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CESA

Consulting Engineers South Africa

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1. Economic overview

1.1 International Developments

Global growth is projected to remain subdued at around 3 percent in 2013, on par with 2012. This is less than the IMF forecast in their April 2013 report. Demand is weaker than expected, growth slowed in several of the emerging markets, and a more protracted recession in the euro area. There are still major downside risks to the global growth outlook, including the impact of the anticipated unwinding of the monetary policy stimulus in the US, which could lead to capital flow reversals in emerging economies.

- United States – projected to rise from 1,7 percent in 2013 to 2,7 percent in 2014, supported modestly by a recovery in the housing sector. Interest rates are expected to remain in place, until 2014.
- United Kingdom – growth expected to improve from an expected 0.3 percent in 2012 to 0.9 percent in 2013, accelerating to 1,5 percent in 2014.
- Euro Area – the near term outlook has been revised downward, expected to contract by 0.6 percent in 2013, due to sharper than expected contraction in Spain. Conditions worsened during the second half of 2012.
- Middle East and North Africa – growth projected to slow from 4,5 percent in 2012 to 3.0 percent in 2013, due to ongoing political violence especially in the middle east
- Brazil – economic growth expected to accelerate in 2013 from 0,9 percent in 2012 to a further revised downward 2,5 percent.
- Russia – growth in Russia is expected to slow from 3,6 percent in 2012 to 2,5 percent in 2013.
- India – one of the major growing economies, predicted to grow by 5,9 percent in 2013 (from 4.5 percent in 2012)
- China – Growth in China is has also been revised downward, from an expected 8,9 percent in 2013 to 7,5 percent.
- South Africa – growth expected to slow to below 2 percent in 2013, on the back of slow consumer demand, higher prices and strike action. Growth is projected to increase to 2,9 percent in 2014.
- Emerging markets – overall economic growth is on track for emerging market and developing economies to reach 5 percent in 2013 (noting that the growth outlook for South Africa is well below that). Emerging economies are still expected to grow at rates well above those achieved within the advanced economies.
- Global growth is expected to strengthen gradually through 2013, averaging 3,1 percent in 2013, rising to 3,8 percent in 2014.

Table 1: Global Growth projections

	2009	*2010*	*2011*	*2012*	*2013*	*2014*
World	**-0.80%**	**5.00%**	**3.80%**	3.1%	3.1%	3.8%
US	-2.50%	2.80%	1.80%	2.2%	1.7%	2.7%
Eurozone	-3.9%	1.80%	1.60%	-0.6%	-0.6%	0.9%
UK	-4.80%	1.70%	0.90%	0.3%	0.9%	1.5%
China	8.70%	10.30%	9.20%	7.8%	7.5%	7.7%
Sub-Saharan Africa	1.60%	5.00%	4.90%	4.9%	5.1%	5.9%
South Africa	**-1.80%**	**2.70%**	**3.40%**	**2.5%**	**2.0%**	**2.9%**

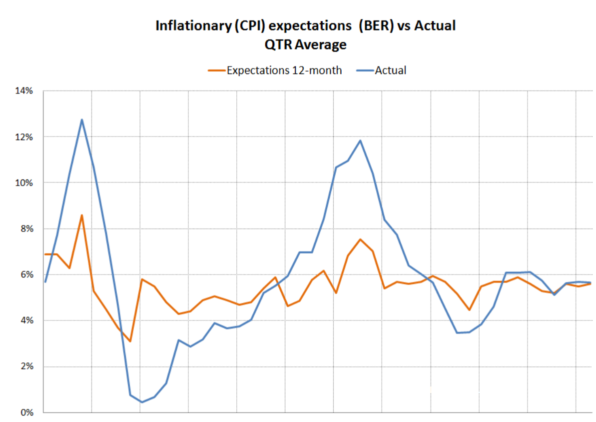
Source: IMF World Economic Outlook July 2013

1.2 Domestic Economy

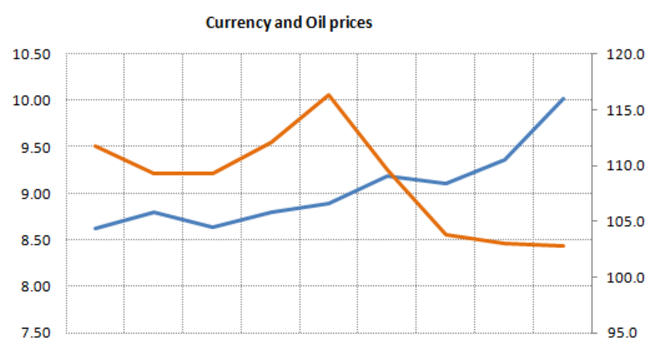
The Reserve bank lowered their growth outlook for South Africa from 2,4 percent in 2013 to 2,0 percent and from 3,5 percent in 2014 to 3,3 percent. Risks include challenges to overcome electricity supplies and strike action. Underlying the sluggish growth outlook is the low growth in gross fixed capital formation, from 4,3 percent (annualised) in 2012Q4 to 2,5 percent in 2013 Q1. Private sector spending continues to slow, while delays on projects such as Medupi impacted negatively on spending by state owned enterprises (Eskom). Unfortunately fixed investment is likely to remain affected by low business confidence and electricity constraints. The output gap has widened and is only expected to narrow during 2015, when actual economic growth is more in line with potential GDP.

The South African economy grew by an estimated 3,0 percent the 2nd quarter of 2013, from 0,9 percent in Q1. Higher growth in the 2nd quarter was supported by an 11,5 percent increase in the manufacturing sector. Growth was however capped by a further contraction in the agriculture and mining sectors. Although government expenditure increased by 9,2 percent in the first six months of 2013, compared to an increase of 6 percent in revenue, Pravin Gordhan remains optimistic that the current account deficit is manageable. According to Gordhan SA has the space to attract enough inflows to fund the current account shortfall. Unfortunately the impact of strike action in the 3rd quarter of 2013 must be considered, as investors are shying away from risky emerging markets.

The outlook for consumer price inflation and lending rates has a direct bearing on disposable income and savings, in a nutshell the general affordability of households. With the Reserve Bank having set an upper inflationary target of 6%, it must remain committed to contain price inflation. However, the curent situation, one characterised by staginflation, is a major challenge to the bank, as it needs to somehow balance higher inflation amidst a low growth environment. Generally economies struggle to escape the grips of staginflation and it could take years for the economy to reach a healthy balance. In essence the bank does not have any instruments by which to control consumer behaviour. Inflation is not fueled by higher consumer demand (as seen by the dwindlng state of the economy), but rather by external factors. Rising interest rates will therefore have no impact, other than push the economy into a sharper contraction. Demand for fuel and food is not price sensitive. Thus, what measures can the bank take to curb inflation without stalling the economy. One opinion is to monitor specific items, locally produced and consumed to understand the underlying price pressures and not only those imposed from abroad. Keeping interest rates unchanged over time actually leads to a gradual increase in debt ratio's. Thus simply doing nothing is also not the answer. The only measurement, for which South Africa has sufficient leverage (for now) is to reduce the repo rate by a further 50 basis points. This may encourage stronger economic growth without necessarily fueling underlying prices. Global price volatility, affecting the currency and the price of oil, is here to stay and that is something we will always have to deal with. Movement in the exchange rate of the rand continue to pose the main upside risk to the inflation outlook.



Inflationary expectations remain close to the upper 6 percent target



	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
R/USDollar	8.63	8.79	8.64	8.79	8.89	9.19	9.11	9.37	10.02
Brent crude $/barrel	111.8	109.3	109.3	112.1	116.4	109.7	103.8	103.0	102.8

For now the outlook for oil prices are stable, capped by the unrest in Egypt and a slower growth outlook for emerging economies as well as the Eurozone

Table 2: Macro economic growth projections (Economist Poll)

Macro Economic Forecasts	***2011***	***2012***	***2013***	***2014***	***2015***	***2016***
GDP	3.5%	2.5%	2.2%	3.3%	2.2%	3.4%
Household consumption	4.8%	3.5%	3.7%	5.3%	4.3%	6.4%
Government consumption	4.6%	4.2%	3.9%	4.0%	4.0%	4.0%
Gross Fixed capital formation	4.5%	5.7%	4.7%	6.4%	4.4%	4.5%
US/ZAR	7.26	8.21	10.00	10.30	9.79	9.30
CPI Inflation	5.00	5.70	6.00	5.90	5.70	5.40
Prime Lending rate	9.00	8.50	8.00	9.00	8.00	8.00

Poll: RMB, Investec, FNB, Standard Bank, Quantech, Treasury (2013 Budget Review), Industry Insight Estimates

1.3 Gross fixed capital formation

Real gross fixed capital formation increased by 4,4 percent y-y (seasonally adjusted annualised rates) in the 1st quarter of 2013, from an annual increase of 6,4 percent in 2012 and 4,5 percent in 2011. Growth in the first quarter was mainly supported by a 7,2 percent increase by public corporations, followed by a 6,6 percent increase in spending by government. Private sector spending increased by 3,0 percent, up from 2,9 percent in the 4th quarter of 2012. The annual growth rate by both government and public corporations slowed down in the 1st quarter compared to the previous quarter (2012Q4). The outlook on private sector spending remains depressed and is expected to (again) be negatively affected by the strike action in the mining sector. Business confidence remains weak (below the 50 level), which means the private sector still lacks sufficient impetus to increase investment. Strikes, ratings downgrades and policy uncertainty were listed by the Treasury as factors contributing to reduced confidence which postponed private sector investment decisions. Confidence is an essential element to stimulate private sector investment, alongside affordability. Affordability includes primarily access to finance, either by means of savings or borrowings.

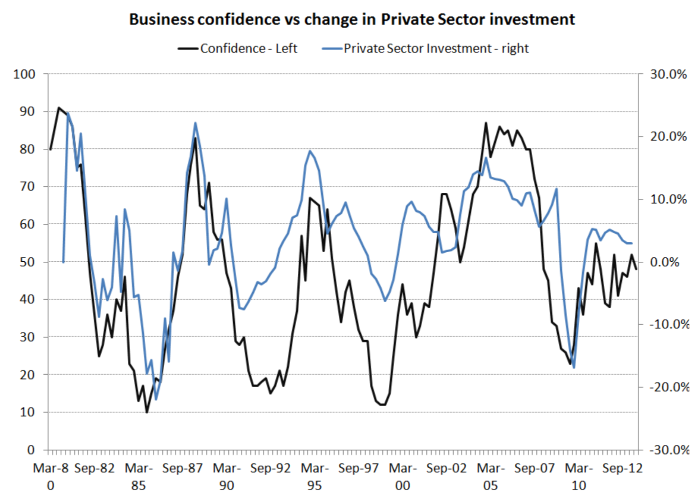


Figure 1: Business confidence vs change in Private Sector Investment

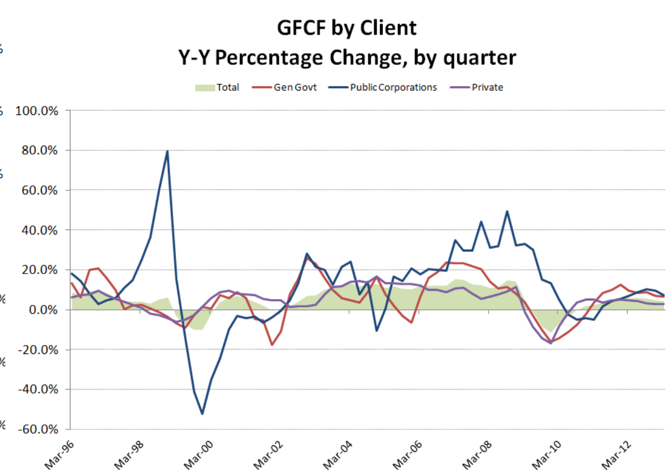


Figure 2: GFCF by client, Y-Y percentage change

Gross fixed capital formation (GFCF) as a percentage of GDP stabilized at 20,3 percent over the last four quarters (as at the 1st quarter of 2013), from an average of 19,5 percent between 2010 and the first quarter of 2012, mainly due to an improvement in the contribution of machinery and equipment and transport. The contribution of building and construction works as a percentage of GFCF moderated to 15,3 percent and 27,3 percent respectively by the 1st quarter of 2013.

