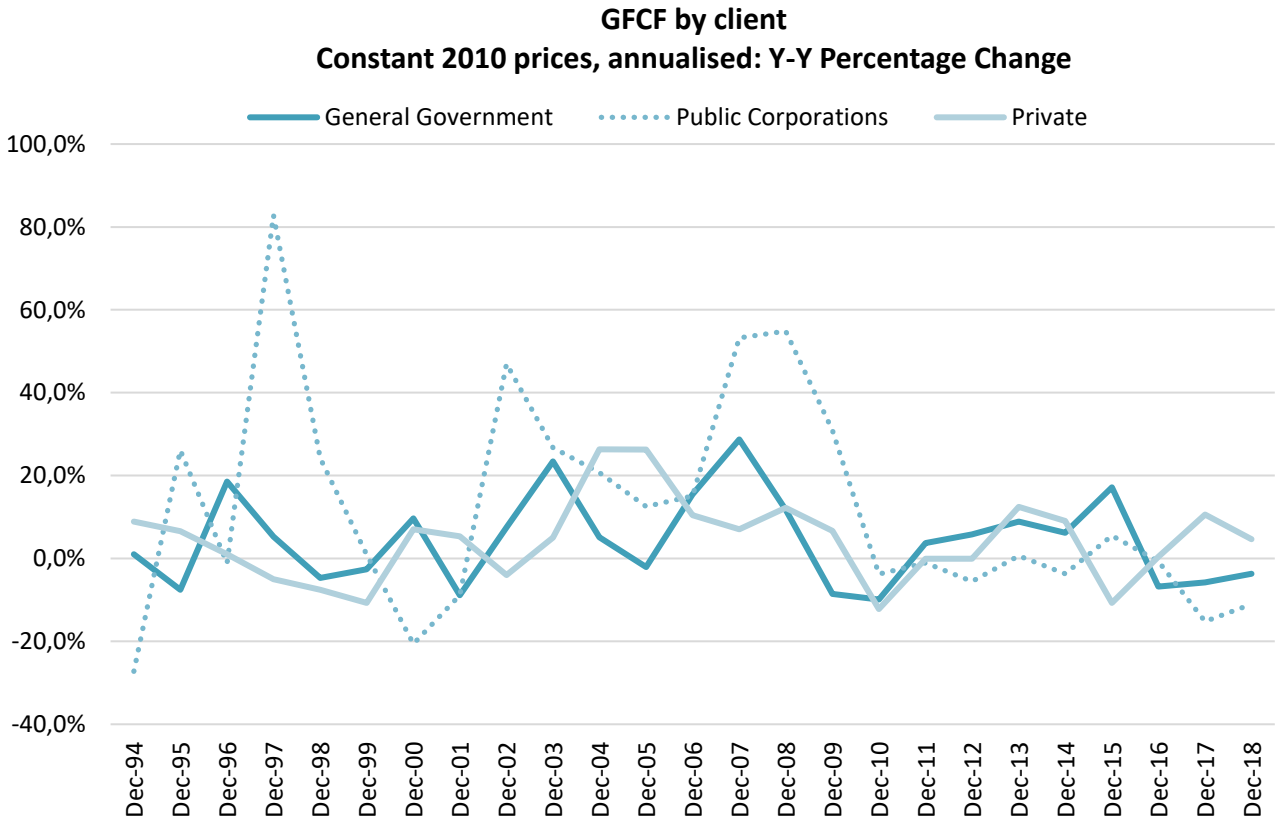
Gross fixed capital formation (GFCF) decreased by 2.4 percent in the 4th quarter of 2018, off the back of a surprise expansion in the 3rd quarter of 0.9 percent. This marks a 1.4 percent decline in investment in the South African construction industry in 2018 overall, on the back of a 1.3 percent decline in 2017. If we look at the contribution of the decline from the different segments, interestingly the civil (construction works) component was the best performer with a decline in investment of just 0.1 percent in 2018. The residential and non-residential investment saw declines of 3.2 percent and 3.3 percent respectively.

GFCF as a percentage of GDP averaged at 8.9 percent in 2018 overall, and has not even been above 10 percent since the first quarter of 2015, suggesting the government's target of 30 percent in the National Development Plan has become rather optimistic.

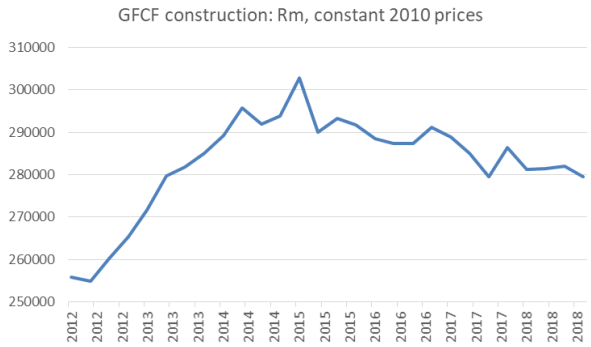
Table 3: GFCF Residential, Non-Residential and Construction works, by client 2018, Constant prices

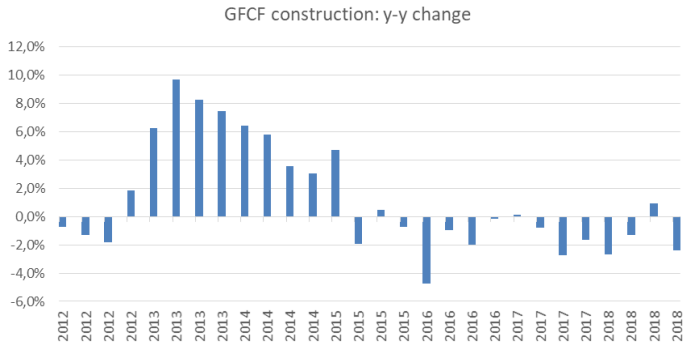
2018	*Government*	*SOE's*	*Private*	*Total*
Residential	1,157	42	54,671	55,870
Non-residential	20,452	2,082	31,377	53,912
Civil works	50,992	59,614	60,630	171,236
Total	72,601	61,738	146,678	281,018

Source: South African Reserve Bank Quarterly Bulletin



Gross Fixed Capital Formation Construction





According to SARB, a total of R281bn was spent on construction infrastructure over the last year (in constant prices), including investment in residential and non-residential buildings and construction works. This would also include purchases of machinery and equipment, often imported, used in the construction process such as the installation of turbines. The most interesting thing from table 3 above, is that the private sector has now become the biggest investor in the civil construction industry, with just over R54 billion invested, surpassing general government and SOE's (respectively) for the first time ever. This clearly shows that renewable energy is a sub-sector of the civil industry that is something to be excited about going forward.

2. CESA Survey: Background

A total of 39 questionnaires were returned via both an on-line and hard copy system. The sample represents a fee income of R1.61bn, and 4260 employees for the period July – December 2018.

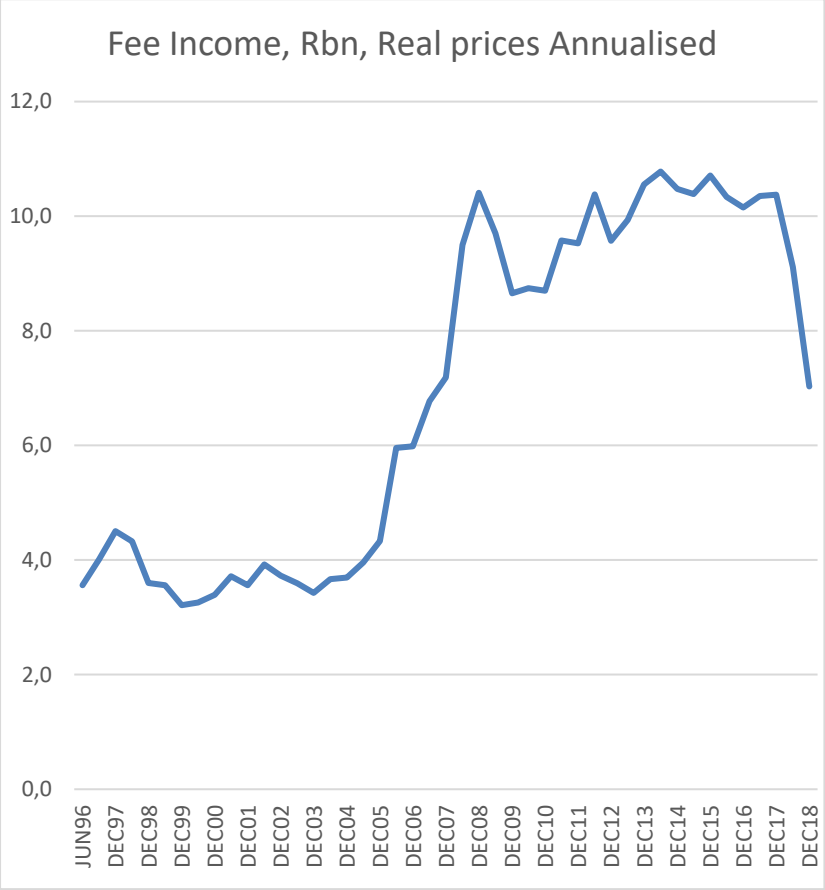
The analysis of the questionnaires completed by active firms in the consulting engineering profession provides a proxy for current and expected working conditions for the profession, which can be measured on a regular basis.

CESA welcomes commentary received from firms and invites all members to actively participate in sending commentary on either the survey or conditions in the work place 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 earnings in the last six months of 2018 decreased by 21.0 percent (in current prices) compared to the first six months of 2018, which is quite a staggering drop in such a short space of time, and followed a 10.0 percent decrease in the first six months of 2018.

Larger firms reported a decrease of 4.1 percent, while earnings for medium size firms was 14.5 percent lower. Smaller firms saw the biggest decrease of 81.4 percent, and micro firms saw a decrease of 31.7 percent, so lower income all across firm size. Fee income declined to R21.5 billion, annualised, at current prices as at December 2018.

Earnings are expected to increase in the first half of 2019. Large firms expect an increase of 10.3 percent which is probably optimistic. Smaller firms on the other hand are expecting further decreases, of 4.2 percent, while medium sized firms also expect and increase (6.3 percent up). Considering trends in the indicators, as reported by respondents in this survey, we maintain our view that it is likely that earnings have probably passed the upper turning point with a softer growth outlook in the medium term.

A summary of fee earnings by firm size, as well as projected earnings for the last six months of 2018 is provided in the table below.

