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1. General Economic Overview

Quick summary of the economic environment during the second half of 2008:

Economic growth weakened in the 3rd and 4th quarters of 2008, following a weak performance during the first quarter when the economy was badly affected by Eskom's regular load shedding policy. GDP growth weakened to 0,2% and -1,8% in the 3rd and 4th quarters of 2008, (seasonally adjusted annualized, or compound, rates) compared to 1,7% and 5% in the 1st and 2nd quarters. Growth in the 1st quarter was hampered by the energy crisis which resulted in prolonged electricity cuts adversely affecting sectors like the mining and manufacturing industries. According to latest statistics by Stats SA (final figures for the 4th quarter of 2008 has not yet been released by the South African Reserve Bank), investment growth in the construction industry moderated from an annual growth rate of 13,9% in the 1st quarter to 15% in the 3rd quarter and 10,8% in the last quarter of 2008. Wholesale and retail sales contracted for the third consecutive quarter, and was -0.2% lower in the 4th quarter. The manufacturing sector plummeted by 21%, following a 9,4% drop in the 3rd quarter.

- The Rand depreciated by almost 16% since its average level of R7.67/US Dollar during the first half of 2008, and averaged R9.9 in the first two months of 2009, a further 12% depreciation.
- The last CPIX data was released in January 2009, for December 2008 inflation, as the new basket was announced in February 2009. Inflation edged higher in the second half of 2008, up from 10,2% in the first half of the year to 12,2% on average in the second half, but did moderate significantly during December 2008, down to 10,3
- Treasury lowered its economic projections to 1,2% for 2009, from 4,2% in last years budget, while actual growth for 2008 is estimated to have moderated to 3,1% (from an expected 4% growth). Trevor Manuel however remains optimistic that South Africa will be able to weather the current global economic turmoil, mainly due to the fact that our financial sector has not been as badly affected by the consumer and credit crunch compared to other developed economies such as the US, the UK and China.
- The Monetary Policy lowered interest rates in February 2009 from 15% to 14% as the economic growth outlook coupled with a more favourable outlook on inflation prompted monetary policy easing. It was hoped that the Reserve Bank would have called an "emergency meeting" prior the scheduled April 2009 meeting to hasten the drop in interest rates to prevent a state of severe economic recession, job losses and bad debt accumulation.
- Investment growth in capital formation is however expected to increase by between 8% and 9% in the coming years, despite poorer economic performance, mainly due to further investment in infrastructure by government and state owned enterprises.
- Inflationary pressures are expected to subside in 2009, but may take some time before falling back into the 3% to 6% target range. Inflation is expected to average 11,6% in 2008, falling substantially to 5,8% (within the upper target range) in 2009.

Table 1: Macro economic growth projections (Source Treasury)

	2005	2006	2007	2008	2009	2010	2011
GDP, Rm	1543.9	1745.2	1999.1	2277	2426.4	2622.7	2884.6
Real growth	5.0%	5.3%	5.1%	3.1%	1.2%	3.0%	4.0%
Revenue	411.1	446.4	558	625.4	642.9	709	781
Expenditure	419	472.7	560.1	631.5	738.5	792.3	848.9
Deficit	-7.9	-26.3	-2.1	-6.1	-95.6	-83.3	-67.9
Deficit % of GDP	-0.5%	-1.5%	-0.1%	-0.3%	-3.9%	-3.2%	-2.4%
GFCF Real % Change	8.9%	13.8%	15.3%	11.5%	9.7%	9.9%	8.0%
Revenue as % of GDP	26.6%	25.6%	27.9%	27.5%	26.5%	27.0%	27.1%
Expenditure % of GDP	27.1%	27.1%	28.0%	27.7%	30.4%	30.2%	29.4%
CPI(X) / New CPI from 2009	3.3%	4.6%	7.2%	11.6%	5.8%	5.3%	4.7%

Budget Review 2009

For more information on the high and low growth scenario's please contact Industry Insight at 011 431 3691 or send an e-mail to info@industryinsight.co.za.