Table 3: Contribution to GFCF and GDP (source SARB)

	Contribution to GFCF			Contribution to GDP			
	Building	Construction Works	Total construction	Building	Construction Works	Total construction	GFCF
Dec-08	17.7%	24.5%	42.2%	3.9%	5.4%	9.2%	21.9%
Mar-09	18.0%	28.4%	46.4%	3.8%	6.0%	9.9%	21.3%
Jun-09	18.3%	29.0%	47.3%	3.8%	6.0%	9.8%	20.7%
Sep-09	18.8%	30.5%	49.3%	3.8%	6.1%	9.9%	20.0%
Dec-09	19.0%	31.0%	50.0%	3.7%	6.1%	9.8%	19.6%
Mar-10	17.9%	30.0%	47.9%	3.5%	5.9%	9.4%	19.6%
Jun-10	17.4%	28.9%	46.3%	3.4%	5.6%	9.0%	19.4%
Sep-10	17.1%	28.6%	45.7%	3.3%	5.5%	8.8%	19.3%
Dec-10	16.6%	28.4%	45.0%	3.2%	5.5%	8.7%	19.3%
Mar-11	16.7%	28.5%	45.2%	3.2%	5.5%	8.7%	19.3%
Jun-11	16.3%	28.5%	44.8%	3.2%	5.5%	8.7%	19.5%
Sep-11	16.0%	28.1%	44.1%	3.2%	5.5%	8.7%	19.7%
Dec-11	15.8%	27.8%	43.6%	3.1%	5.5%	8.7%	19.9%
Mar-12	16.1%	27.7%	43.8%	3.2%	5.5%	8.8%	20.0%
Jun-12	15.9%	27.8%	43.7%	3.2%	5.6%	8.8%	20.1%
Sep-12	15.5%	27.8%	43.3%	3.1%	5.6%	8.8%	20.3%
Dec-12	15.3%	27.5%	42.8%	3.1%	5.6%	8.7%	20.4%
Mar-13	15.3%	27.3%	42.6%	3.1%	5.6%	8.7%	20.5%

Source: South African Reserve Bank

Table 4: GFCF Building and Construction (Rm)

	Residential		Non-res		Total building		Construction works		Grand Total	
	Current prices	2005 prices, SEA Adj annualised	Current prices	2005 prices, SEA Adj annualised	Current prices	2005 prices, SEA Adj annualised	Current prices	2005 prices, SEA Adj annualised	Current prices	2005 prices, SEA Adj annualised
Dec-08	12036	31988	14804	38396	26840	70384	38188	97478	65028	167862
Mar-09	10987	30595	14392	37966	25379	68561	40795	108133	66174	176694
Jun-09	11506	30273	13810	36957	25316	67230	39554	106855	64870	174085
Sep-09	11611	29867	13278	37311	24889	67178	39817	108807	64706	175985
Dec-09	11288	29397	14435	37526	25723	66923	41429	109389	67152	176312
Mar-10	10234	27731	14160	36058	24394	63789	41015	106872	65409	170661
Jun-10	10371	26381	13792	35633	24163	62014	38873	102844	63036	164858
Sep-10	10197	25144	13460	35761	23657	60905	38687	102023	62344	162928
Dec-10	9860	24732	13792	35168	23652	59900	39661	102233	63313	162133
Mar-11	9255	24230	14931	36783	24186	61013	41451	103988	65637	165001
Jun-11	9921	24119	14685	36183	24606	60302	41055	105193	65661	165495
Sep-11	10305	23964	14620	36296	24925	60260	42654	105659	67579	165919
Dec-11	10176	23999	15499	36498	25675	60497	44656	106344	70331	166841
Mar-12	10043	24655	16426	37754	26469	62409	45393	107234	71862	169643
Jun-12	10848	24886	16256	37367	27104	62253	45520	109041	72624	171294
Sep-12	11332	25083	15769	36507	27101	61590	46585	110281	73686	171871
Dec-12	11080	24720	16478	36648	27558	61368	48274	110404	75832	171772
Mar-13	10650	24676	17533	37100	28183	61776	48441	110444	76624	172220

Source: South African Reserve Bank

Table 5: GFCF Y-Y percentage change

	Building		Construction		Transport		Machinery		Total GFCF	
	Current prices	2005 prices	Current prices	2005 prices	Current prices	2005 prices	Current prices	2005 prices	Current prices	2005 prices
Dec-09	-4.2%	-4.9%	8.5%	12.2%	-5.6%	-6.8%	-36.2%	-36.7%	-13.6%	-11.4%
Mar-10	-3.9%	-7.0%	0.5%	-1.2%	4.1%	2.9%	-18.0%	-19.2%	-6.4%	-6.5%
Jun-10	-4.6%	-7.8%	-1.7%	-3.8%	23.7%	23.0%	-10.2%	-11.9%	-2.8%	-3.2%
Sep-10	-4.9%	-9.3%	-2.8%	-6.2%	2.6%	2.7%	8.0%	7.4%	1.3%	0.0%
Dec-10	-8.1%	-10.5%	-4.3%	-6.5%	16.1%	16.1%	20.8%	20.3%	4.9%	2.0%
Mar-11	-0.9%	-4.4%	1.1%	-2.7%	10.9%	11.1%	9.1%	8.4%	4.4%	2.6%
Jun-11	1.8%	-2.8%	5.6%	2.3%	4.3%	4.1%	10.5%	10.4%	6.0%	3.8%
Sep-11	5.4%	-1.1%	10.3%	3.6%	0.1%	-1.1%	14.1%	12.6%	9.1%	5.3%
Dec-11	8.6%	1.0%	12.6%	4.0%	9.6%	9.6%	11.5%	10.5%	11.0%	6.3%
Mar-12	9.4%	2.3%	9.5%	3.1%	12.9%	13.3%	7.4%	6.5%	9.8%	6.0%
Jun-12	10.2%	3.2%	10.9%	3.7%	23.4%	24.1%	4.3%	2.5%	9.8%	6.0%
Sep-12	8.7%	2.2%	9.2%	4.4%	24.8%	25.4%	6.3%	3.1%	9.2%	5.7%
Dec-12	7.3%	1.4%	8.1%	3.8%	12.5%	11.5%	8.3%	4.1%	8.1%	5.0%
Mar-13	6.5%	-1.0%	6.7%	3.0%	11.7%	8.4%	10.7%	5.4%	8.5%	4.4%

Source: South African Reserve Bank

3. CESA Survey: Background

A total of 102 questionnaires were returned via both the on-line and hard copy system. Of these 68 were used in the survey, having submitted returns for the last two consecutive surveys. The sample for the current survey represents a fee income of R3,1 bn, and 8,865 employees for the period January to June 2013.

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 and relevant to current conditions in the industry. Several new questions were included in the current survey to improve the compilation of benchmark indicators.

4. Prevailing conditions in the Consulting Engineering Industry

4.1 Financial Indicators

Fee income earned accelerated at a faster pace than expected in the first six months of 2013, after slowing down in the last half of 2012. Earnings increased by 7 percent in nominal terms (from the last six months of 2012), which was just over 1 percent compared to the same period in 2012. Firms expect growth in earnings to accelerate by 10 percent in nominal terms in the last six months of 2013, which would then translate into a 17 percent increase compared to the last six months of 2012. The ratio between prevailing Orderbooks and current earnings has improved but may not be sufficient to support a 10 percent growth outlook. In spite of the overall improved growth outlook, 53 percent of the firms still reported negative growth in the first six months. Total fee income as at June 2013 (annualised, current prices) is estimated to have increased to R20,4bn billion.

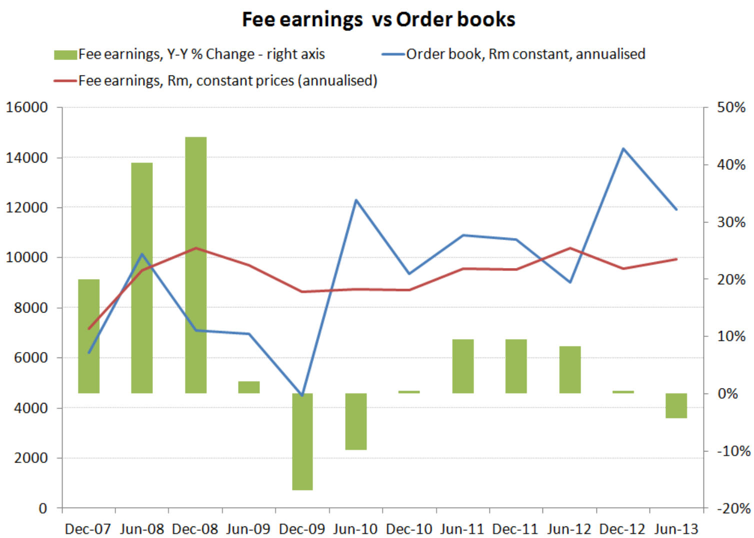


Figure 3: Orderbook vs Fee earnings

Industry growth supported by larger firms

Earnings by larger companies (employing more than 100 people), showed the strongest growth in the first six months, up 8,2 percent compared to the last six months of 2012, with a 6,9 percent increase reported by medium size firms. Small and micro firms reported negative growth (down 10 percent and 8,5 percent).

Real annual fee earnings lower on back of higher inflation.

Taking inflation into consideration, real fee earnings are estimated to have increased only marginally, up 4 percent y/y compared to the last six months of 2012, but is negative (down 4 percent) when compared to the first six months of 2012. The outlook on real growth is dependent on the deflator used to adjust nominal earnings. For general purposes of this report, the consumer inflation (CPI) is used. The CESA deflator would show a much stronger decline in real terms, as the labour cost indicator increased by 24 percent y-y in the last six months, compared to an average inflation rate of 5,6 percent.

The chart above shows an estimated view on the size of the industry's orderbook in relation to current earnings. On this basis we do expect earnings to improve in the last six months of 2013 at between 5 and 10 percent compared to the first six months of 2013.

The average (un-weighted) **net profit** (before tax) improved in the first six months averaging 15,0 percent compared to 11,4 percent in the last six months of 2012. The average margin for firms employing more than 100 people improved from 6 percent to 8 percent, and averaged 14 percent for medium size firms employing between 10 and 100 people. Majority firms expect margins to stabilize (58 percent), although there was an increase in the number of firms expecting margins to come under pressure in the next 6 months (32 percent compared to 21 percent in the previous survey). Majority of firms (68%) were satisfied with the profit margins, up from a satisfaction rate of 66 percent in the previous survey.

Order books (the value of outstanding (not yet invoiced) for confirmed appointments, (excluding sub-consultants or JV partners) did not show an improvement in the first six months compared to the previous survey (down an estimated 5 percent), after having improved by 27 percent in the last six months. In relation to income, the order book : current income ratio dropped slightly to 1.2 (from 1.50 in the previous survey). This is still better compared to a few surveys back. A rate above 1.00 means the order book is higher than current income, which is a good for short term future earnings.

The industry's **return on working capital** (un-weighted average) moderated to 40,9 percent (from 46 percent and 40,8 percent in the past two surveys). Majority of firms reported a ROI of between 20% and 100%, with a few reporting negative rates.

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 (ie accounts receivable or inventory), or has decreased its current liabilities (accounts payable).

Approximately 9,9 percent of fee earnings were outstanding for longer than 90 days, compared to 8,3% in the December 2012 survey and 24 percent in December 2011. This translates to an estimated R2bn outstanding in fee earnings.

4.2 Human Resources

There was a notable increase in employment during the first six months of 2013. Employment increased by 22 percent to an estimated 24,356 as at June 2013. This follows a decrease of 4 percent reported in the December 2012 survey. Compared to the same period in 2012, employment was up by 17 percent, or 3 560 people. Employment increased across most levels, except for technical assistants which declined by 17 percent. The appointment of professional Engineers, according to participating firms, increased by 16 percent in the first six months of 2013 compared to the December 2012 survey. This translates to an estimated additional 459 engineers to a total of an estimated 3209 engineers in the private sector. The increase in employment of engineers follows firm sentiment since 2011 that firms are looking to increase employment (see chart below).