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

Firm size category	Actual (Dec 2018 vs June 2018)	Projected for June 2019?
Large	-4.1%	10.3%
Medium	-14.5%	6.3%
Small / Micro	-56.6%	-4.2%
Total	-21.2%	9.0%

3.1.2 Outsourcing

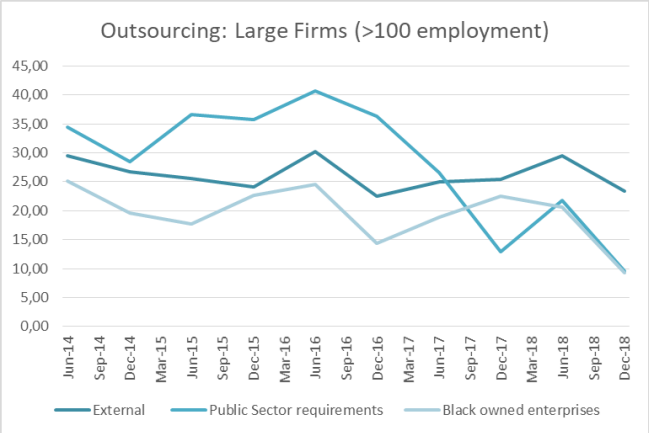
On average firms **outsourced** a lower percentage of turnover to external enterprises, compared to transformation purposes or for procurement reasons as laid down by public sector clients. Outsourcing to black owned entities increased, and was 18.4 percent of turnover in this survey, compared to 16.2 percent in the June 2018 survey.

Larger firms outsourced 23.4 percent to external enterprises, but decreased outsourcing to black owned enterprises from 20.6 percent to just 9.3 percent. Overall, there haven't been big changes in how much firms outsource, if we compare the previous few surveys.

Figure 3: 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

	External enterprises or individuals including sub-consultants, joint ventures and contract workers	*Black owned enterprises*
A	23,4	9,3
B	11,6	6,9
C	17,6	34,7
D	16,7	9,3
Average % of industry turnover	**17,1**	**18,4**
Average % of industry turnover Jun 2018 Survey	**16,8**	**16,2**


Outsourcing: Large Firms (>100 employment)
45,00
40,00
35,00
30,00
25,00
20,00
15,00
10,00
5,00
0,00
Jun-14
Sep-14
Dec-14
Mar-15
Jun-15
Sep-15
Dec-15
Mar-16
Jun-16
Sep-16
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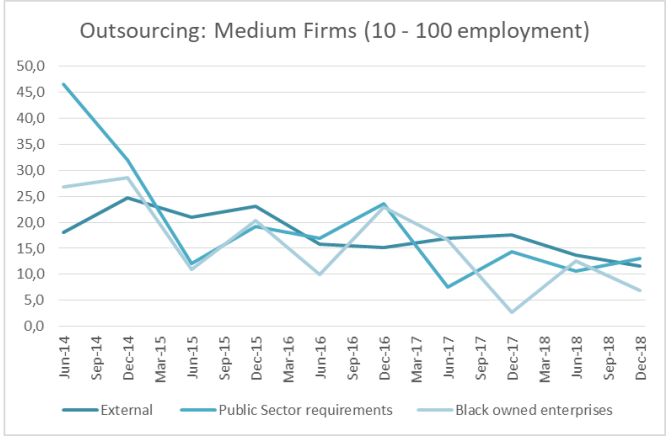
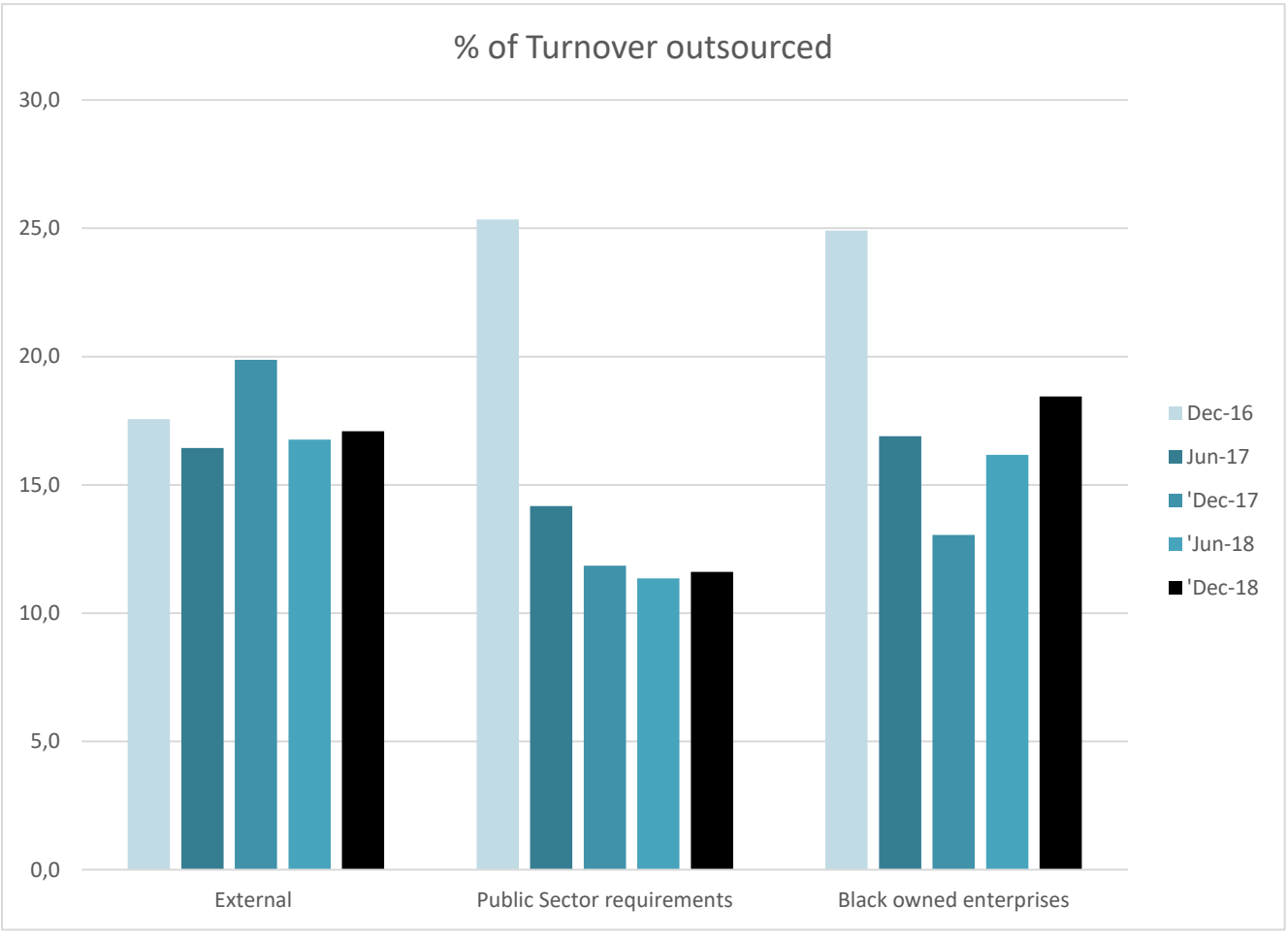
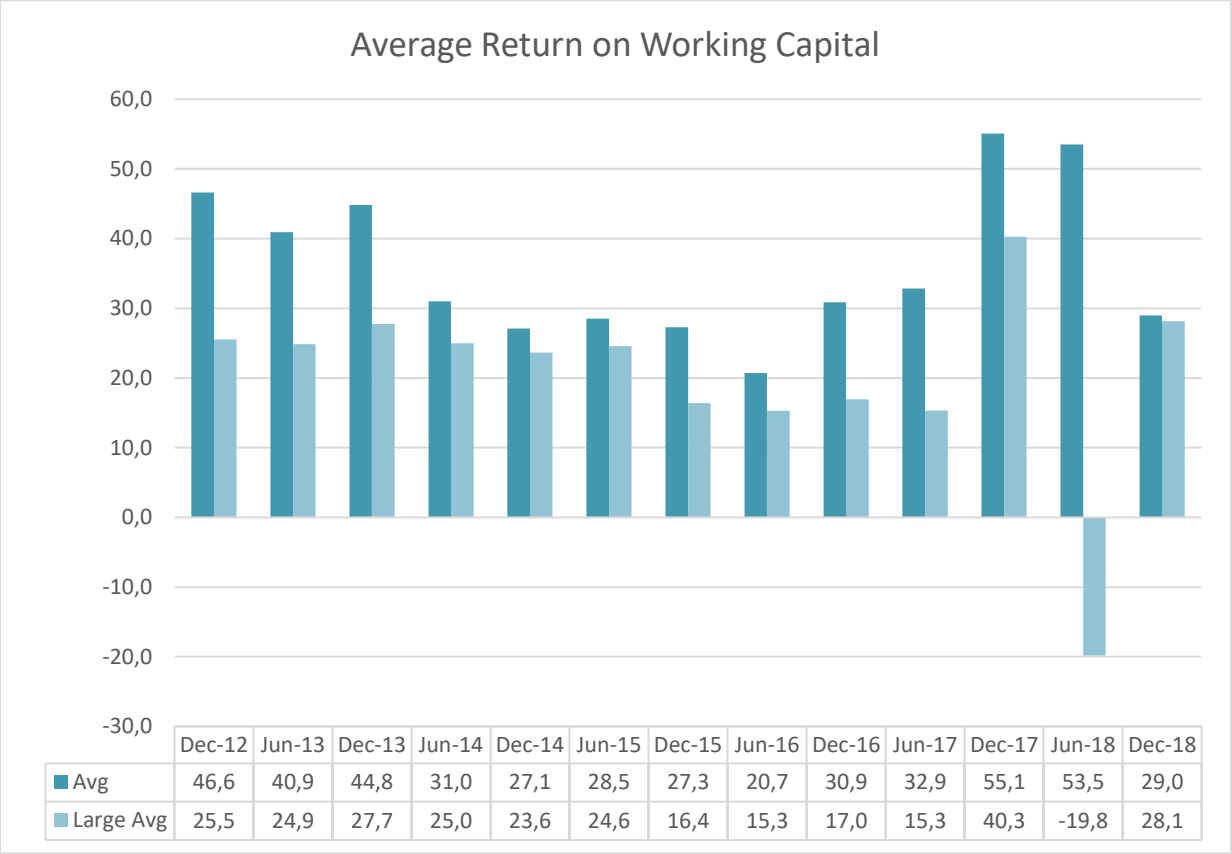
Jun-17
Sep-17
Dec-17
Mar-18
Jun-18
Sep-18
Dec-18
External
Public Sector requirements
Black owned enterprises


Outsourcing: Medium Firms (10 - 100 employment)
50,0
45,0
40,0
35,0
30,0
25,0
20,0
15,0
10,0
5,0
0,0
Jun-14
Sep-14
Dec-14
Mar-15
Jun-15
Sep-15
Dec-15
Mar-16
Jun-16
Sep-16
Dec-16
Mar-17
Jun-17
Sep-17
Dec-17
Mar-18
Jun-18
Sep-18
Dec-18
External
Public Sector requirements
Black owned enterprises


% of Turnover outsourced
30,0
25,0
20,0
15,0
10,0
5,0
0,0
External
Public Sector requirements
Black owned enterprises
Dec-16
Jun-17
'Dec-17
'Jun-18
'Dec-18

3.1.3 Return on Working Capital



	Dec-12	Jun-13	Dec-13	Jun-14	Dec-14	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18
Avg	46,6	40,9	44,8	31,0	27,1	28,5	27,3	20,7	30,9	32,9	55,1	53,5	29,0
Large Avg	25,5	24,9	27,7	25,0	23,6	24,6	16,4	15,3	17,0	15,3	40,3	-19,8	28,1

Figure 4: Average Return on Working Capital – Trend since December 2012

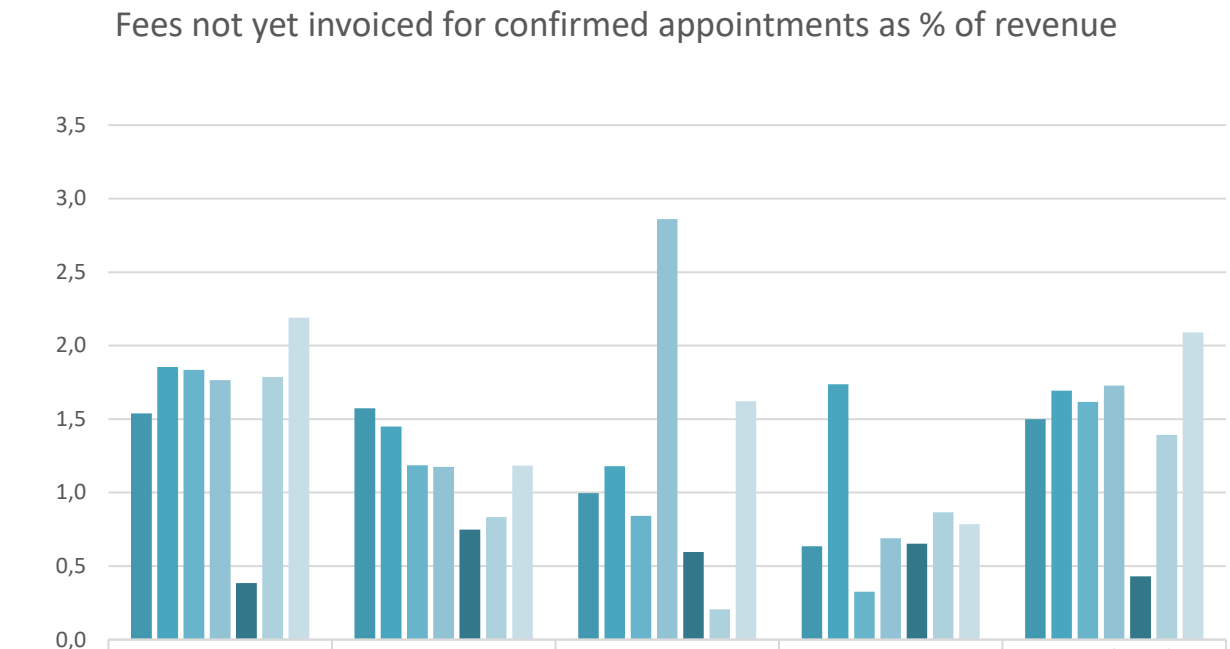
- The industry's **return on working capital**[1] (un-weighted average) moderated further to just 29.0 percent in the Dec 2018 survey after having slowed marginally to 53.5 percent the previous survey, which is now back to the average of between 30 and 40 percent in 2012 and 2013. Majority of firms reported a ROI of between 20% and 35%, and large firms bounced back in this survey to a 28.1 percent return, from a negative return on capital reported in the previous report.
- Medium sized firms have consistently reported a good return on working capital, but this came to a halt in the current survey as medium sized firms reported more 'normal' levels of 25.1 percent.

Table 6: Return on Working Capital by firm size

Group	*Dec-15*	*Jun-16*	*Dec-16*	*Jun-17*	*Dec-17*	*Jun-18*	*Dec-18*
A	16.4	15.3	17.0	15.3	40,3	-19,8	28,1
B	24.8	18.9	48.2	53.5	127,3	114,2	25,1
C	32.4	28.1	33.4	41.8	26,1	61,2	34,4
D	28.9	19.9	10.0	22.8	5,2	20,3	20,6
Grand Total	**27.3**	**20.7**	**30.9**	**32.9**	**55,07**	**53,53**	**28,99**

[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



	A	B	C	D	Grand Total
Jun-15	1,5	1,6	1,0	0,6	1,5
Dec-15	1,9	1,4	1,2	1,7	1,7
Jun-16	1,8	1,2	0,8	0,3	1,6
Dec-16	1,8	1,2	2,9	0,7	1,7
Jun-17	0,4	0,7	0,6	0,7	0,4
Dec-17	1,8	0,8	0,2	0,9	1,4
Jun-18	2,2	1,2	1,6	0,8	2,1

Figure 5: Order book: Income ratio

There was another improvement in the ratio of fees not yet invoiced for confirmed appointments to existing earnings to 2.4 from 1.4 in the June 2018 survey, after having stabilized at 1.5 for 2015, from an average of 1.6 in 2014. Larger firms reported the largest increase, from 1.8 to 2.2. All other firms reported an increase, except for small firms who reported a marginal decrease from 0.9 to 0.8.

3.1.5 Profitability and late payments

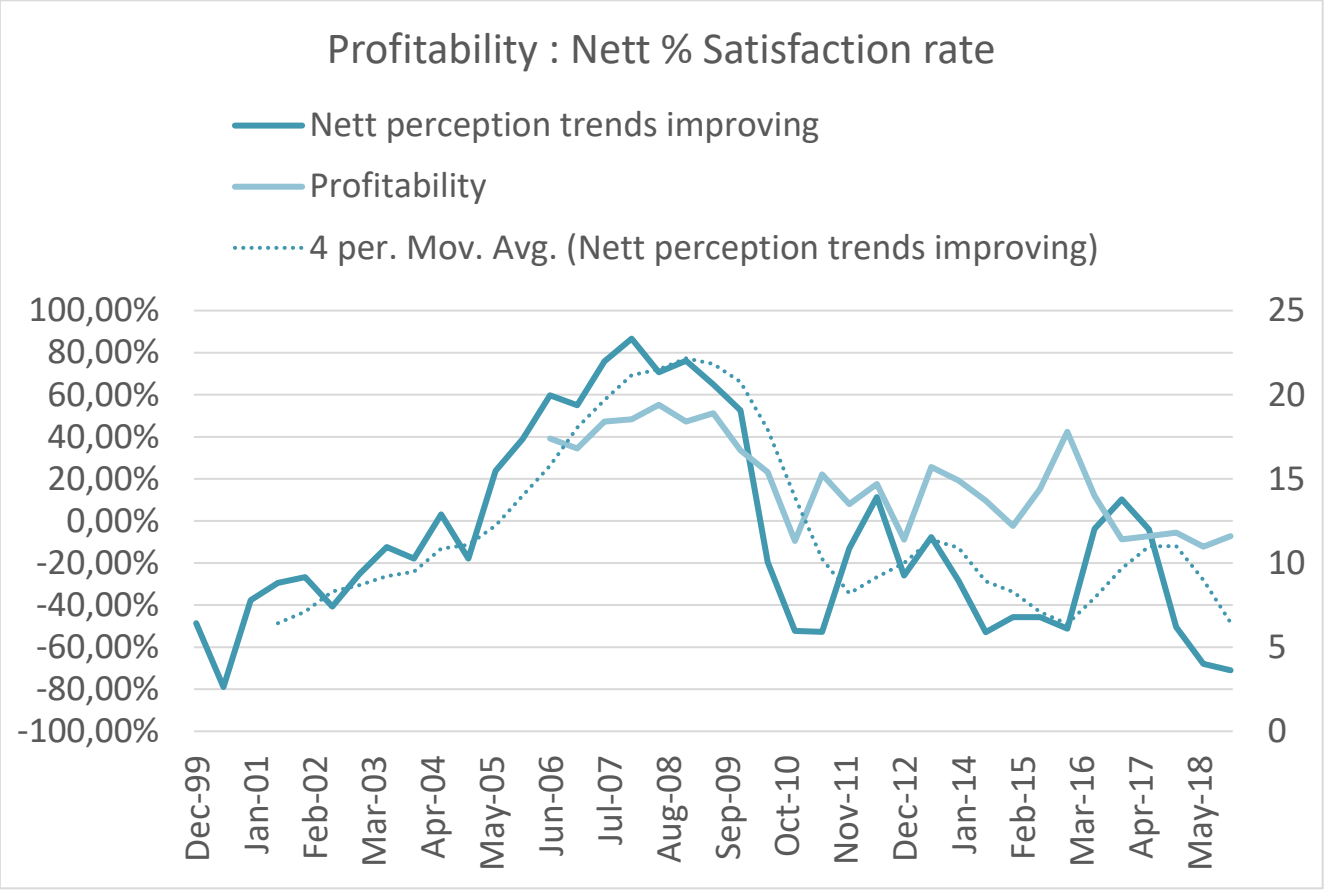


Figure 6: Profitability: Net % Satisfaction rate vs Average Profitability

Nett profitability improved ever so slightly to an average of 11.6 percent in the second six months of 2018, from an average of 11.0 percent in the previous survey, but is still lower than the average of 12.7 percent in 2016. Allowing for fluctuations on a survey to survey basis, there has been no significant change in the overall trend (based on a two year average) in profitability since 2011, remaining below 15 percent on average.

What there has been a change in, is the expectations around profitability in the current survey. In a further turnaround, very few firms are now expecting an improvement in profitability, only 3.4 percent in fact (compared to 3.0 percent in the last survey, which was a record low). The majority of firms expect a receding trend (65.0 percent), while 31.6 percent of firms expect conditions to remain static (more or less the same), which are very similar results compared to the previous survey.

Also a further big turnaround compared to the previous survey, majority of firms (73.7 percent) continue to be unsatisfied with profit margins, compared to 71.6 percent in the previous survey, but also compared to just 14.0 percent in the Dec 2017 survey, just a year and a half ago. Only 2.7 percent of firms reported their margins as good, which is also a record low, while 23.6 percent are satisfied with their margins. No firms reported their margins as being exceptional.