Table 6

Skill	Dec-12	Jun-13	% Change
Administration	5,343	6,424	20.2%
Prof Eng	1,216	1,500	23.3%
Unreg Technician	386	367	-5.0%
Unreg Tech other	33	36	8.6%
Unreg Eng	2,750	3,209	16.7%
Tech Assistant	566	593	4.7%
Draughts person	43	96	123.5%
Unreg Technologist	1,727	1,425	-17.5%
Prof Other	274	317	15.6%
Lab Assistant	747	998	33.7%
Technologist	2,463	2,994	21.6%
Technician	1,386	2,448	76.6%
Prof Arch	1,902	2,876	51.2%
Prof QS	1,127	1,073	-4.9%
Grand Total	19,964	24,356	22.0%

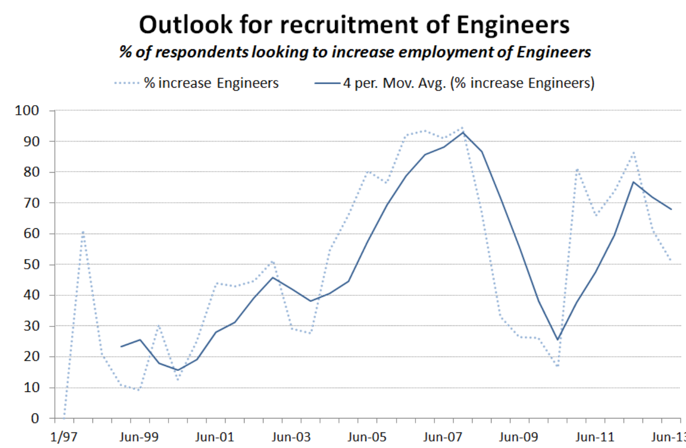


Figure 4: Outlook for recruitment of Engineers

Note: The trend (solid) line depicts a moving overage over the last four surveys

The number of firms looking for engineers did however moderate to 51 percent from 61 percent in the December 2012 survey. There seems to be growing number of firms looking to increase support staff, from 7,5 percent in December 2012 to 24,0 percent in the current survey.

Table 7: % of firms wanting to increase staff, by type of personnel

Type of personnel	% of firms wanting to increase staff December 2010	% of firms wanting to increase staff June 2011	% of firms wanting to increase staff December 2011	% of firms wanting to increase staff June 2012	% of firms wanting to increase staff December 2012	% of firms wanting to increase staff June 2013
Engineers	81.5	66.0	74.0	86.5	61.2	50.8
Technologists	18.3	51.8	36.0	38.2	19.9	46.2
Technicians	18.3	52.7	22.0	22.2	18.1	30.5
Other technical staff	10.1	8.3	4.8	17.5	12.5	20.9
Support Staff	5.8	6.6	6.9	6.6	7.5	24.0

The employment of African (Black, Coloured and Asian) professional Engineers increased by 14 percent in the first six months compared to the December 2012 survey. The appointment of African unregistered engineers however fell by 8 percent. Trying to conform to BBBEE requirements, means demand for black engineers will continue to put pressure on firms, as there are simply not enough black engineers available to fill those positions. Private firms are now competing with growing demand from public sector companies for qualified engineers in view of government's commitment to higher levels of infrastructure expenditure over the near to medium term.

The contribution of the salary and wage bill to fee earnings stabilized at 66 percent (compared to 59% in June 2012). Inflated to annualised rates, the salary and wage bill increased by between 7 and 9 percent in nominal terms since the December 2012 survey, to an estimated R13,5 billion. In real terms, (deflated by the CPI), the salary and wage bill increased by around 7 percent y/y (annualized) in June 2013 compared to June 2012. The salary and wage bill is a key cost driver in the engineering business.

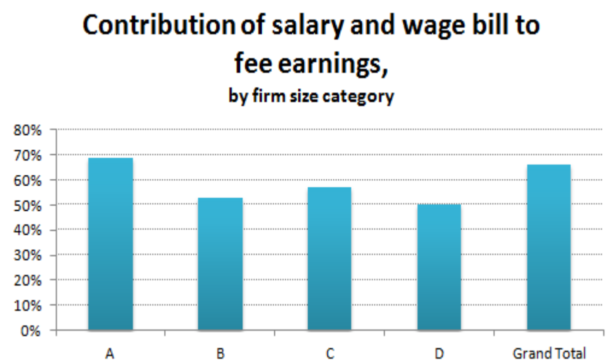


Figure 5: Contribution of salary and wage bill to earnings by firm size category as at June 2013

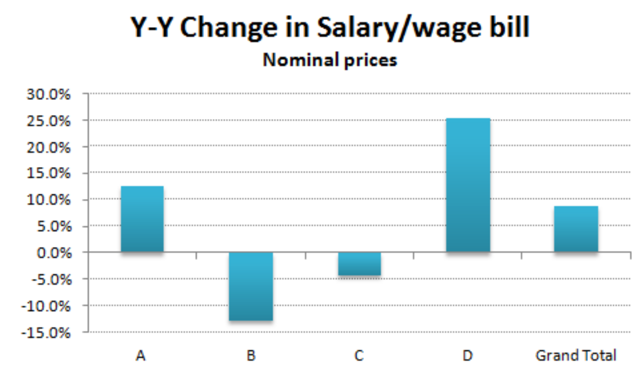


Figure 6: Percentage change in salary and wage bill by firm size category as at June 2013

On average, between 16% and 20% of firms' total fee income earned were outsourced to external enterprises or individuals, including sub-consultants, joint venture and contract workers. This amounted to between R1 billion and R2 billion (annualised) in constant rand terms (2000 prices), or around R3bn in current prices. Larger firms (employing more than 100 people) by comparison to the industry average, outsourced a higher percentage of turnover (by between 22% and 25%). There appears to be a tendency amongst firms (particularly larger firms) to lower their levels of outsourcing, having to better utilize internal capacity.

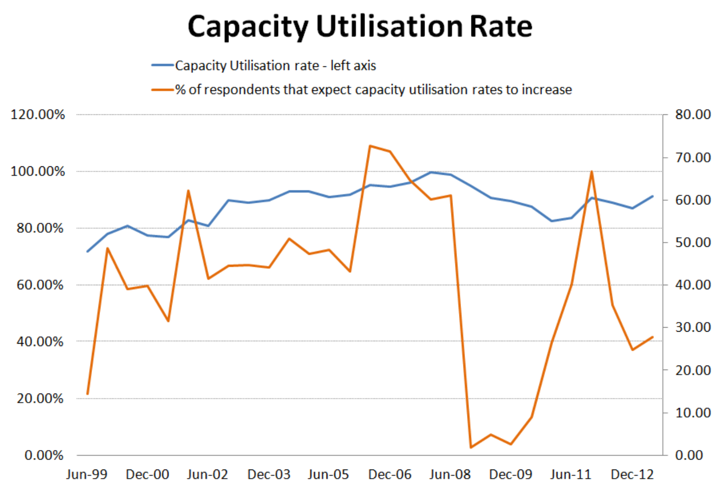
4.3 Training

Expenditure by firms on training and in particular bursaries is of a seasonal nature and responses can therefore be distorted in terms of timing when the bi-annual survey are conducted. Training expenses, which include the costs directly associated with training as well as the cost of salaries but excluding the 1% CETA skills development levy, averaged 6,1 percent of the total estimated salary bill, compared to 19 percent in the December 2012 survey. This data is not entirely reliable, as many firms did not complete this section of the questionnaire. Most of the firms reported only on direct training costs. Direct training costs, an easier measurement of firms contribution to training, averaged 1,0 percent of the salary and wage bill, compared to 0,5 in the December 2012 survey. Larger firms spent 1,1 percent of their salary and wage bill on direct training, compared to 0,3 percent by the smaller firms. Only 26 percent of the firms spent more than 1 percent of their salary and wage bill on direct training.

4.4 Industry Equity / Ownership Profile

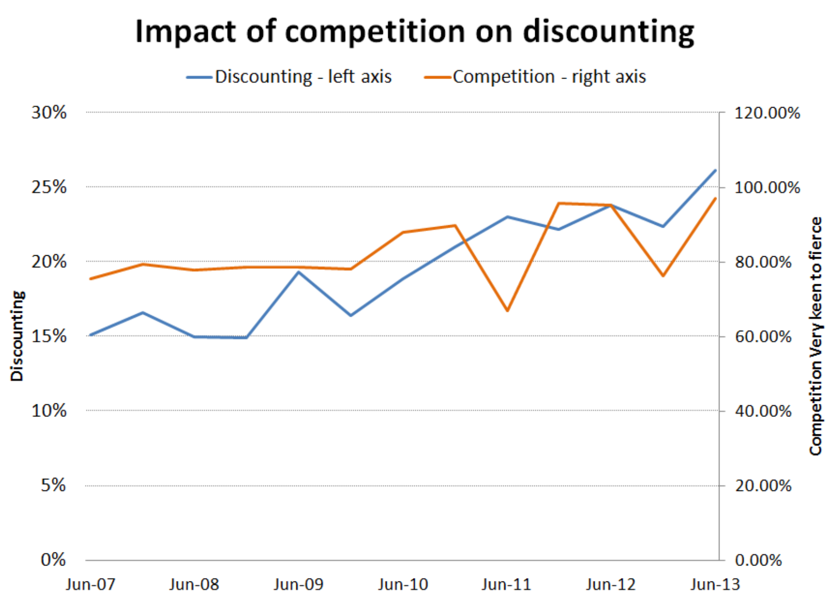
Black (including Asian and Coloured) equity, including executive directors, non-executive directors, members and partners, increased to 35,5 percent from 30,1 percent and 28,1 percent in the previous two surveys. This shows real significant progress in terms of industry transformation. For a detailed breakdown by race and gender please refer to tables 27 and 31. Women (including all races) represented 8,3 percent of total equity, compared to 7 percent in the June 2012 survey.

4.5 Capacity Utilisation



Capacity levels improved in the June 2013 survey to 91 percent, after deteriorating to a level of 87 percent in the previous two surveys. A level of 91 percent is so far the highest level reported by participating firms since the December 2008 survey when it was at 95 percent. The increase was not expected, as majority of firms expected capacity levels to be maintained at the low level of 87 percent (as at December 2012). There is a small shift in favour of firms expecting an increase in capacity (from 24,7 percent in December 2012 to 27,7 percent in June 2013 survey), but most firms still expect levels to be maintained (69,6 percent).

4.6 Competition in tendering



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 increases the risk for the engineering firm.

There was a notable increase in the competition during the survey, with 97 percent of the firms reporting competition to be keen to fierce (65 percent said fierce), compared to 76,2 percent in the December 2012 survey. In line with more intense competition, discounting increased to an average of 26,1 percent in June 2013 - when benchmarked against the ECSA Guideline fee scales - from 22,4 percent in December 2012 and 23,8 percent in June 2012.

Larger firms discounted more aggressively, averaging 35 percent in the June 2013 survey, compared to between 25% and 30%, in the previous surveys. They also experience more intense competition, with 73 percent of the firms reporting fierce competition, compared to only 29 percent in medium size firms, where the average discounting rate may have been lower at 25 percent, it is still higher compared to previous surveys.

Table 8: Competition vs Discounting by firm size category

		Competition (Weighted by firm size category)				
Firm size category	Average Discounting rate %	*Very low*	*Low*	*Keen*	*Very Keen*	*Fierce*
A	35.71	0.0%	0.0%	0.0%	26.8%	73.2%
B	25.74	0.0%	0.0%	12.9%	57.5%	29.5%
C	27.00	0.0%	0.0%	30.0%	36.8%	33.2%
D	18.33	0.0%	17.1%	22.4%	31.6%	28.9%

4.7 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 MIS Survey. This should accommodate at least 50% 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 for the industry, increased by an average of 24 percent y-y in the first six months of 2013, following a 17 percent annual increase reported by firms in the December 2012 survey. The impact of higher salaries and wages is profound on the engineering business considering that between 55% and 66% of earnings are paid towards the salary and wage bill.

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 5,6 percent in the first half of 2013, compared to 5,4 percent in the last six months of 2012. Consumer inflation breached the Reserve Bank's upper inflationary target in July 2013, coming in at 6,3 percent. External factors are mostly to blame for the uptick in inflation, including higher oil and food prices and the impact of a weaker currency. Regulated administered prices (those prices controlled by government and state owned departments) have also increased well above the average inflation rate, up 12,7 percent in July 2013.

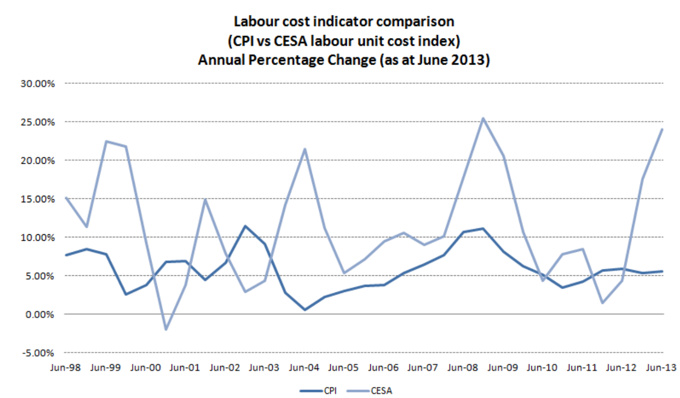


Figure 7: CESA Labour Cost Indicator

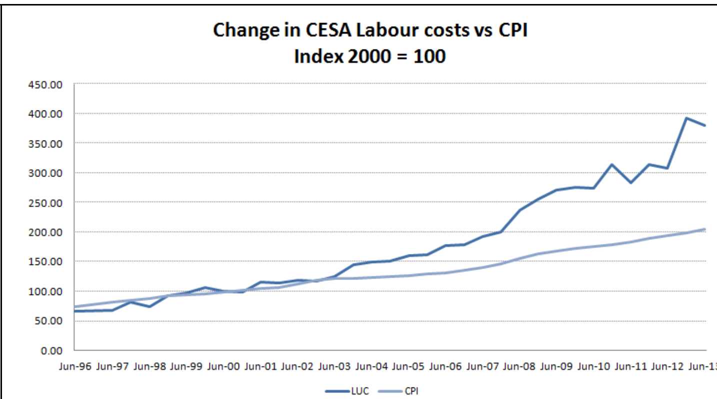


Figure 8: Change in CESA LCI vs CPI

5. Industry Outlook

The confidence index, as an indicator of members' assessments regarding current and future prospects with regard to market developments, 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.*[1] *To ensure that possible distortions emanating from ad hoc replies do not occur, only those members that have submitted returns during the last two consecutive surveys are used. The confidence index is used as a leading indicator to determine a short to medium term outlook for the consulting engineering industry.*

Conditions in the first six months of 2013 were not as bad as expected, considering the better than expected increase in earnings, alongside a healthy increase in employment. Confidence levels improved by 20 percent to a level of 84 (compared to an expected 76), and is expected to be relatively stable in the next 12 months, with a slight better outlook for the industry in the first six months of 2014. The confidence index increased to an expected level of 94 for June 2014. It just didn't materialize into the expected earnings.

While larger firms are more optimistic regarding the next 12 months, is more about being "satisfactorily busy" than very busy. Medium to smaller size firms are generally not as optimistic compared to the larger firms, but also expect some improvement in the next 12 months.

Table 9: Confidence as at June 2013, by firm size category

Firm size category	First six months	Next 6 months	Next 12 months
A	84.1%	84.1%	97.8%
B	83.2%	86.4%	70.6%
C	83.0%	96.0%	90.9%
D	69.7%	89.5%	81.6%

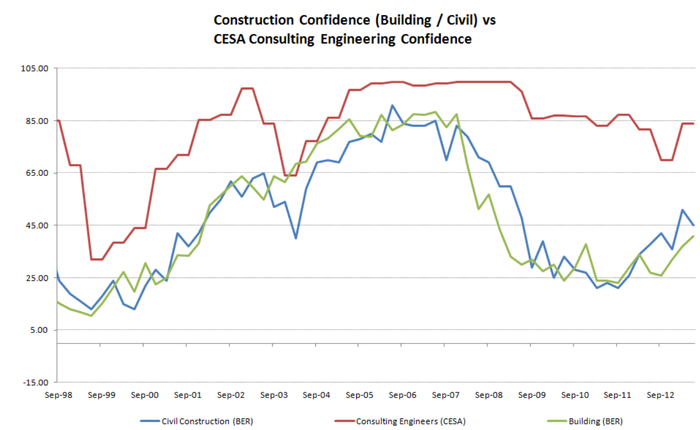


Figure 9: Confidence indices (Source: FNB/BER, CESA)

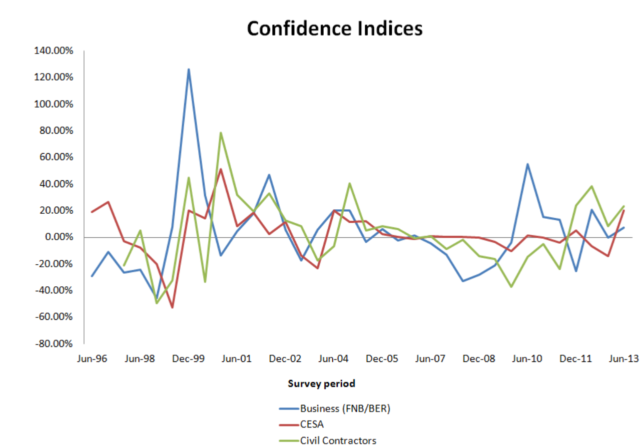


Figure 10: Confidence Indices – Y-Y change

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

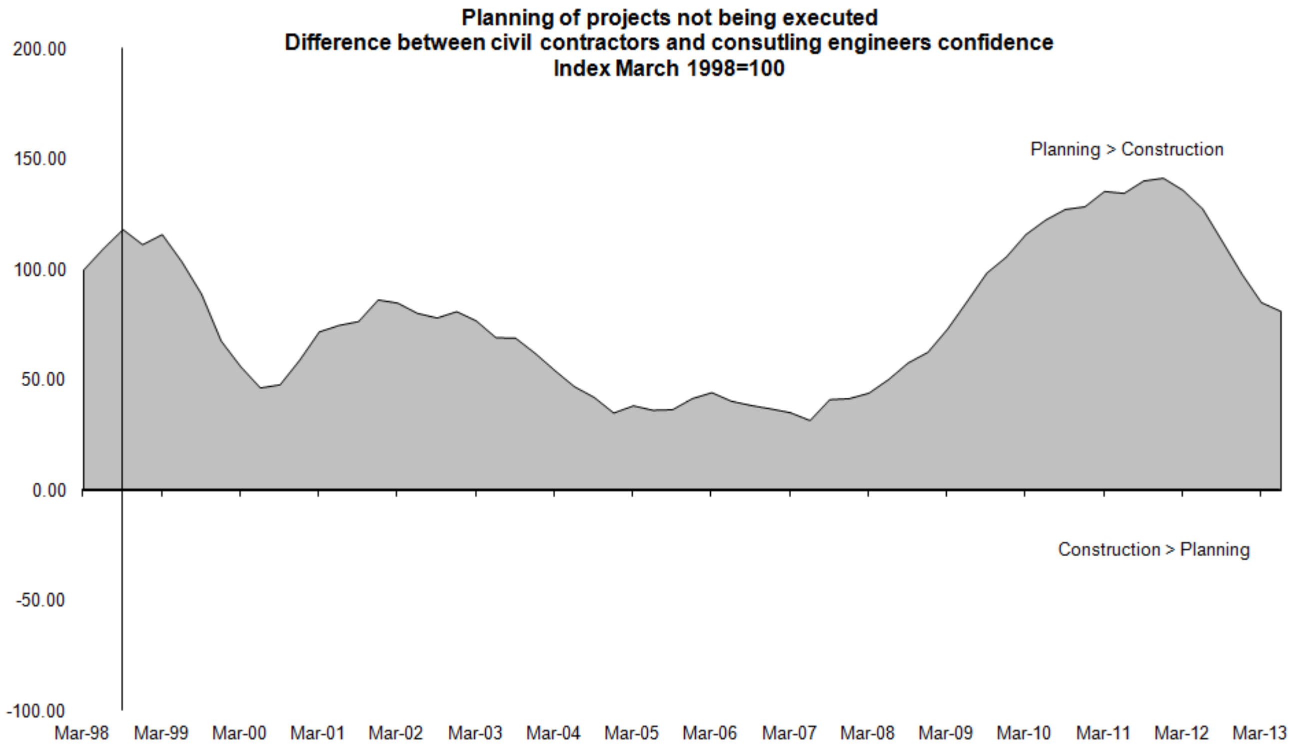


Figure 11: Planning of projects and execution

The relationship between confidence levels of engineers and civil contractors deteriorated from 2009 onwards, as consulting engineers seem to remain busy, while work opportunities for civil construction deteriorated, or otherwise put, could not keep up with the pace experienced during the pre-2010 World cup preparation phase. That trend between confidence levels amongst consulting engineers and contractors has however shown some improvement, as contractors are re slightly more optimistic.

Confidence in the consulting engineering sector generally lags business sentiment. Business sentiment recovered to a level of 50 (neutral) but is unlikely to be sustained or even improve considering the current economic turmoil in terms of the expected negative impact of strike action during the month of August on the economy. Confidence levels have been deteriorating since 2007 (when it was at a level of 69) and until it recovers back to at least a level of 60, the outlook for increased private sector investment will remain subdued. Civil contracting confidence (based on the BER surveys) deteriorated again in the 2nd quarter of 2013, from 51 to 45, as project delays and postponements continue to hamper growth in the civil industry.

Confidence levels amongst building contractors showed only a slight improvement in the 2nd quarter of 2013, from 37 in Q1 to 41. This still means that an overwhelming majority of contractors are pessimistic regarding the outlook for work opportunities in the sector. There is some evidence that private sector spending on buildings may show an improvement in the next 12 months based on the rate of change in the number of sqm approved for construction by local authorities. However, any improvement is from a significantly lower base as the rate by which plans are being approved are still only at 60 percent of the peak reported in 2007/08. Indicators across the board are doing no more than fluctuating sideways. This trend is likely to continue until such time that the economy can provide sufficient stimulus to promote infrastructure expenditure. Infrastructure spending by government is capped by available funds, currently being eroded by poor economic growth, limiting revenue collection. Private sector spending is being hampered by affordability constraints (linked to financial institutions new policies in terms of mortgage finances requiring excessive deposits) as well as high vacancy rates due to an oversupply of commercial buildings during the retail and property boom.

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 (forecast)	85.0	1.2%	21.4%
Jun-14 (forecast)	94.0	10.6%	11.9%

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.

- Unrealistic tendering fees remain a concern for members, while the extended time it takes in which to finalise proposal are 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.
- 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 established an R1m anticorruption fund in order to take to take legal action against municipalities and private companies that it suspects of having acted illegally in the award or securing of contracts. In July, CESA took steps to lodge its first case with the regional office of the Public Protector which involves a district council. CESA is also engaging with National Treasury to include the concept of an "integrity" pact into the Public Finance Management Act and the Municipal Finance Management Act.
- 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. 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.
- 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. Pravin Gordhan made it very clear that under spending of infrastructure budgets is a serious concern for the industry, where only R177bn of the R266bn was spent during 2010/11.
- 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 kilometre, 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.

7. Market Profile

7.1 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, structural services and project management. Within the smaller and micro firms, electrical services and mechanical building services had the largest impact on earnings. Project Management is a fast growing discipline in the industry, contributing an average of 16,8% and 17,5% of fee earnings in the last two surveys, the highest levels since the inception of the survey.