Table 7

Firm size category	Total gross income	Outstanding fee income	Proportion of overall income
Large	1 422 906 839	605 419 275	42,5%
Medium	91 091 370	18 612 336	20,4%
Small	82 940 065	12 793 017	15,4%
Micro	17 591 624	7 879 614	44,8%
Total	1 738 033 586	13 889 013	39,9%

Overall, the large firms again have the highest proportion of their income that is still outstanding, at quite a staggering 42.5 percent. 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. Medium sized firms reported that 20.4 percent of their overall income was still outstanding, below the average of 39.9 percent for all firms. Small firms had a very small proportion at just 15.4 percent, with micro firms higher at 44.8 percent.

3.2 Human Resources

3.2.1 Employment

- Employment decreased by an average of 10 percent in the second half of 2018 to an estimated 24 540, compared to the first six months of 2018, following the 12 percent increase reported in the previous survey. This is a relatively staggering decrease. Large firms reported the biggest decrease in employment, down 11 percent in the second half of 2018. Small firms also reported a large decline of 10 percent. Medium firms did however only report a 2 percent drop in employment which is good. Micro firms employment was unchanged in the latest survey.
- The number of firms looking for engineers decreased substantially to only 4.4 percent from 20.0 percent in the previous survey, with a notable decrease in demand for technologists to 1.6 percent, from 71.8 percent reported three surveys ago. Demand for support staff was the highest at just 7.5 percent in the current survey.

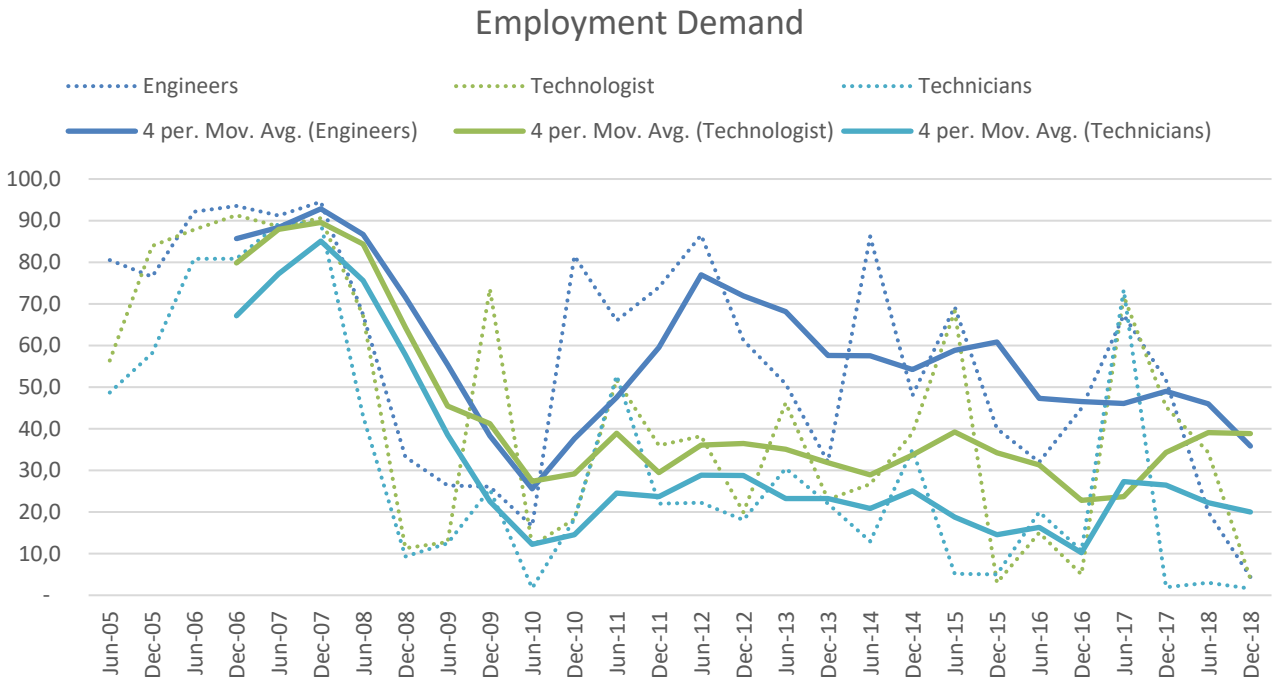


Figure 7: Employment Demand

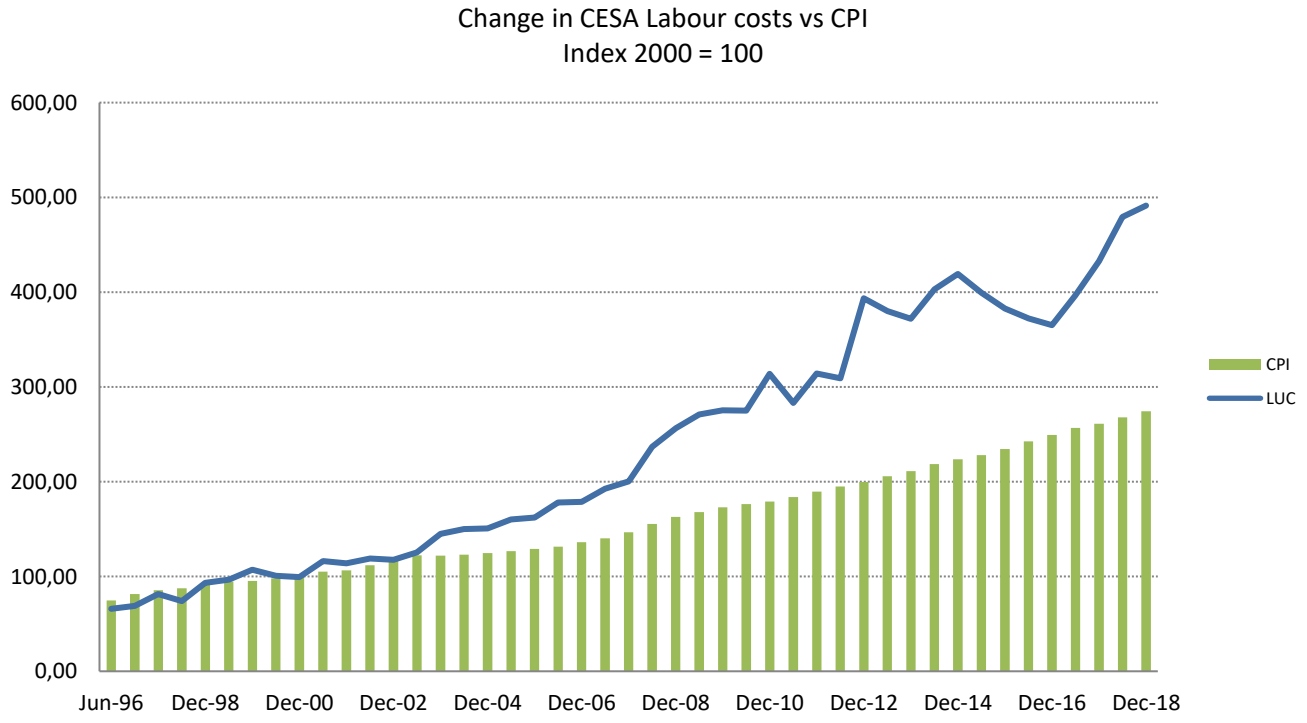
Table 8: % of firms wanting to increase staff, by type of personnel

Type of personnel	% of firms wanting to increase staff December 2015	% of firms wanting to increase staff June 2016	% of firms wanting to increase staff December 2016	% 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
Engineers	40.0	32.0	44.9	67.3	51,70	20,0	4,4
Technologists	3.0	15.0	5.0	71.8	3,70	18,0	3,9
Technicians	5.0	20.0	10.7	73.4	45,30	34,3	1,6
Other technical staff	4.0	38.0	72.0	75.2	1,90	3,0	2,3
Support staff	0.0	18.0	0.0	35.3	2,30	0,0	7,5

3.2.2 Salary and Wage bill

The salary and wage bill represents 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 but was higher at 76 percent in the current survey, with salary and wage bills becoming a bigger and bigger proportion of fee earnings.
- The contribution of the salary and wage bill was highest amongst large firms, and averaged 78 percent (from 70 percent in June 2018), while small size firms reported an average salary bill of 48 percent, which was the lowest. Medium sized firms reported a proportion of 68 percent, while micro firms reported a figure of 68 percent.
- 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), accelerated further in the December 2018 survey, representing an increase of 13.5 percent compared to the same period in 2017. Inflation averaged 4.2 percent in the last six months of 2018 (from an average of 4.3 percent in the first six months), and is expected to remain under 6 percent for 2019 and 2020, according to the Reserve Bank.