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

7.2 Economic Sectors

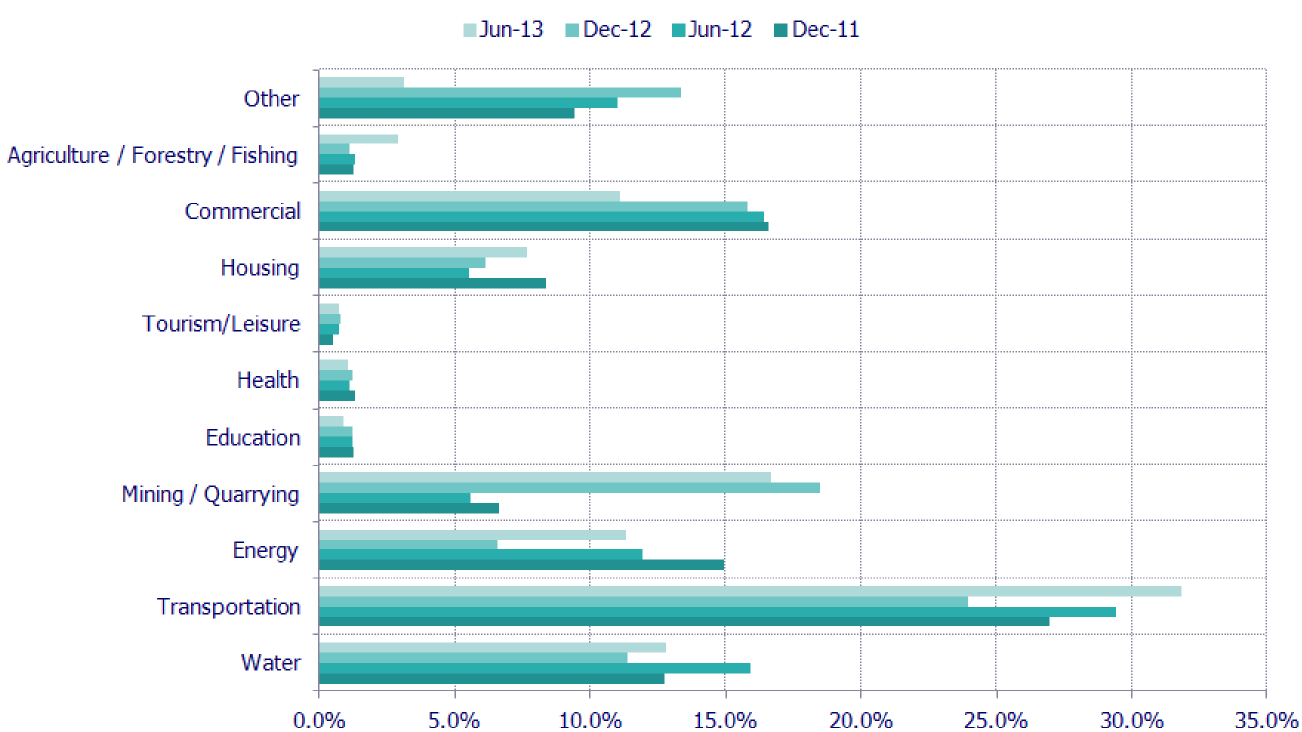


Figure 12: Fee earnings by Economic Sector

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 water services, transportation and commercial, with a growing emphasis on housing.

The two most prominent sectors are Transportation (averaging 32 percent in June 2013, from an average of 26,7 percent in 2012 and 24,9 percent in 2011) and mining (averaging 17 percent in June 2013, from an average of 12 percent in 2012 and 8,2 percent in 2011). There was less focus on the commercial sector, contributing a lower 11 percent of earnings in the first six months of 2013 (compared to an average of 16 percent in 2012).

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

	Water	Transportation	Energy	Mining	Education	Health	Tourism	Housing	Commercial	Agriculture	Eco other	Total
Large	11.6%	31.8%	10.4%	21.0%	0.5%	0.7%	0.9%	7.2%	9.1%	3.5%	3.2%	100.0%
Medium	16.1%	32.4%	17.5%	2.5%	2.1%	2.5%	0.1%	10.9%	14.0%	0.0%	1.9%	100.0%
Small	19.0%	35.5%	0.2%	1.3%	0.7%	0.4%	0.0%	3.0%	30.4%	3.1%	6.3%	100.0%
Micro	16.7%	11.8%	10.4%	2.5%	3.7%	5.7%	0.1%	4.9%	33.3%	5.3%	5.5%	100.0%
Total	*12.8%*	*31.8%*	*11.3%*	*16.7%*	*0.9%*	*1.0%*	*0.7%*	*7.7%*	*11.1%*	*2.9%*	*3.1%*	100.0%

Table 12: Charts depicting fee earnings by sector split by high capacity provinces

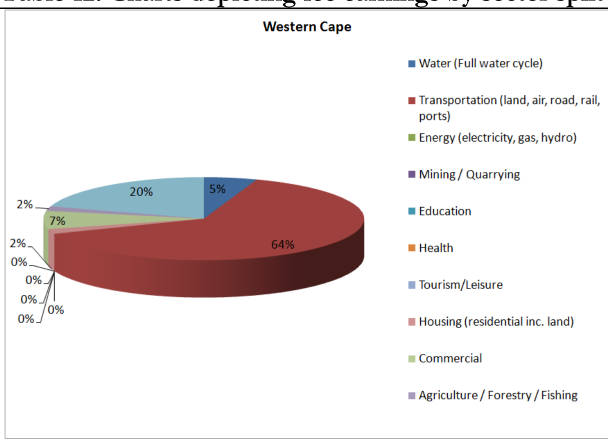


Figure 13: Western Cape

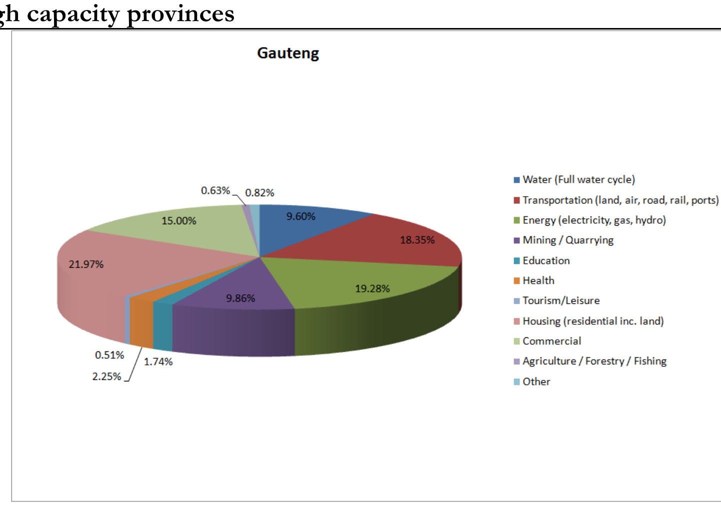


Figure 14: Gauteng

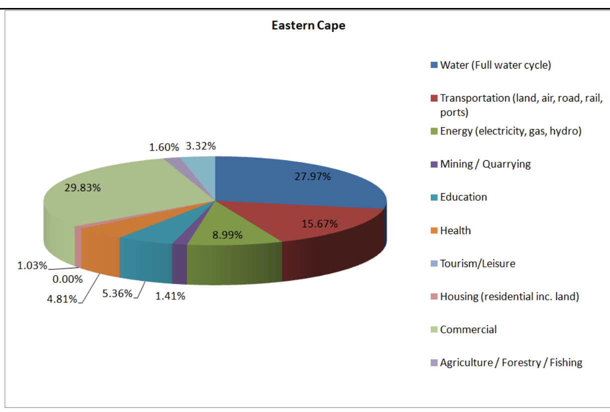


Figure 15: Eastern Cape

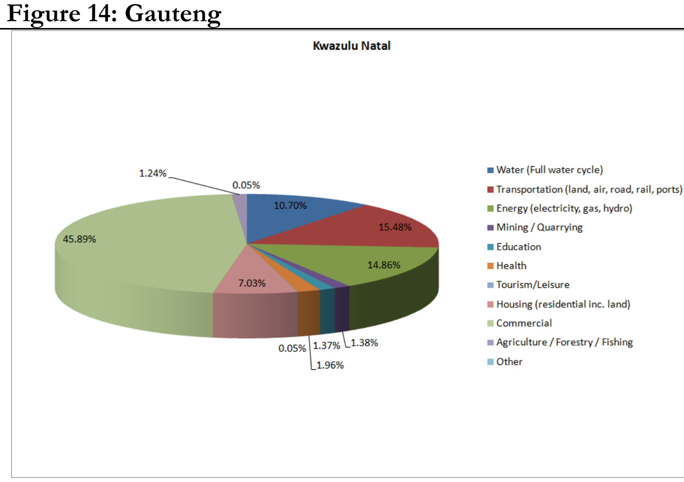


Figure 16: Kwazulu Natal

Based on a provincial distribution of fee earnings - where earnings for a particular firm exceeded 50% within one specific province – the four charts above show the distribution within the high capacity provinces by economic sector in order to gauge some profile of activity at a provincial level. In Kwazulu Natal for example earnings were dominated by the commercial sector, while transport was the main sector in the Western Cape. Please note that this data is not suitable to determine regional market shares. It is merely a proxy of market activity where a particular firm earned more than 50 percent of earnings in a particular province and to determine how those earnings have been made up.

7.3 Geographic Location

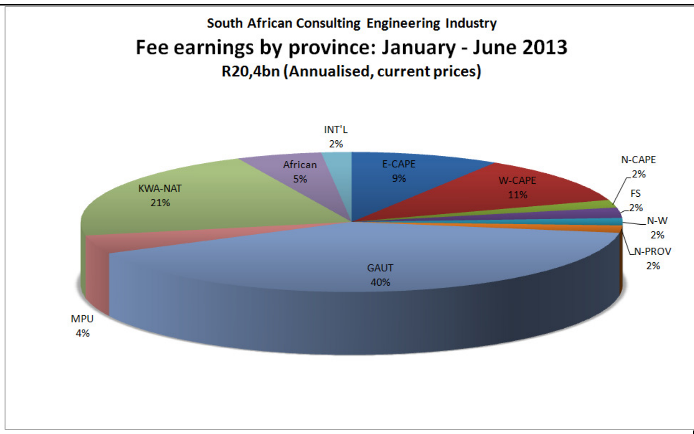


Figure 17: Provincial distribution of fee earnings

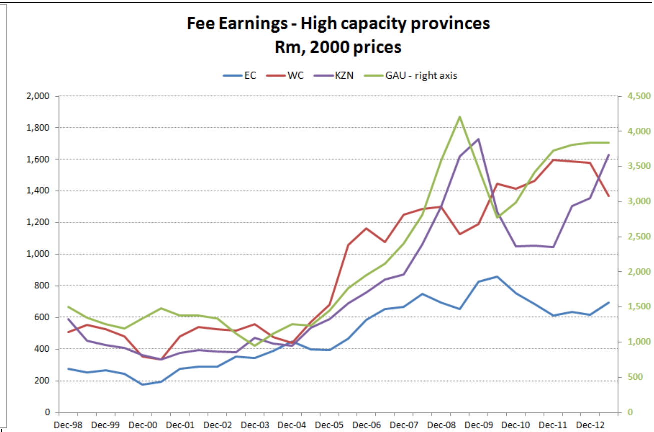


Figure 18: Fee Earnings, high capacity provinces, Rm 2000 prices

The bulk of fees were earned in Gauteng (40 percent), followed by 21 percent in Kwazulu Natal, and 11 percent in the Western Cape. Fee earnings in Kwazulu Natal increased dramatically during 2009, contributing almost 19 percent of fee earnings, whereafter it to a more "normal" level for the area, averaging between 10 percent and 12 percent, before escalating to 21 percent in the first six months of 2013. Earnings in Kwazulu Natal, in rand terms, almost doubled in the first six months compared to the last six months of 2012, to an estimated R2 bn in (in constant annualised prices – in current prices it is around R4bn). In the first six months compared to the last six months of 2012, earnings increased by 74 percent in Eastern Cape,16 percent in Northern Cape, 26 percent in North West, 83 percent in Kwazulu Natal and by 7 percent in Gauteng. Earning in the Western Cape declined by an estimated 33 percent to a market share of only 11 percent (June 2013).

7.4 Clients

The contribution by the private sector stabilized at 44 percent in the first six months, on par with the 45 percent reported in the previous survey. The contribution of local government however dropped from 31,2 percent in the previous survey to only 20,6 percent in the current survey. State owned enterprises contributed 20 percent to earnings compared to 15 percent in the previous survey. In rand terms therefore, compared to the December 2012 survey, earnings increased across most client types, except for local government which reported a real decline of 30 percent. Compared to the same period in 2012 (first six months), earnings in real terms were weaker across all categories in the public sector, but was up by 22,8 percent in terms of the private sector. Smaller firms are more reliant on work opportunities from the local sector, contributing 45 percent to fee earnings during the first six months of 2013. Considering the challenges faced by local departments to effectively spent allocated budgets, smaller firms are clearly more desperate for greater involvement by institutions such as CESA to resolve bottlenecks in the industry.