3.3 Capacity Utilisation

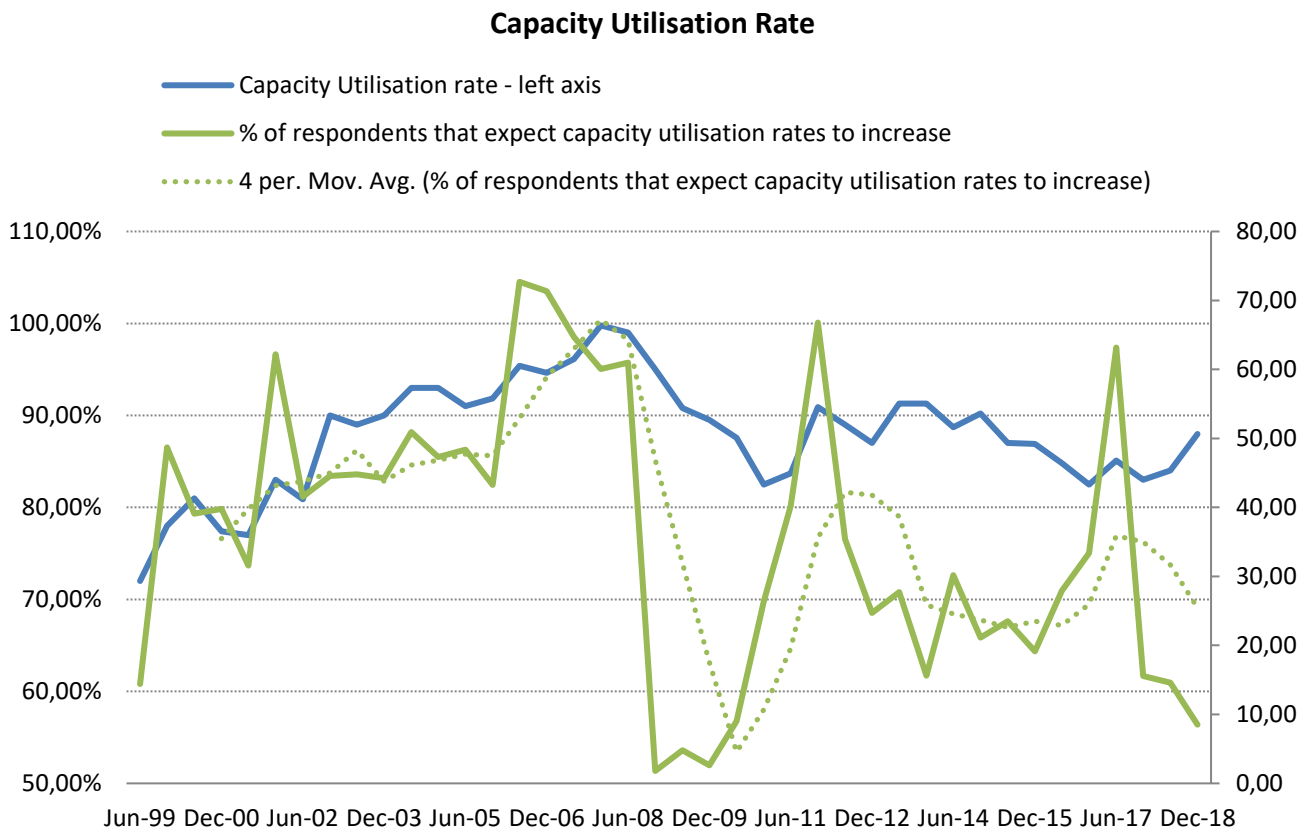


Figure 8: Capacity Utilisation Rate

Capacity utilization of technical staff increased to an average of 88.0 percent, more or less unchanged compared to the last few surveys, but a marginal increase compared to the June 2018 survey, increasing from 84.0 percent. The majority of firms still expect their capacity utilization to be static over the next period, with 89.5 percent of firms being of this opinion. A total of 9.3 percent of firms expect an increase, while a minimal 1.0 percent of firms expect a decrease. In this case, expectations were in line with reality, with the majority of firms expecting capacity utilization to be relatively static in the last survey, which it was.

Medium and micro sized firms reported the highest capacity utilisation at 93.1 and 90 percent respectively, while large firms averaged a rate of 85.0 percent, which was second lowest to small firms at 83.8 percent capacity.

3.4 Competition in tendering

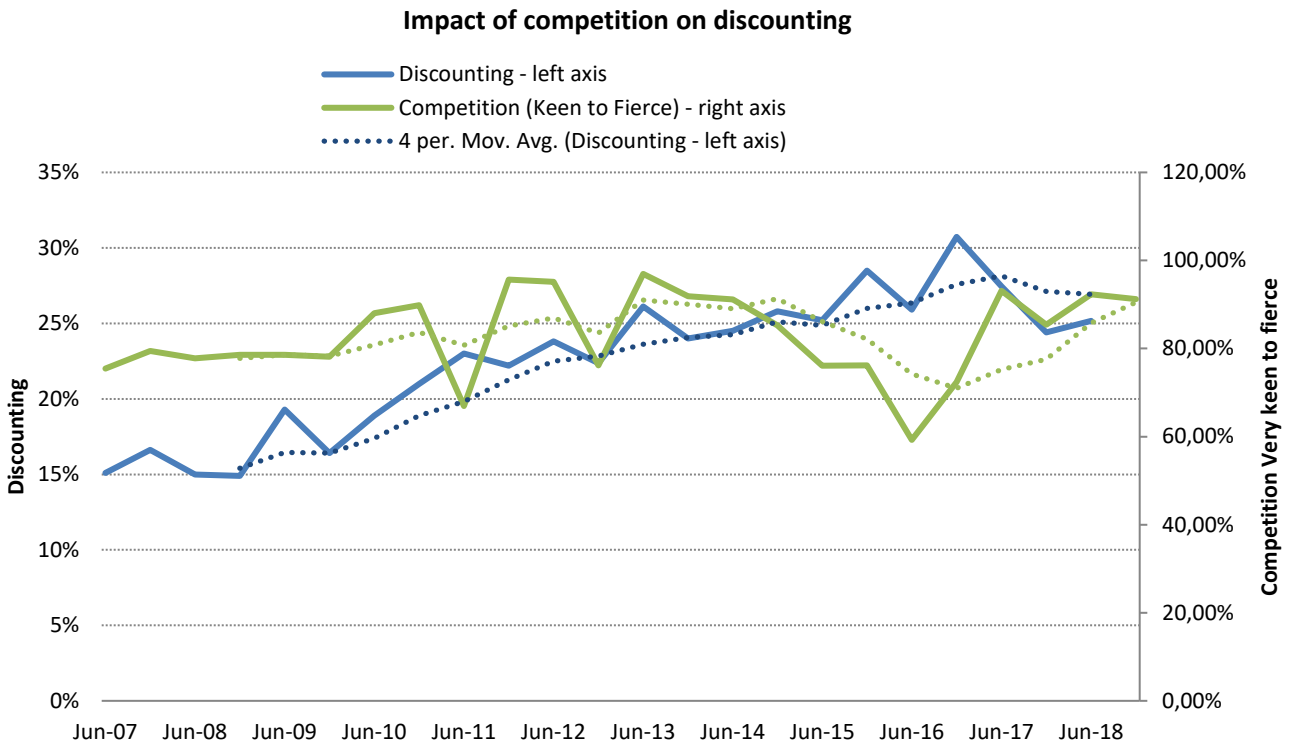


Figure 9: Competition and Discounting

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.

Although there has been some improvement the level of very keen to fierce competition since 2011/2012, an increasing number of firms continue to report on very keen fierce competition. In this survey 91.2 percent reported on very keen to fierce competition, in line with the previous survey, from an also high 92.3 percent. This is however significantly up from an average of 65.8 percent in 2016. Higher levels of competition are however more experienced by larger firms, with 95.8 percent reporting on very keen to fierce completion, while 53.0 percent of medium size firms experienced similar levels of competition. Micro firms reported the lowest level of strong competition, averaging 13.2 percent (very keen to fierce).

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 26.9 percent in the current survey. Large size firms reported the highest level of discounting at 33.3 7percent, followed by micro and medium firms (17.5 and 13.6 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 last six months*
Large	85,0	3,1%	33,33	95,8%
Medium	93,1	45,2%	31,25	53,0%
Small	83,8	49,3%	27,50	59,2%
Micro	90,0	26,4%	15,63	13,2%
Industry Average	**85,5 (Weighted)**	**9.34% (Weighted)**	**13.62(Weighted)**	**91.3 (Weighted)**

3.5 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, accelerated by 17.0 percent since the last six months of 2018, and is the fourth consecutive increase since the December 2016 survey.

While changes in the general cost of living (as measured by the Statistics South Africa's Consumer Price Index) are clearly not indicative of labour cost changes in the consulting engineering industry, the CPI may have a strong influence in the determination of ECSA Guideline Fees, which has shown an average increase of 4.2 percent in the second half of 2018, from 4.3 percent in the first half of 2018, and is expected to remain under 6 percent for 2019 and 2020, according to the Reserve Bank.

Figure 10: CESA Labour Cost Indicator (LCI)

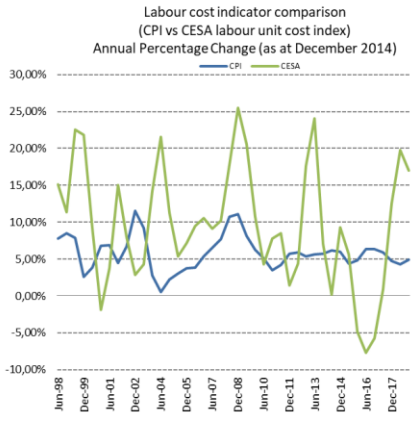


Figure 11: Change in CESA LCI vs CPI

4. Industry Outlook

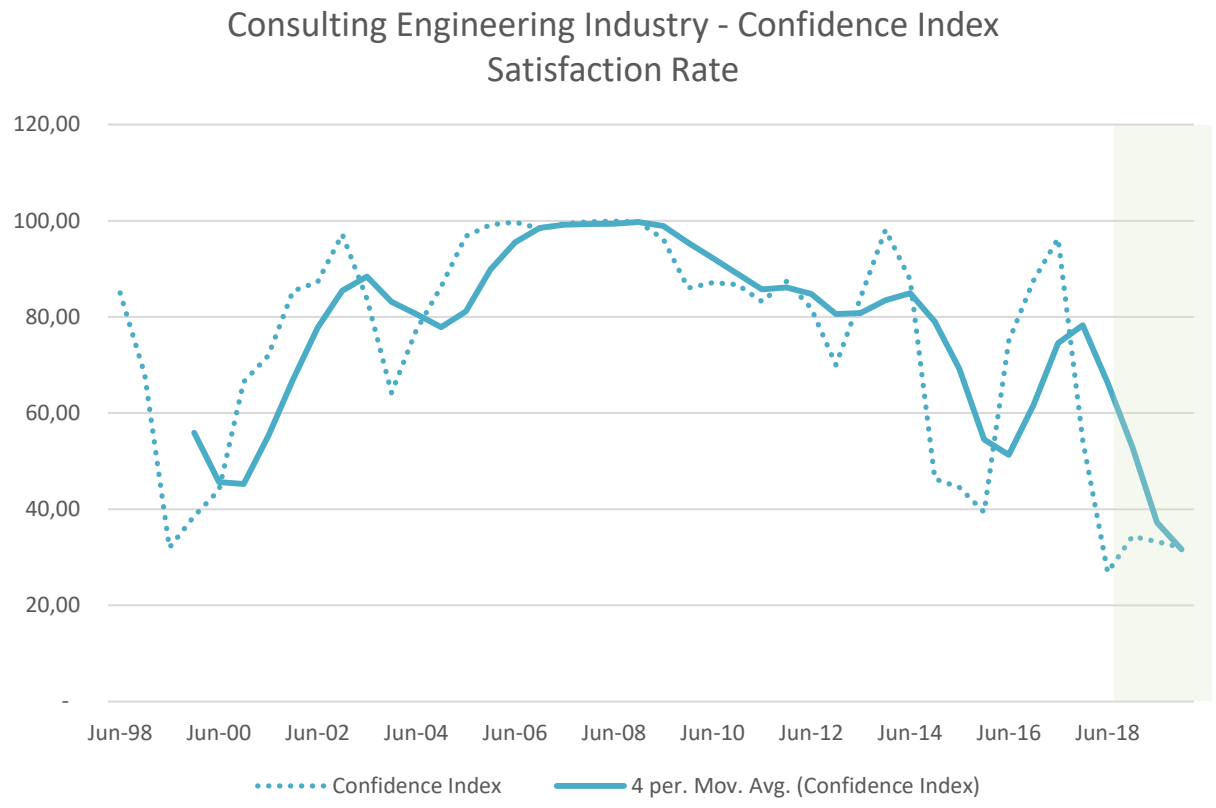


Figure 12: Confidence Index

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.

Confidence levels remained low with a nett satisfaction rate of just 34.3 percent. This is up from record lows in the previous survey which was the least confident consulting engineers have ever been, based on the results of the surveys over the years since the mid-90's. People are clearly very worried about the overall outlook for the construction industry in general and the economy. Respondents in the survey are also not much more hopeful for the rest of the year, with similarly bleak levels reported, as confidence levels are 33.3 and 32 for the next two six month periods, for June of 2019 and December 2019.

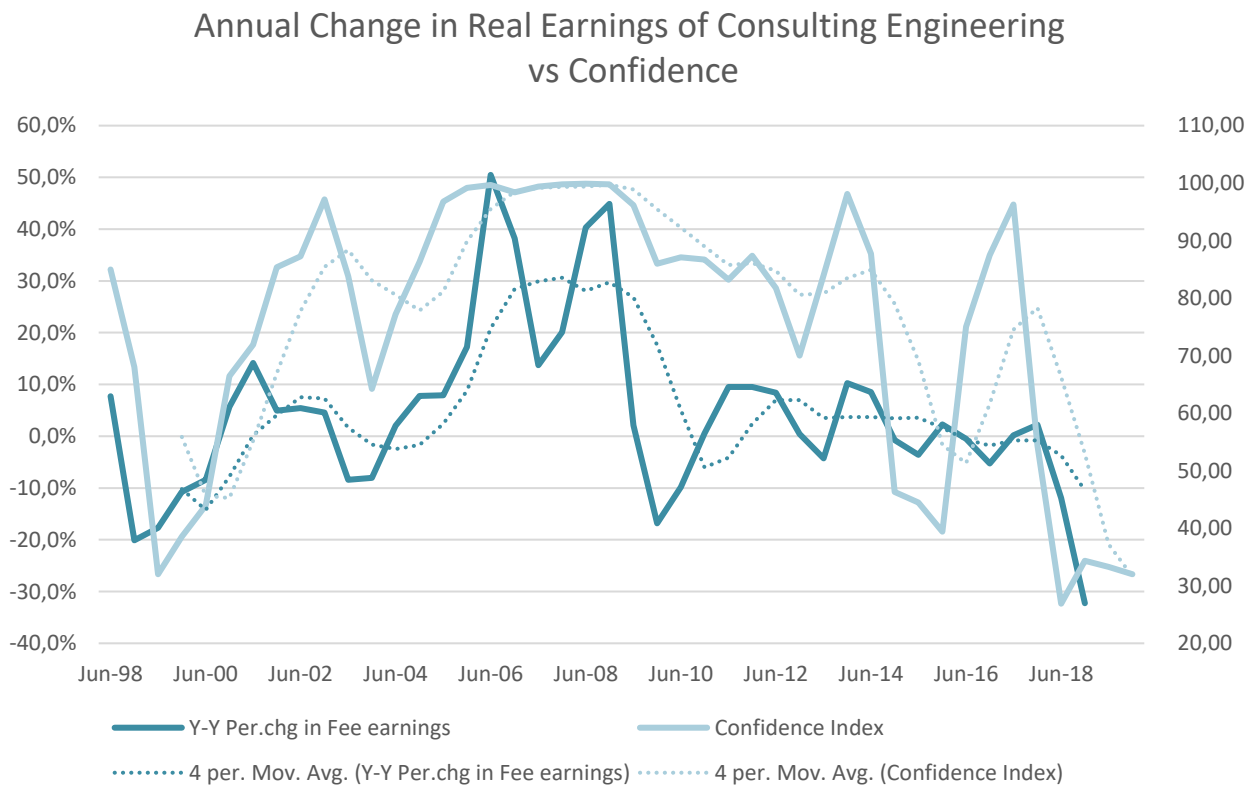
The large firms are by far the least confident, and are the reason the index is so low in the current six month period again. Confidence levels for larger firms were just 25.2, while levels are much higher for medium, small and micro firms, with confidence of 89.0, 80.9 and 49.1 respectively.

A breakdown by firm size category is provided in the table below.

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

Table 9: Confidence as at December 2018 by firm size category (% of respondents that experienced satisfactory business conditions)

Firm size category	First six months of 2017 (?)	Next 6 months	Next 12 months
Large	25,2%	26,4%	26,4%
Medium	89,0%	100,0%	71,3%
Small	80,8%	80,8%	74,6%
Micro	49,1%	69,8%	83,0%



Confidence levels amongst firms have deteriorated over the last few years, and are also showing signs of increased volatility, evidence of higher levels of uncertainty brought about by domestic and political turmoil. Firms do however think that we have reached the lowest point in the cycle, as confidence, although still historically low, is improved for the next 12 month period.

It will then be interesting to see whether improved confidence going forward results in improved fee income and employment. In our opinion, it will unfortunately not.

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-05	96.8	12.2%	25.4%
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	-3.6%	-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	55.4	-43,5%	-37,8%
Jun-18	26,89	-50,6%	-72,1%
Dec-18	34,36	27,8%	-36,8%
Jun-19 (forecast)	33,29	-3,1%	23,8%
Dec-19 (forecast)	32,00	-3,9%	-6,9%

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

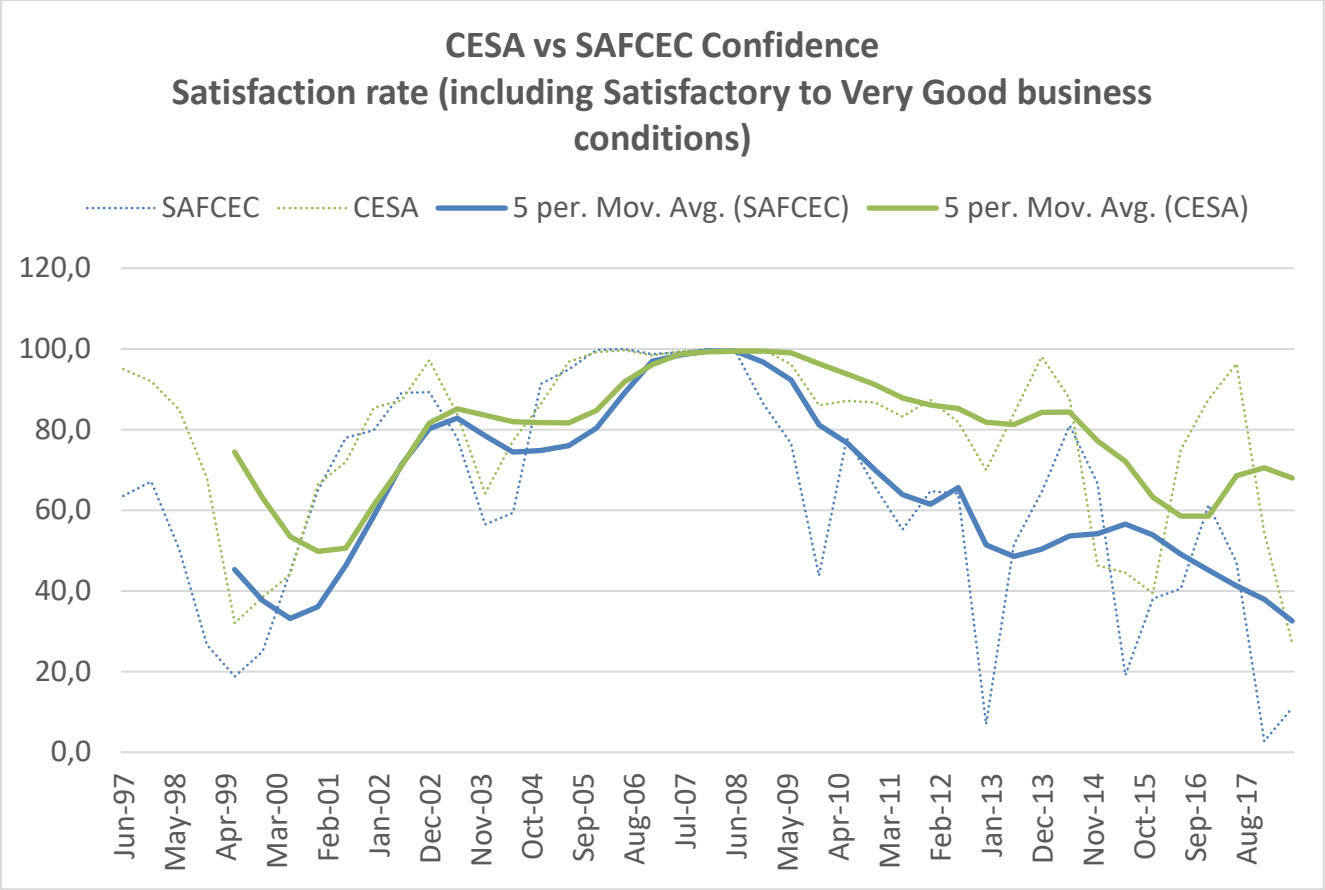


Figure 13: CESA vs SAFCEC

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 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.

Confidence in the consulting engineering sector generally lags business sentiment. Business confidence has been below or close to the 50 level for the past 7 years, (which means business is mostly pessimistic regarding business conditions), at first due to uncertain outlook on interest rates and inflation, slowing economic growth and now further constrained by political instability, policy uncertainty and credit rating downgrades. Market sentiment amongst the private sector is important to the engineering industry, since the private sector contributes on average, nearly 40 percent to total earnings, which is why it is important for confidence levels to be restored to a level of between 60 and 70 in order to stimulate higher levels of investment.