Table 13: Fee earnings distribution by client by firm size

	Central	Provincial	Local	Parastatals	Private	Total
Large	*5.4%*	*7.5%*	*19.4%*	*21.7%*	*46.0%*	100.0%
Medium	*3.6%*	*18.5%*	*21.3%*	*17.1%*	*39.5%*	100.0%
Small	*3.5%*	*14.4%*	*45.4%*	*8.0%*	*28.7%*	100.0%
Micro	*15.3%*	*10.5%*	*20.1%*	*14.2%*	*40.0%*	100.0%
Total	*5.1%*	*9.8%*	*20.6%*	*20.3%*	*44.1%*	100.0%

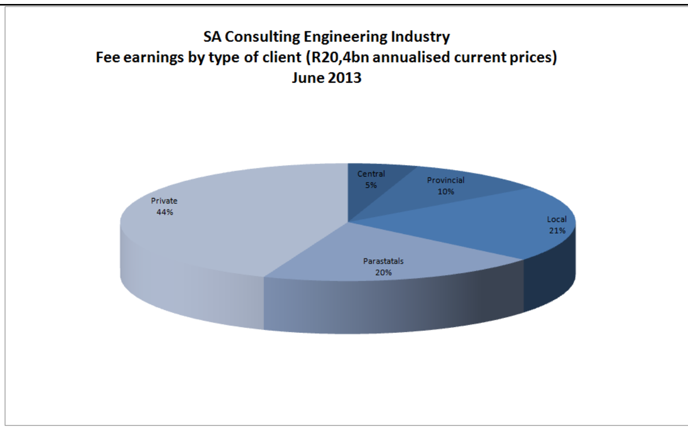


Figure 19: Distribution of fee earnings by client type

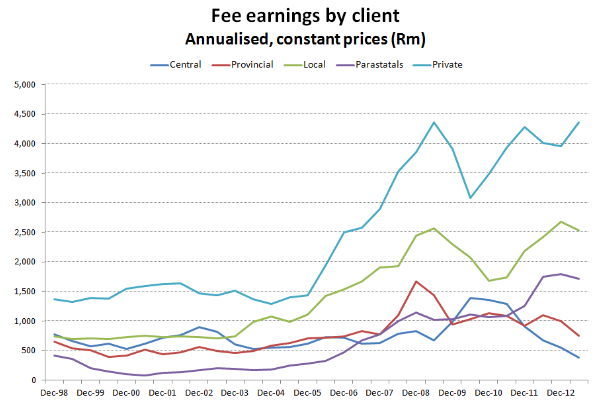


Figure 20: Fee earnings by client, annualized Rm, constant prices

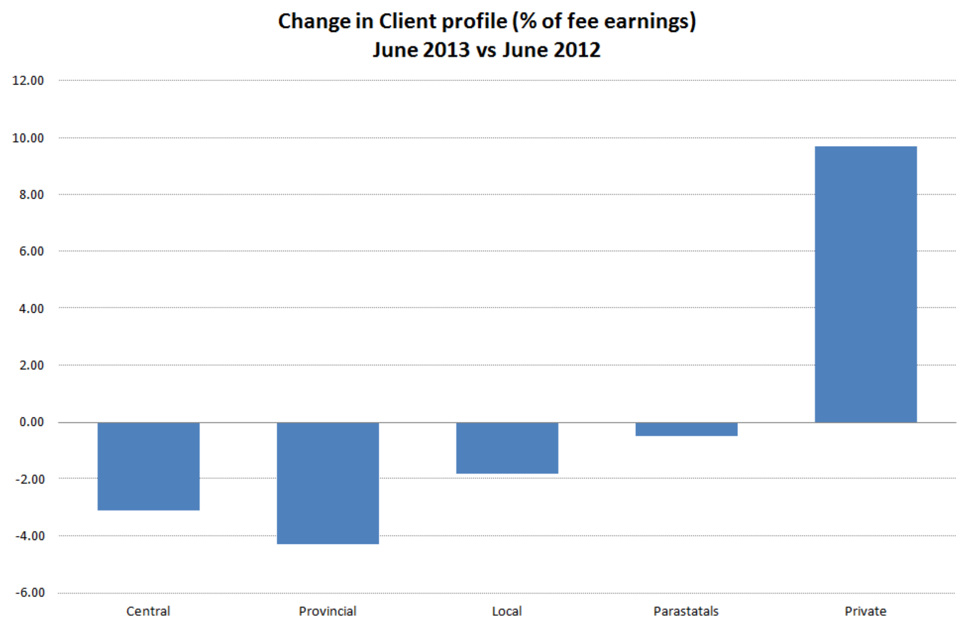


Figure 21: Change in client profile (% of fee earnings)

8. Professional Indemnity Insurance

The industry spends approximately R400 million on premiums for professional indemnity insurance, or roughly 1.8 percent of gross fee earnings. Majority of firms spend less than 1% of their income on insurance, but a few did report as high as 11 percent. For the purpose of this report, firms reporting a premium higher than 20% were removed. Most of the larger firms reported a level of between 0,2 percent and 1,0 percent, somewhat lower than reported in the December 2011 survey of between 1 and 1,5 percent.

Table 14: Average annual premium as percentage of gross fee income, by firm size category

Firm size category	Average annual premium as percentage of gross fee income
A	0.5
B	1.5
C	1.7
D	1.8
Average	**1.5**

Majority of firms (60%) reported a low risk exposure, while only 1% of respondents reported to have a high risk exposure. Only a few firms reported on the value of claims paid by insurers as a percentage of premiums paid, so the results from this section of the survey is deemed unreliable and not suitable for analytical purposes. Approximately 30 percent of the responding firms, reported claims over the last five years, averaging 4,1 claims per firm, compared to an average claims per firm of 2,2 in the June 2012 survey. On average (based on limited responses), of the 82 claims reported by participating firms, 39 (or 47 percent) were not refunded.

The industry's average limit of indemnity as a percentage of gross fee income over the 12 month period increased substantially compared to previous surveys, mainly due to participation of larger firms that affected the average. The limit of indemnity averaged between 15 percent and 20 percent for larger firms, compared to between 40 percent and 50 percent in the June 2012 survey, and a weighted average of 13 percent, compared to 17 percent in the previous survey. The industry average in terms of deductibles as a percentage of the indemnity limit moderated further to 2,9 percent, from 3,4 percent (June 2012) and 4,1 percent in the December 2011 survey. Larger firms averaged mostly between 2 percent and 3 percent.

9. Quality Management System

A quality management system (QMS) is a control that is implemented at various stages of production process or service delivery stages. All firms are required to have a QMS as a condition of CESA membership. Majority of firms reported to have a QMS system in place (94 percent), although this should be at a rate of 100 percent.

Having a QMS in place is now compulsory for all CESA members, who recognize the importance of good efficient quality control. CESA recommends the ISO:9001:2008 frame work, recognizing this framework as being comprehensive and internationally recognized.

Members can, provided the correct procedures are followed, claim a portion of the skills development levy for quality management training. For more information on statutory requirements for members, please refer to the practice note released by CESA.

Members are obliged to use accredited agents should they wish to obtain an ISO 9001:2008 certificate. Details of certification bodies used by Members consenting to make this information available, is published on the CESA website. On average 32 percent of the firms certified, compared to 40 percent in June 2012. Majority of the small to micro firms are not IS0 9001:2008 certified, compared to 89% of the larger firms (employing more than 100 people) that are certified. An ISO certification is not a condition of membership at this stage.

Statistical Tables

Table **15**: General financial indicators

Survey period	Employment[2]	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-04	12,599	1,957	4,601	3,692	7.8%	124.6	2.2%
Jun-05	12,798	2,030	5,015	3,957	7.9%	126.8	3.0%
Dec-05	14,026	2,247	5,597	4,330	17.3%	129.3	3.7%
Jun-06	14,068	3,096	7,835	5.954	50.5%	131.6	3.8%
Dec-06	14,912	3,350	8,149	5.983	38.2%	136.2	5.4%
Jun-07	15,807	3,613	9,493	6,771	13.7%	140.2	6.5%
Dec-07	16,755	3,542	10,537	7,183	20.1%	146.7	7.7%
Jun-08	18,347	4,940	14,752	9,499	40.3%	155.3	10.8%
Dec-08	19,081	5,516	16,965	10,407	44.9%	163.0	11.1%
Jun-09	19,596	5,141	16,287	9,700	2.1%	167.9	8.1%
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	5.3%

Table **16**: Consulting Engineering Profession: Financial indicators: Annual Percentage Change (Real)

Survey period	Employment	Salaries and Wage Bill	Fee income	Cost escalation based on CPI index (Stats Sa)
Dec-04	0.5%	14.2%	7.8%	2.2%
Jun-05 *	0.0%	8.6%	7.9%	3.0%
Dec-05	11.3	14.8%	17.3%	3.7%
Jun-06	9.9%	52.5%	50.5%	3.8%
Dec-06	6.3%	49.1%	38.2%	5.4%
Jun-07	12.3%	16.7%	13.7%	6.5%
Dec-07	12.3%	5.7%	20.1%	7.7%
Jun-08	16.1%	36.7%	40.3%	10.8%
Dec-08	13.8%	54.1%	44.9%	11.1%
Jun-09	6.8%	53.0%	2.1%	8.1%
Dec-09	1.4%	58.0%	-16.9%	6.2%
Jun-10	0.2%	54.0%	-9.8%	5.1%
Dec-10	0.1%	60.0%	0.5%	3.5%
Jun-11	1.6%	59.0%	9.5%	4.2%
Dec-11	1.4%	63.0%	9.5%	5.8%
Jun-12	4.3%	60.0%	8.4%	5.9%
Dec-12	1.8%	66.0%	0.4%	5.4%
Jun-13	17.1%	66.0%	-4.3%	5.6%

* Revised

[2] Revised June 2007

Table **17: Sub-disciplines: June 2012 – June 2013, Percentage share**

Sub-discipline	Jun-12	Dec-12	Jun-13	Change in market share Last 6 months	Change in market share Last 12 months
Agricultural	0.6%	0.5%	0.7%	0.2%	0.2%
Architecture	0.3%	0.9%	0.3%	-0.6%	0.0%
Mechanical building Services	2.4%	4.1%	3.5%	-0.6%	1.1%
Civil	41.6%	49.2%	56.7%	7.5%	15.1%
Electrical / Electronic	7.6%	8.6%	7.3%	-1.3%	-0.3%
Environmental	2.3%	1.2%	2.0%	0.7%	-0.4%
Facilities Management (New)	1.5%	0.0%	0.4%	0.4%	-1.1%
Geotechnical	1.0%	0.9%	0.9%	0.1%	0.0%
Industrial Process / Chemical	0.7%	1.4%	0.5%	-0.9%	-0.2%
GIS	1.0%	0.2%	0.4%	0.2%	-0.6%
Hydraulics (New)	0.6%	0.4%	1.2%	0.8%	0.6%
Information Systems / Technology	0.5%	0.0%	0.0%	0.0%	-0.5%
Marine	0.9%	0.0%	1.7%	1.7%	0.9%
Mechanical	3.3%	4.8%	1.8%	-2.9%	-1.5%
Mining	4.0%	5.5%	0.1%	-5.4%	-3.9%
Project Management	17.5%	9.0%	7.7%	-1.3%	-9.7%
Quantity Surveying	0.4%	0.2%	1.0%	0.7%	0.6%
Structural	13.4%	12.7%	10.4%	-2.3%	-3.0%
Town planning	0.4%	0.4%	3.2%	2.9%	2.9%
Total	100.0%	100.0%	100.0%	0.0%	0.0%

Table 18: Sub-disciplines: June 2012 – June 2013, Annualized R mill, Real 2000 prices

Sub-discipline	Dec-11	Jun-12	Dec-12	Change Jun-13/Jun-12	Change Jun-13/Jun-12
Agricultural	57	48	74	54.5%	28.2%
Architecture	33	83	26	-68.2%	-19.5%
Mechanical building Services	254	395	350	-11.3%	37.9%
Civil	4,318	4,708	5,636	19.7%	30.5%
Electrical / Electronic	789	823	730	-11.3%	-7.5%
Environmental	242	119	195	63.1%	-19.5%
Facilities Management (New)	156	4	43	962.2%	-72.7%
Geotechnical	100	83	94	13.2%	-5.9%
Industrial Process / Chemical	77	134	52	-61.5%	-32.9%
GIS	104	22	41	82.1%	-60.9%
Hydraulics (New)	62	40	117	193.5%	88.5%
Information Systems / Technology	56	1	0	-100.0%	-100.0%
Marine	89	0	171	-	93.0%
Mechanical	344	457	182	-60.2%	-47.2%
Mining	417	522	7	-98.6%	-98.2%
Project Management	1,812	859	768	-10.7%	-57.6%
Quantity Surveying	38	22	95	332.4%	150.3%
Structural	1,392	1,214	1,036	-14.7%	-25.6%
Town planning	38	35	320	819.0%	747.1%
Total	10,377	9,569	9,935	3.8%	-4.3%