5. Market Profile

5.1 Sub-disciplines of fee income earned

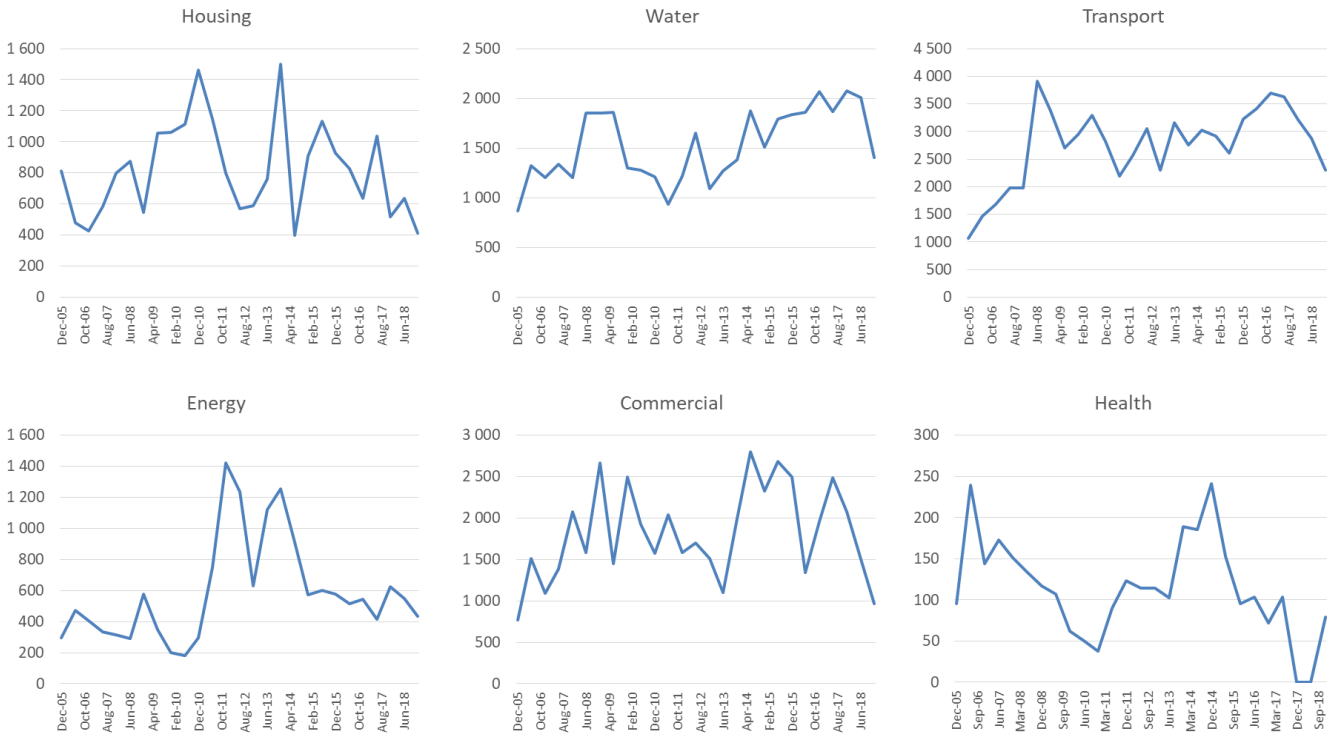
The South African consulting engineering industry is represented by many different sub-disciplines. The most common disciplines within larger firms include civil and structural services, contributing 53.7 percent and 10.0 percent in earnings during the last six months of 2018. The contribution of electrical work increased to 8.0 percent (from an average of 4.2 percent in 2016). 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.

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 as well as commercial was relatively unchanged. The mining sector remained at 9 percent, which is the highest since June 2013, with an influx of mining related projects.

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	38%	9%	22%	8%	2%	0%	4%	2%	1%	15%	0%	100%
B	33%	0%	25%	8%	1%	2%	17%	1%	12%	2%	0%	100%
C	32%	6%	13%	12%	3%	13%	2%	10%	0%	7%	1%	100%
D	9%	3%	49%	1%	1%	22%	7%	9%	0%	0%	0%	100%
Grand Total	10%	5%	5%	0%	5%	15%	0%	0%	0%	55%	5%	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	19%	34%	6%	10%	1%	1%	0%	6%	13%	0%	10%	100%
B	43%	23%	0%	5%	3%	3%	1%	2%	14%	0%	6%	100%
C	11%	23%	12%	0%	2%	0%	0%	7%	27%	10%	7%	100%
D	12%	1%	1%	1%	3%	1%	2%	22%	21%	0%	37%	100%
Grand Total	20,0%	32,8%	6,2%	9,3%	0,8%	1,1%	0,1%	5,9%	13,7%	0,5%	9,5%	100%

5.3 Geographic Location

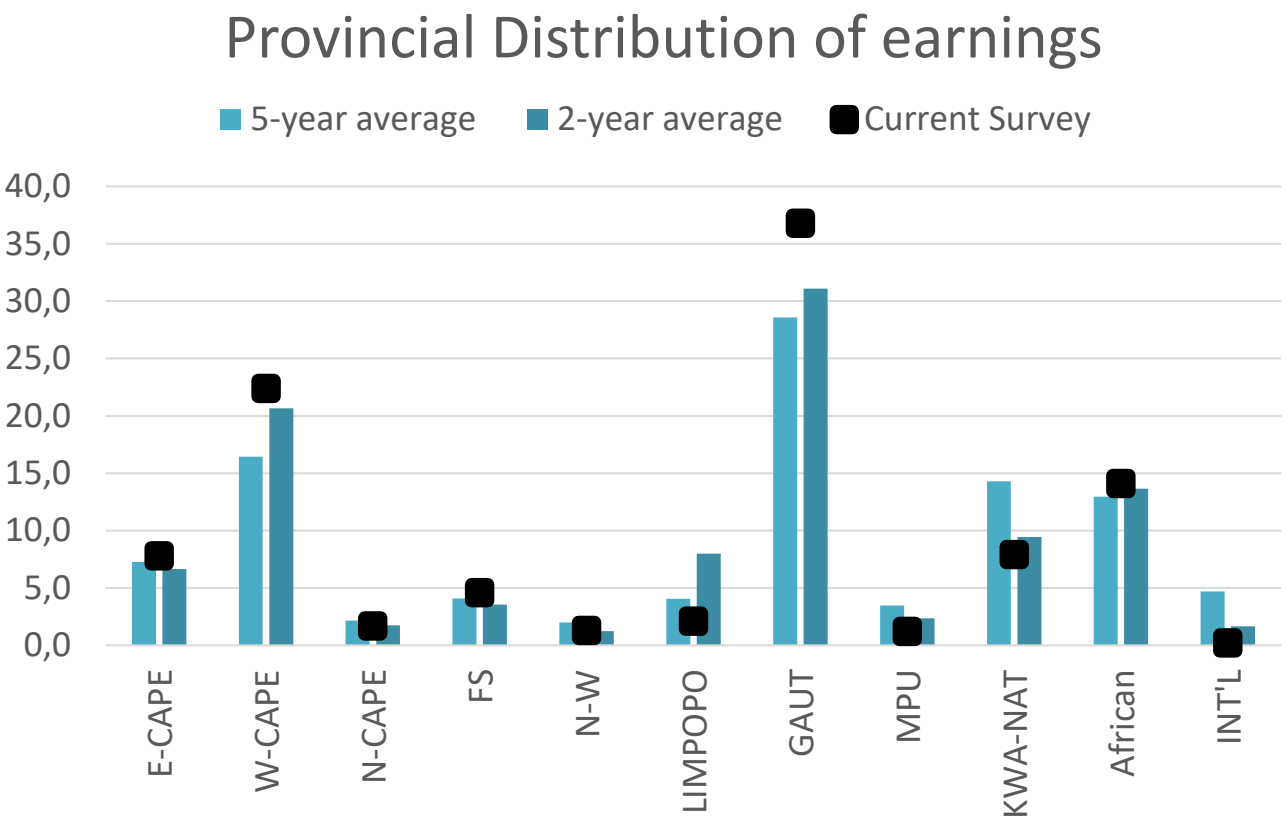


Figure 14: Provincial Distribution of earnings

The contribution of Gauteng to total earnings increased substantially in this survey to 36.8 percent in the current survey, compared to just 25.4 percent in the previous survey. The contribution within Kwazulu Natal has been decreasing consistently over the last few surveys, and now sits at just 7.9 percent from above 28 percent in previous surveys. The Western Capes contribution has remained more or less constant over the last 3-4 surveys, and increased to 22.4 percent in the current survey which is the highest since 2006.

Earnings outside of South Africa (Africa in particular) contributed 14.1 percent, up from 13.2 percent (June 2018) and an average of 10.2 percent in 2016. Whether or not this is a shift in strategy as far as local engineers are concerned can only be determined by the results of future surveys, and may be affected by sampling in this particular survey. International earnings contributed just 0.2 percent to earnings, down from 3.1 percent in the previous survey.

5.4 Clients

The contribution to fee earnings by the private sector remained high in the current survey at 42.0 percent from 46.0 percent, now more in line with the two and five year average, as the private sector continues to supplement a lack of work coming from the state. This is a notable shift over the last few surveys. The stronger increase in the private sector means the contribution by provincial and local government decreased to 7.2 percent and 10.1 percent respectively (from 11 percent and 12 percent in the June 2018 survey).

The contribution by SOE's stayed at low levels, slightly up to 9.8 percent (from 5 percent), more in line with the longer term averages now. 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.

Figure 15: 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) increased slightly to 58 percent from 54 percent in the previous survey, while the contribution by the private sector decreased to 42 percent. 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 13: Fee earnings distribution by client by firm size

	Central	Provincial	Local	Parastatals	Private	Total
Large	36,0%	7,5%	9,5%	9,4%	37,6%	100.0%
Medium	1,5%	15,1%	21,3%	19,6%	42,5%	100.0%
Small	14,6%	5,9%	19,8%	16,4%	43,2%	100.0%
Micro	6,1%	4,5%	32,0%	0,2%	57,2%	100.0%
Total	30,8%	7,2%	10,1%	9,8%	42,0%	100.0%
Average 2-Year	19.2	10.6	14.5	11.5	44.3	100.0%
Average 5-year	11.8	13.0	20.1	13.9	14.1	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 December 2018 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
Dec-09	19,342	5,019	14,984	8,653	-16.9%	173.2	6.2%
Jun-10	19,632	4,723	15,433	8,746	-9.8%	176.5	5.1%
Dec-10	19,357	5,220	15,588	8,699	0.5%	179.2	3.5%
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%	228.10	4.4%
Dec-15	24,315	6,748	25,119	10,712	2.3%	234.50	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%	256.82	5.9%
Dec-17	21,369	6,226	27,117	10,377	2.2%	261,31	4,8%
Jun-18	23,934	6,288	24,405	9,113	-12.0%	267,80	4,3%
Dec-18	21,540	4,851	19,280	7,030	-32.3%	274,26	5.0%

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)
Dec-09	1.4%	-9.0%	-16.9%	6.20%
Jun-10	0.2%	-8.1%	-9.8%	5.10%
Dec-10	0.1%	4.0%	0.5%	3.50%
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%

[3] Revised June 2007

Table 16: Sub-disciplines: Percentage share of earnings (just check we normally don't use comma's)