Table **19**: Provincial Turnover, R mill, Real 2000 prices (Annualized)

Province	Survey period							
	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13
EC	900	817	687	680	543	727	507	884
WC	1 471	1 425	1 400	1 532	1 658	1 516	1,646	1,093
NC	69	142	217	201	210	197	153	179
FS	260	405	426	354	343	467	287	238
NW	199	179	217	201	133	104	134	169
LIM	277	239	200	249	295	280	230	169
GAU	2 596	2 951	3 018	3 811	3 639	3 986	3,703	3,984
MPU	251	257	322	306	438	301	679	427
KZN	1 497	1 042	1 061	1 044	1 048	**1 567**	**1,148**	**2,106**
AFRICAN	926	1 079	948	1 006	1 058	1 007	813	507
INT'L	208	210	200	192	162	239	268	179
Total	8 653	8 746	8 698	9 576	9 527	10 380	9,569	9,935

Table 20: Y-Y Change (Trend – SMOOTHED over two consecutive surveys, to remove short term volatility)

Province	Survey period							
	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13
EC	19.4%	31.2%	-9.2%	-20.4%	-18.7%	-7.1%	0.9%	9.6%
WC	-8.6%	28.5%	18.6%	1.3%	12.9%	8.2%	-0.9%	-13.7%
NC	-21.1%	-18.7%	60.0%	98.5%	14.4%	-2.8%	-14.7%	-18.4%
FS	-26.0%	43.5%	75.7%	17.5%	-16.1%	3.8%	8.1%	-35.1%
NW	-39.2%	-31.0%	3.5%	10.6%	-15.7%	-43.3%	-28.9%	27.7%
LIM	3.6%	-14.3%	-25.3%	-12.9%	24.0%	28.2%	-6.3%	-30.8%
GAU	-2.7%	-34.1%	-14.4%	23.1%	24.8%	11.6%	3.2%	0.8%
MPU	-22.3%	-14.7%	15.1%	23.7%	28.6%	17.7%	31.6%	49.7%
KZN	32.9%	-21.6%	-39.1%	-17.1%	-0.6%	24.2%	29.8%	24.4%
AFRICAN	-43.7%	19.4%	55.4%	-2.6%	1.8%	5.7%	-11.8%	-36.1%
INT'L	-61.7%	-43.9%	-0.3%	-6.2%	-13.8%	2.3%	43.3%	11.5%
Total	-7.8%	-13.5%	-5.0%	5.0%	9.5%	9.0%	4.5%	-2.1%

Table 21: Market share (% of fee earnings)

Province	Survey period							
	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13
EC	10.40	9.34	7.90	7.10	5.70	7.00	5.30	8.90
WC	17.00	16.29	16.10	16.00	17.40	14.60	17.20	11.00
NC	0.80	1.62	2.50	2.10	2.20	1.90	1.60	1.80
FS	3.00	4.63	4.90	3.70	3.60	4.50	3.00	2.40
NW	2.30	2.05	2.50	2.10	1.40	1.00	1.40	1.70
LIM	3.20	2.73	2.30	2.60	3.10	2.70	2.40	1.70
GAU	30.00	33.74	34.70	39.80	38.20	38.40	38.70	40.10
MPU	2.90	2.94	3.70	3.20	4.60	2.90	7.10	4.30
KZN	17.30	11.92	12.20	10.90	11.00	**15.10**	12.00	21.20
AFRICAN	10.70	12.34	10.90	10.50	11.10	9.70	8.50	5.10
INT'L	2.40	2.40	2.30	2.00	1.70	2.30	2.80	1.80
Total	100.0%	100.0%	100.0%	100%	100%	100%	100%	100%

Table **22**: Fee income earned by type of client, R mill, Real 2000 prices (Annualized)

Client	Survey period						
	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13
Central	1 432	1 287	1 302	505	841	268	497
Provincial	1 217	1 044	1 130	715	1 484	507	994
Local	1 786	1 578	1 896	2 477	2 367	2,986	2,086
State Owned	1 110	1 018	1 159	1 362	2 128	1,455	1,987
Private	3 202	3 775	4 089	4 468	3 560	4,354	4,371
Total	8 746	8 702	9 576	9 527	10 380	9,569	9,935

Table **23**: Percentage market share by client

Client	Survey period						
	Jun-10	**Dec-10**	**Jun-11**	**Dec-11**	**Jun-12**	**Dec-12**	**Jun-13**
Central	16.4%	14.8%	13.6%	5.3%	8.1%	2.8%	5.0%
Provincial	13.9%	12.0%	11.8%	7.5%	14.3%	5.3%	10.0%
Local	20.4%	18.1%	19.8%	26.0%	22.8%	31.2%	21.0%
State Owned	12.7%	11.7%	12.1%	14.3%	20.5%	15.2%	20.0%
Private	36.6%	43.4%	42.7%	46.9%	34.3%	45.5%	44.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 24: Percentage of fee income earned by economic sector

Economic sector	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13	Change in the last 6 months
Water (Full water cycle)	14.0%	9.7%	12.8%	15.9%	11.4%	13%	1.4%
Transportation (land, air, road, rail, ports)	32.5%	22.8%	27.0%	29.4%	24.0%	32%	7.9%
Energy (electricity, gas, hydro)	3.4%	7.8%	14.9%	11.9%	6.6%	11%	4.7%
Mining / Quarrying	8.3%	9.8%	6.6%	5.6%	18.5%	17%	-1.8%
Education	0.5%	0.7%	1.3%	1.2%	1.2%	1%	-0.3%
Health	0.4%	0.9%	1.3%	1.1%	1.2%	1%	-0.2%
Tourism/Leisure	0.1%	0.7%	0.5%	0.7%	0.8%	1%	-0.1%
Housing (residential inc. land)	16.8%	12.0%	8.4%	5.5%	6.1%	8%	1.5%
Commercial[3]	18.1%	21.3%	16.6%	16.4%	15.8%	11%	-4.7%
Agriculture / Forestry / Fishing	3.3%	1.8%	1.3%	1.3%	1.1%	3%	1.8%
Other	2.6%	12.5%	9.4%	11.0%	13.4%	3%	-10.2%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100%**	**100%**	-

Table 25: Fee income earned by economic sector, Rm, Real 2000 prices, Annualized

Economic sector	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13	Real % Change Jun-13/Jun-12
Water (Full water cycle)	1 214	931	1 216	1 650	1,090	1,271	-23.0%
Transportation (land, air, road, rail, ports)	2 825	2 187	2 569	3 052	2,293	3,164	3.7%
Energy (electricity, gas, hydro)	297	747	1 423	1 235	628	1,123	-9.1%
Mining / Quarrying	721	934	629	581	1,768	1,656	185.0%
Education	46	63	119	125	114	86	-31.2%
Health	38	90	123	114	115	102	-10.2%
Tourism/Leisure	5	68	49	73	76	69	-5.7%
Housing (residential inc. land)	1 460	1 145	797	571	588	762	33.5%
Commercial	1 574	2 043	1 581	1 702	1,513	1,104	-35.2%
Agriculture / Forestry / Fishing	290	169	122	135	105	286	112.2%
Other	230	1 199	898	1 142	1,280	311	-72.7%
Total	**8 698**	**9 576**	**9 527**	**10 380**	**9,569**	**9,935**	-4.3%

[3] Commercial includes: Manufacturing, industrial buildings, communication, financial, facilities management

Table 26: 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-98	R 59.30	83.65	11.4%	13.3%
Jun-99	R 61.46	95.10	22.5%	
Dec-99	R 68.01	101.96	21.9%	22.2%
Jun-00	R 63.90	103.88	9.2%	
Dec-00	R 63.08	100.00	-1.9%	3.7%
Jun-01	R 73.80	107.80	3.8%	
Dec-01	R 72.23	115.00	15.0%	9.4%
Jun-02	R75.56	116.39	8.0%	
Dec-02	R74.67	118.31	2.9%	5.4%
Jun-03	R79.51	121.42	4.3%	
Dec-03	R92.14	135.18	14.3%	9.3%
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%	

Table **27**: Fee income outstanding for more than 90 days (including foreign fee income earnings)

Income distribution	Fee income outstanding for more than 90 days as % of total annualized fee income (total fee income = gross fee income + fee income outstanding)					Fee income outstanding longer than 90 days R mill, current prices
	Jan-Jun 2011 %	**July - Dec 2011 %**	**Jan - Jun 2012 %**	**Jul-Dec 2012 %**	**Jan-Jun 2013 %**	
Central government	4%	7.1%	6.2%	6.4%	6.6%	R48
Provincial government	11.6%	12.2%	17.0%	9.5%	44.7%	R626
Local government	12.0%	14.6%	10.7%	7.0%	5.4%	R158
State owned enterprises	10.8%	3.6%	21.3%	8.5%	7.0%	R201
Private Sector	12.3%	12.9%	11.4%	5.5%	11.2%	R706
Foreign (all EX-RSA)	75.0%	62.0%	15.3%	8.3%	9.9%	R294
Total	18.0%	24.0%	9.4%	8.3%	9.9%	R2,032

** Note:*
In the July – December 2001 survey the questionnaire was changed to exclude non-payment for periods less than 60 days, which leads to distortions when comparing previous survey's results.
In the July – December 2002 survey the questionnaire was changed to include non-payments by foreign clients (irrespective of client classification). The total percentage of fee income outstanding therefore includes non-payments by foreign clients, previously excluded.

Table 28: Fees outstanding for longer than 90 days as percentage of fee earnings, by firm size category and by client type

Firm Size Category	**Central**	**Provincial**	**Local**	**State Owned enterprises**	**Private**	**Total**
A	6.3%	70.0%	6.3%	7.8%	11.8%	9.3%
B	11.0%	7.1%	3.5%	3.2%	8.1%	8.1%
C	3.6%	19.6%	1.9%	2.7%	10.4%	6.8%
D	0.0%	5.0%	1.3%	0.8%	22.0%	8.8%
Total	6.6%	44.7%	5.4%	7.0%	11.2%	9.9%

Table **29**: Contribution to education and training (excluding 1% CETA Levy)

Survey	Bursaries % of salary bill	Bursaries R mill current prices	Training % of Salary bill[4]	Training R mill current prices
Jun-00	1,1%	R17	2,9%	R 44.5
Dec-00	0,6%	R10	2,1%	R 36.0
Jun-01	0,8%	R14	2,0%	R 36.6
Dec-01	0,5%	R9	1,5%	R 25.7
Jun-02	0,5%	R10	1,3%	R 25.7
Dec-02	0,9%	R19	0,7%[5]	R 14.6
Jun-03	0,6%	R13	1,5%	R 31.7
Dec-03	0,5%	R11	1,3%	R 28.0
Jun-04	0,6%	R13	1,3%	R30.0
Dec-04	0,5%	R12	1,8%	R44.6
Jun-05	0,6%	R15	1,3%	R33.7
Dec-05	0,7%	R19	1,5%	R44.2
Jun-06	0,9%	R35	1,2%	R48.5
Dec-06	0,6%	R29	1,1%	R49.7
Jun-07	0,9%	R44	1,0%	R52.2
Dec-07	0,6%	R32	1,3%	R67.0
Jun-08	1.1%	R82	1.4%	R107.4
Dec-08	0.5%	R40	0.8%	R70.1
Jun-09	0.6%	R52	0.8%	R68.2
Dec-09	0.4%	R37	1.0%	R88.9
Jun-10	0.9%	R72	0.9%	R74.2
Dec-10	0.4%	R37	1.3%	R121.6
Jun-11	0.5%	R 53	0.3%	R31.2
Dec-11	0.3%	R34	1.9%	R212
Jun-12	0.8%	R95	1.2%	R148
Dec-12	0.4%	R50	0.5%	R63
Jun-13	0.6%	R81	1.0%	R134

[4] Training now includes all training, in-house and external. Comparisons with previous surveys not compatible. – excludes costs related to salaries
[5] Revised: Removed outlier questionnaire erroneously included in previous sample.