Sub-discipline	Dec-17	Jun-18	Dec-18	5-year average	2-year average	Deviation 5-year	Deviation 2-year	Deviation last six months
Agricultural	0,9%	0,9%	**0,6%**	1,0%	0,6%	-0,3%	0,0%	-0,3%
Architecture	0,0%	0,2%	**0,4%**	0,6%	0,3%	-0,2%	0,1%	0,2%
Mechanical building Services	5,1%	1,8%	**6,7%**	3,9%	4,7%	2,8%	2,0%	4,9%
Civil	54,8%	55,7%	**53,7%**	51,0%	56,0%	2,7%	-2,4%	-2,1%
Electrical / Electronic	4,6%	7,0%	**5,4%**	5,9%	5,6%	-0,5%	-0,2%	-1,6%
Environmental	3,7%	1,4%	**8,1%**	3,9%	3,6%	4,2%	4,5%	6,7%
Facilities Management (New)	0,0%	0,9%	**0,0%**	0,4%	0,6%	-0,4%	-0,6%	-0,9%
Geotechnical	1,6%	0,4%	**2,0%**	1,4%	1,2%	0,6%	0,7%	1,6%
Industrial Process / Chemical	0,6%	0,1%	**0,2%**	1,7%	0,2%	-1,5%	0,0%	0,1%
GIS	0,4%	0,1%	**1,1%**	0,6%	0,6%	0,5%	0,4%	1,0%
Hydraulics (New)	1,3%	0,2%	**1,2%**	0,7%	0,7%	0,5%	0,6%	1,0%
Information Systems / Technology	0,0%	0,0%	**0,0%**	1,7%	0,8%	-1,7%	-0,7%	0,0%
Marine	0,0%	1,0%	**0,3%**	0,6%	0,3%	-0,3%	-0,1%	-0,7%
Mechanical	2,8%	1,2%	**0,4%**	3,7%	1,3%	-3,3%	-0,9%	-0,8%
Mining	1%	4%	**2,3%**	1,1%	2,0%	1,2%	0,3%	-1,2%
Project Management	9%	7%	**7,2%**	7,9%	6,7%	-0,8%	0,5%	0,1%
Quantity Surveying	0%	0%	**0,3%**	0,2%	0,2%	0,1%	0,1%	0,1%
Structural	14%	18%	**9,8%**	13,0%	14,0%	-3,2%	-4,1%	-8,3%
Town planning	0%	0%	**0,4%**	0,8%	0,5%	-0,4%	-0,1%	0,1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**			

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

Sub-discipline	DEC17	JUN18	DEC18	Change last six months	Change last 12 months
Agricultural	89	79	64	-20%	-28%
Architecture	3	21	41	90%	1409%
Mechanical building Services	530	161	695	332%	31%
Civil	5 687	5 080	5 554	9%	-2%
Electrical / Electronic	481	637	556	-13%	16%
Environmental	385	127	839	563%	118%
Facilities Management (New)	2	84	3	-96%	69%
Geotechnical	168	32	202	525%	20%
Industrial Process / Chemical	66	9	18	115%	-72%
GIS	45	5	109	1922%	144%
Hydraulics (New)	132	18	127	600%	-4%
Information Systems / Technology	0	0	4	1274%	#DIV/0!
Marine	4	90	28	-69%	550%
Mechanical	289	108	37	-66%	-87%
Mining	96	320	236	-26%	147%
Project Management	883	650	745	15%	-16%
Quantity Surveying	4	20	35	77%	763%
Structural	1 476	1 648	1 015	-38%	-31%
Town planning	37	24	42	74%	14%
Total	**10 377**	**9113**	10 352	14%	0%

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

Province	Survey period							
	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18
EC	675	643	1,085	721	704	751	650	683
WC	1,486	1,393	1,530	1,685	1,884	1,819	1 738	2 119
NC	187	171	331	284	197	171	155	179
FS	571	386	331	548	590	560	379	365
NW	280	182	320	142	145	176	158	128
LIM	218	407	227	497	321	295	768	814
GAU	2,950	2,485	1,943	3,309	3,602	3,332	2 688	3 194
MPU	322	428	630	416	279	295	315	240
KZN	**1,538**	**1,928**	**2,914**	**1,066**	**1,387**	**1,617**	1 425	967
AFRICAN	1,382	1,767	847	1,228	1,128	1,197	1 234	1 400
INT'L	779	932	176	254	114	150	235	168
Total	10,389	10,722	10,335	10,150	10,352	10,364	9 745	10 256

Table 19: Provincial Distribution Y-Y percentage Change

(Trend – SMOOTHED over two consecutive surveys, to remove short term volatility)

Province	Survey period							
	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18
EC	-8,1%	-16,6%	11,1%	37,0%	-17,6%	-16,8%	-8,7%	-9,1%
WC	-28,0%	-8,4%	4,9%	11,7%	22,1%	13,2%	-2,6%	16,5%
NC	11,5%	-37,4%	-1,9%	71,6%	-4,2%	-44,4%	-35,7%	4,9%
FS	70,3%	73,3%	-16,1%	-8,2%	58,9%	27,4%	-33,5%	-34,8%
NW	7,8%	-14,6%	-10,8%	0,0%	-42,9%	-23,8%	10,4%	-27,3%
LIM	36,8%	1,7%	8,5%	15,9%	29,0%	-18,5%	87,8%	175,6%
GAU	-22,4%	-9,5%	-19,9%	-3,4%	56,1%	26,9%	-22,2%	-4,1%
MPU	16,6%	2,5%	49,2%	39,5%	-34,3%	-43,5%	-9,4%	-18,8%
KZN	30,9%	52,0%	72,6%	14,8%	-49,3%	-18,7%	16,2%	-40,2%
AFRICAN	21,0%	2,3%	-13,9%	-34,1%	-9,9%	15,4%	4,8%	16,9%
INT'L	30,7%	-20,6%	-42,7%	-74,9%	-66,8%	-30,0%	27,7%	11,5%
Total	-2,2%	-0,7%	0,9%	-3,0%	-2,6%	1,2%	-4,9%	-1,0%

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Table 20: Provincial Distribution percentage share of earnings

Province	Survey period									
	Jun-15	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	5-year average	2-year average
EC	6,5	6,0	10,5	7,1	6,8	7,7	5,5	7,8	7,3	6,7
WC	14,3	13,0	14,8	16,6	18,2	16,9	18,9	22,4	16,5	20,7
NC	1,8	1,6	3,2	2,8	1,9	1,4	1,8	1,7	2,2	1,8
FS	5,5	3,6	3,2	5,4	5,7	5,1	2,5	4,6	4,1	3,6
NW	2,7	1,7	3,1	1,4	1,4	2,0	1,2	1,3	2,0	1,3
LIM	2,1	3,8	2,2	4,9	3,1	2,6	13,9	2,1	4,1	8,0
GAU	28,4	23,2	18,8	32,6	34,8	29,5	25,4	36,8	28,6	31,1
MPU	3,1	4,0	6,1	4,1	2,7	3,0	3,5	1,2	3,5	2,4
KZN	14,8	18,0	28,2	10,5	13,4	17,8	11,0	7,9	14,3	9,5
AFRICAN	13,3	16,5	8,2	12,1	10,9	12,2	13,2	14,1	13,0	13,7
INT'L	7,5	8,7	1,7	2,5	1,1	1,8	3,1	0,2	4,7	1,7
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						
	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18
Central	632	413	1,015	1,035	1 038	2 369	2 165
Provincial	2,132	1,550	1,421	725	1 764	1 002	506
Local	2,228	2,377	2,538	1,863	1 868	1 094	710
State Owned	1,403	1,654	1,827	1,656	1 557	456	689
Private	4,317	4,237	3,350	5,072	4 151	4 192	2 953
Total	10,712	10,232	10,150	10,352	10 377	9 113	7 023

Table 22: Client distribution Percentage share of earnings

Client	Survey period								
	Dec-15	Jun-16	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	5-year average	2-year average
Central	5,9	4,0	10,0	10,0	10,0	26,0	30,8	**11,8**	**19,2**
Provincial	19,9	15,0	14,0	7,0	17,0	11,0	7,2	**13,0**	**10,6**
Local	20,8	23,0	25,0	18,0	18,0	12,0	10,1	**20,1**	**14,5**
State Owned	13,1	16,0	18,0	16,0	15,0	5,0	9,8	**13,9**	**11,5**
Private	40,3	41,0	33,0	49,0	40,0	46,0	42,0	**41,1**	**44,3**
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	Dec-17	Jun-18	Dec-18	5-year average	2-year average	Deviation 5-year	Deviation 2-year	Deviation last six months
Water (Full water cycle)	20%	22%	20%	16,8%	19,1%	5,2%	2,9%	16,8%
Transportation (land, air, road, rail, ports)	31%	32%	33%	30,5%	33,8%	1,0%	-2,3%	30,5%
Energy (electricity, gas, hydro)	6%	6%	6%	6,9%	5,1%	-0,9%	0,9%	6,9%
Mining / Quarrying	8%	9%	9%	6,3%	6,0%	2,7%	3,0%	6,3%
Education	1%	1%	1%	1,5%	1,3%	-0,5%	-0,3%	1,5%
Health	0%	0%	1%	1,2%	0,7%	-1,2%	-0,7%	1,2%
Tourism/Leisure	0%	0%	0%	0,4%	0,1%	-0,4%	-0,1%	0,4%
Housing (residential inc. land)	5%	7%	6%	8,3%	7,3%	-1,3%	-0,3%	8,3%
Commercial[4]	20%	17%	14%	20,4%	19,1%	-3,9%	-2,6%	20,4%
Agriculture / Forestry / Fishing	0%	2%	1%	1,0%	0,4%	1,0%	1,6%	1,0%
Other	9%	5%	10%	6,9%	7,1%	-1,9%	-2,1%	6,9%
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	Dec-16	Jun-17	Dec-17	Jun-18	Dec-18	Per. Change last 6 months	Per. Change Last 12 months
Water (Full water cycle)	2,070	1,863	2 075	2 005	1 406	-3,4%	7,6%
Transportation (land, air, road, rail, ports)	3,693	3,623	3 217	2 871	2 305	-10,8%	-20,8%
Energy (electricity, gas, hydro)	545	414	623	547	434	-12,2%	32,1%
Mining / Quarrying	505	414	830	820	653	-1,2%	98,1%
Education	124	104	104	91	59	-12,2%	-12,0%
Health	72	104	0	0	79		-100,0%
Tourism/Leisure	32	0	0	0	9		
Housing (residential inc. land)	634	1,035	519	638	412	22,9%	-38,4%
Commercial	1,955	2,484	2 075	1 504	962	-27,5%	-39,5%
Agriculture / Forestry / Fishing	60	0	0	182	39		
Other	459	311	934	456	671	-51,2%	46,7%
Total	**10,150**	**10,352**	10 377	9 113	7 030	-12,2%	-12,0%

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
Jun-04 * Revised	R95,22	147,56	21,5%	
Dec-04	R95,75	150,40	11,3%	16,4%
Jun-05	R101,62	155,44	5,3%	
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%

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
Jun-04	77,2	20,25%	-7,9%
Dec-04	86,3	11,77%	34,4%
Jun-05	96,8	12,2%	25,4%
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	34,3	27,8%	-36,8%
Jun-19 (forecast)	33,3	-3,1%	23,8%
Dec-19 (forecast)	32,0	-3,9%	-6,9%

End of report

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