Table **30**: Employment profile of the consulting engineering industry: Percentage contribution: January – June 2013

Job Category	Black	Coloured	Asian	White	Total
Professional Engineer Pr.Eng	8.0%	3.1%	4.7%	84.2%	100.00%
Professional Architects	7.7%	0.0%	7.7%	84.6%	100.00%
Professional Quantity Surveyors	14.3%	0.0%	5.7%	80.0%	100.00%
Professional Other	11.2%	4.2%	9.3%	75.3%	100.00%
Technologists Pr TEchENg	11.6%	7.2%	6.6%	74.6%	100.00%
Technicians PrTechni	40.9%	5.2%	4.3%	49.6%	100.00%
Unregistered technical staff: Engineer	22.1%	4.4%	9.2%	64.3%	100.00%
Unregistered technical staff: Technologist	33.4%	10.3%	5.9%	50.4%	100.00%
Unregistered technical staff: Technician	46.5%	9.4%	5.9%	38.2%	100.00%
Unregistered technical staff: Other	31.5%	6.3%	8.6%	53.6%	100.00%
Technical Assistants	47.6%	8.1%	5.0%	39.3%	100.00%
Draughts Persons	12.7%	9.0%	8.3%	70.0%	100.00%
Laboratory / Survey Assistants	80.5%	7.5%	1.5%	10.5%	100.00%
Administration / Support staff	41.4%	10.1%	7.1%	41.4%	100.00%
Total	30.9%	7.4%	6.9%	54.8%	100.00%

Table 31: Employment profile of the consulting engineering industry: Percentage contribution: January – June 2013 Change in contribution since June 2012 survey

Job Category	Black	Coloured	Asian	White
Professional Engineer Pr.Eng	1.9%	0.5%	1.2%	-3.5%
Professional Architects	1.8%	0.0%	-4.1%	2.3%
Professional Quantity Surveyors	-4.5%	0.0%	5.7%	-1.3%
Professional Other	-13.8%	-2.4%	1.1%	15.2%
Technologists Pr TEchENg	1.7%	0.0%	0.1%	-1.8%
Technicians PrTechni	13.3%	-7.5%	-0.1%	-5.7%
Unregistered technical staff: Engineer	0.9%	0.8%	0.0%	-1.6%
Unregistered technical staff: Technologist	0.5%	1.4%	-3.0%	1.1%
Unregistered technical staff: Technician	0.5%	0.3%	-1.6%	0.7%
Unregistered technical staff: Other	0.8%	-0.7%	1.3%	-1.3%
Technical Assistants	-2.6%	0.8%	0.1%	1.7%
Draughts Persons	-3.4%	-1.9%	-0.4%	5.7%
Laboratory / Survey Assistants	2.2%	5.1%	-5.0%	-2.3%
Administration / Support staff	1.2%	-2.5%	0.3%	0.9%
Total	-0.6%	-0.5%	0.1%	1.0%

Table 32: Ownership / equity controlled by BLACK people, as percentage of TOTAL Equity
(African include Black, Asian and Coloured)

Company Type	Owner category	Professional Category	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Jun-13
(PTY) LTD	Executive Directors	Pr.Eng	9.8%	9.6%	9.2%	11.2%	12.3%	13.7%	12.1%
		PrTechEng	50.0%	33.3%	26.7%	23.7%	33.3%	23.8%	41.9%
		Other	27.9%	26.2%	26.9%	45.9%	46.5%	60.5%	60.0%
		TOTAL	**15.5%**	**15.2%**	**15.3%**	**20.8%**	**19.7%**	**22.6%**	**26.3%**
	Non-Executive Directors	Pr.Eng	10.0%	7.1%	16.7%	100.0%	66.7%	50.0%	60.0%
		PrTechEng	50.0%	50.0%	-	50.0%	50.0%	100.0%	100.0%
		Other	65.6%	69.6%	82.4%	86.2%	89.0%	84.2%	100.0%
		TOTAL	**30.2%**	**35.8%**	**55.2%**	**85.7%**	**79.6%**	**75.0%**	**90.0%**
CC	Members	Pr.Eng	41.7%	38.5%	33.3%	32.5%	36.7%	71.4%	80.0%
		PrTechEng	60.0%	60.0%	42.9%	35.7%	36.4%	40.0%	60.0%
		Other	66.7%	50.0%	40%	55.6%	33.3%	85.7%	83.3%
		TOTAL	**50.0%**	**45.4%**	**37.5%**	**36.5%**	**36.0%**	**62.5%**	**70.9%**
Partnership	Partners	Pr.Eng	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		PrTechEng	0.0%	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%
		Other	80.0%	75.0%	0.0%	50.0%	50.0%	50.0%	50.0%
		TOTAL	**15.4%**	**12.5%**	**22.2%**	**14.3%**	**20.0%**	**11.1%**	**12.5%**
Total			**21.4%**	**20.4%**	**21.2%**	**27.8%**	**28.1%**	**30.2%**	**35.5%**

Black people represented 35,5 percent of total equity in the industry, up from 30,2 percent in the previous survey. The improvement has been across all ownership types, including that of executive director, non-executive director, member and partner.

Table 33: 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-99	38.5	20.31%	-43.4%
Jun-00	44.0	14.29%	37.5%
Dec-00	66.5	51.05%	72.6%
Jun-01	71.9	8.23%	63.5%
Dec-01	85.4	18.67%	28.4%
Jun-02	87.3	2.24%	21.3%
Dec-02	97.2	11.34%	13.8%
Jun-03	83.8	-13.76%	-3.9%
Dec-03	64.2	-23.38%	-33.9%
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 (forecast)	85.0	1.2%	21.4%
Jun-14 (forecast)	94.0	10.6%	11.9%

Table 34: Employment Breakdown, by race, gender and job category January – June 2013

Job category	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Professional Engineer Pr.Eng	237	19	256	96	3	99	127	25	152	2,600	102	2,702	3,060	149	3,209
Professional Architects	3	0	3	0	0	0	3	0	3	22	8	30	28	8	36
Professional Quantity Surveyors	8	6	14	0	0	0	3	3	6	69	8	77	80	17	96
Professional Other	39	28	66	22	3	25	36	19	55	309	138	447	405	187	593
Technologists Pr TEchENg	108	8	116	58	14	72	61	6	66	714	30	744	940	58	998
Technicians PrTechni	108	22	130	17	0	17	8	6	14	146	11	157	278	39	317
Unregistered technical staff: Engineer	524	138	662	110	22	132	185	91	276	1,599	325	1,924	2,418	576	2,994
Unregistered technical staff: Technologist	243	116	358	80	30	110	50	14	63	482	58	540	855	218	1,072
Unregistered technical staff: Technician	1,020	317	1,337	193	77	270	132	39	171	995	102	1,097	2,341	535	2,876
Unregistered technical staff: Other	551	221	772	96	58	154	108	102	210	910	403	1,312	1,665	783	2,448
Technical Assistants	480	199	678	80	36	116	55	17	72	408	152	560	1,023	403	1,425
Draughts Persons	152	39	190	108	28	135	116	8	124	623	427	1,050	998	502	1,500
Laboratory / Survey Assistants	254	41	295	19	8	28	6	0	6	25	14	39	303	63	367
Administration / Support staff	921	1,740	2,661	185	463	648	132	323	455	653	2,007	2,661	1,891	4,533	6,424
Total	4,646	2,892	7,538	1,064	742	1,806	1,020	651	1,671	9,556	3,785	13,341	16,286	8,070	**24,356**
% of total	19.1%	11.9%	30.9%	4.4%	3.0%	7.4%	4.2%	2.7%	6.9%	39.2%	15.5%	54.8%	66.9%	33.1%	100.0%

Table 35: Employment Breakdown, by race, gender and job category: January – June 2013: Percentage share

Job category	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Professional Engineer Pr.Eng	1.0%	0.1%	1.1%	0.4%	0.0%	0.4%	0.5%	0.1%	0.6%	10.7%	0.4%	11.1%	12.6%	0.6%	13.2%
Professional Architects	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%
Professional Quantity Surveyors	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.3%	0.1%	0.4%
Professional Other	0.2%	0.1%	0.3%	0.1%	0.0%	0.1%	0.1%	0.1%	0.2%	1.3%	0.6%	1.8%	1.7%	0.8%	2.4%
Technologists Pr TEchENg	0.4%	0.0%	0.5%	0.2%	0.1%	0.3%	0.2%	0.0%	0.3%	2.9%	0.1%	3.1%	3.9%	0.2%	4.1%
Technicians PrTechni	0.4%	0.1%	0.5%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.6%	0.0%	0.6%	1.1%	0.2%	1.3%
Unregistered technical staff: Engineer	2.2%	0.6%	2.7%	0.5%	0.1%	0.5%	0.8%	0.4%	1.1%	6.6%	1.3%	7.9%	9.9%	2.4%	12.3%
Unregistered technical staff: Technologist	1.0%	0.5%	1.5%	0.3%	0.1%	0.5%	0.2%	0.1%	0.3%	2.0%	0.2%	2.2%	3.5%	0.9%	4.4%
Unregistered technical staff: Technician	4.2%	1.3%	5.5%	0.8%	0.3%	1.1%	0.5%	0.2%	0.7%	4.1%	0.4%	4.5%	9.6%	2.2%	11.8%
Unregistered technical staff: Other	2.3%	0.9%	3.2%	0.4%	0.2%	0.6%	0.4%	0.4%	0.9%	3.7%	1.7%	5.4%	6.8%	3.2%	10.1%
Technical Assistants	2.0%	0.8%	2.8%	0.3%	0.1%	0.5%	0.2%	0.1%	0.3%	1.7%	0.6%	2.3%	4.2%	1.7%	5.9%
Draughts Persons	0.6%	0.2%	0.8%	0.4%	0.1%	0.6%	0.5%	0.0%	0.5%	2.6%	1.8%	4.3%	4.1%	2.1%	6.2%
Laboratory / Survey Assistants	1.0%	0.2%	1.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	1.2%	0.3%	1.5%
Administration / Support staff	3.8%	7.1%	10.9%	0.8%	1.9%	2.7%	0.5%	1.3%	1.9%	2.7%	8.2%	10.9%	7.8%	18.6%	26.4%
Total	19.1%	11.9%	30.9%	4.4%	3.0%	7.4%	4.2%	2.7%	6.9%	39.2%	15.5%	54.8%	66.9%	33.1%	100.0%

Table 36: Ownership profile: Employment, company type, race & gender: January – June 2013

Company Type	Owner category	Professional	Black			Coloured			Asian			White			Total		
		Category	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	To
(PTY) LTD	Executive Director	PrEng	19	0	19	15	0	15	6	2	7	370	2	372	417	7	4
		PrTechEng	30	0	30	7	0	7	7	2	9	48	0	48	71	2	7
		Other	36	11	47	2	0	2	2	2	4	33	9	43	63	17	8
	Non-Executive Director	PrEng	8	0	8	0	0	0	0	2	2	6	0	6	15	2	1
		PrTechEng	3	0	3	0	0	0	0	0	0	6	0	6	11	0	1
		Other	17	19	36	7	0	7	4	4	7	4	2	6	35	19	5
CC	Member	PrEng	11	0	11	6	0	6	9	0	9	35	0	35	56	0	5
		PrTechEng	19	0	19	0	0	0	2	0	2	9	4	13	17	4	2
		Other	6	3	8	0	0	0	4	0	4	7	4	11	13	4	1
Partnership	Partner	PrEng	0	0	0	0	0	0	0	0	0	4	0	4	4	0	[illegible]
		PrTechEng	0	0	0	0	0	0	0	0	0	2	0	2	2	0	[illegible]
		Other	0	0	0	2	0	2	0	0	0	6	0	2	7	0	[illegible]
GRAND TOTAL			149	33	182	39	0	39	33	11	45	530	20	547	711	54	7
% distribution			19.6%	4.3%	23.9%	5.1%	0.0%	5.1%	4.4%	1.5%	5.9%	69.7%	2.7%	71.9%	93.4%	7.1%	100
% directorship only			14.8%	1.9%	16.7%	4.2%	0.0%	4.2%	2.6%	1.0%	3.5%	78.4%	1.9%	80.3%	95.5%	4.5%	100
Total employment			**4,646**	**2,892**	**7,538**	**1,064**	**742**	**1,806**	**1,020**	**651**	**1,671**	**9,556**	**3,785**	**13,341**	**16,286**	**8,070**	**24,**
% ownership / equity			**3.2%**	**1.1%**	**2.4%**	**3.7%**	**0.0%**	**2.2%**	**3.3%**	**1.7%**	**2.7%**	**5.5%**	**0.5%**	**4.1%**	**4.4%**	**0.7%**	**3.**

End of report

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