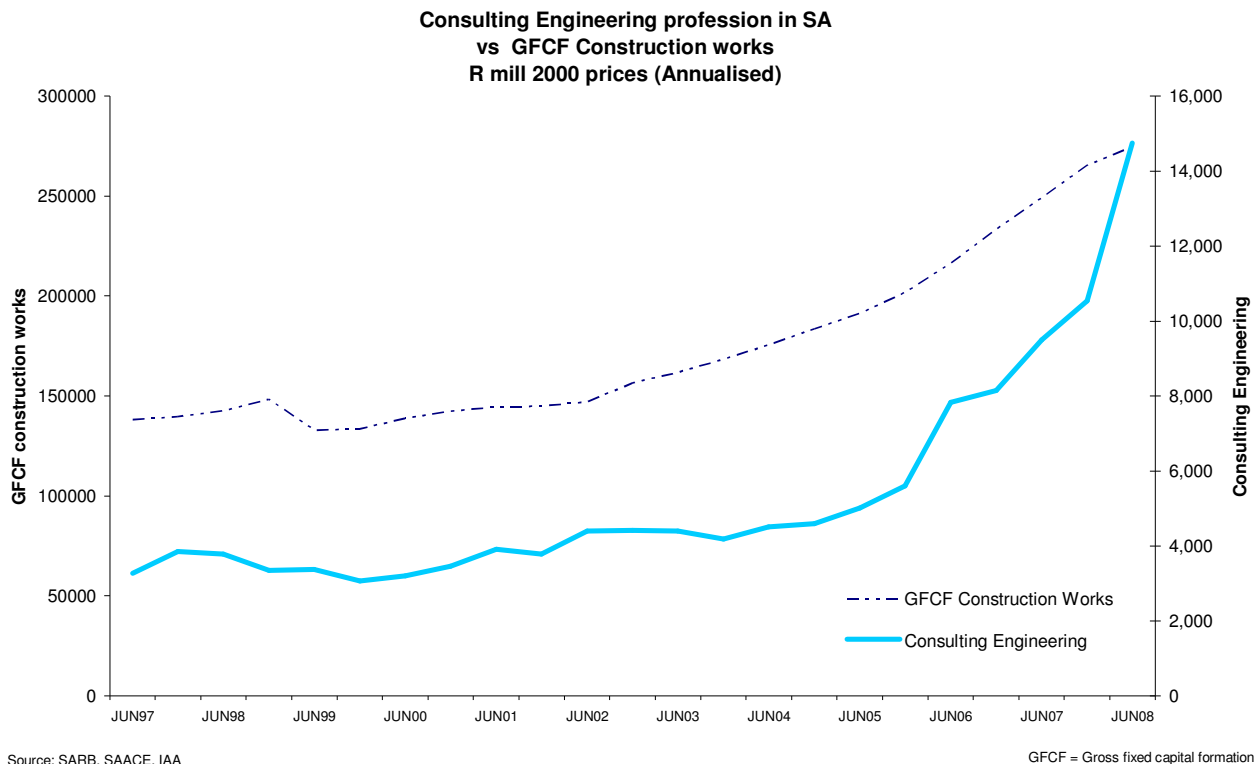


Figure 1

2. CESA Survey: Background

CESA opted for a more efficient on-line data management system to streamline the questionnaire and data capturing system. This is the first time that CESA members have been asked to use this system, and while there were some teething problems member firms are encouraged to make use of this system that will enable a more efficient management information service. Due to many firms not familiar with the new system, the response rate was significantly weaker for this survey period. With support from member firms however, the response rate should improve in the next survey.

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

Questionnaires were distributed to all member firms of the Consulting Engineers South Africa (CESA). To eliminate possible distortions in the statistics and prevent anomalies, only responses received from firms that have submitted questionnaires for the last two consecutive surveys are used. **The 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 sample size for the December 2008 survey was 38 out of 69 surveys received. The sample was based on a total fee income of R1,6 billion and approximately 5 500 employees for the period July to December 2008.

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.

3. Prevailing conditions in the Consulting Engineering Industry

3.1 Gross Fee earnings

Nominal fee income increased by 15% in the second half of 2008 compared to the first six months of 2008 or by 61% compared to the same period in 2008. This means that nominal fee income has increased by double digit annual growth rates since December 2004. In real terms, using the CPI as deflator, annual fee income increased by 43% y/y during the last six months of 2008, compared to an increase of 40% y/y during the first six months of 2008.

The average (un-weighted) net profit (before tax) moderated in the last six months, from 19,4% in the first six months of 2008 to 18,4%, while profit margins are expected to moderate further in the first six months of 2009, to an average of between 15% and 16%. Nonetheless, more than a third of the respondents (based on a weighted response) were highly satisfied with the current profit margin. There is a lack of consistency in the response with regards to expected profit margins. While a strong majority (66%) expects profit margins to improve, the future profit margin is expected to be lower. This may suggest a level of uncertainty amongst member firms with regards to the outlook for the industry in the next 6 to 12 months.

The order book (the value of outstanding (not yet invoiced) fee income for confirmed appointments, excluding sub-consultants or JV partners) in relation to fee earnings for the last six months, rose from 109% in the first 6 months to 144%, which is more than doubled the fee earnings reported by firms for the period under review. However, if we remove the information from one of the very large firms that have a 300% order book to fee earnings ratio, the average ratio for the industry is a lower 68%. This is still good news for the consulting industry as it suggests further acceleration in fee earnings during the remainder of the year.

3.2 Employment

Employment estimates were revised in the December 2007 survey to correlate with information supplied by CESA firms in their annual declaration submissions. According to information from the December 2008 survey, comparing responses from firms that have responded in the last two consecutive surveys employment has increased by a lower 4%, compared to an increase of 9,5% in the first six months of 2008. This was the weakest increase in employment since June 2006 when employment rose 0,3%.

The CESA labour cost indicator, based on the selected sample of total number of employees and the total salary and wages paid during the period under review, increased by a higher 25,5% y/y, or an average of 21,6% for the year 2008, compared to an average of 10,2% in the December 2007 survey. The increase in engineering costs has surpassed the increase in the CPI from the June 2003 survey, which means the real change in fee income is probably overstated, given the fact that the CPI is used as a nominal fee income deflator.

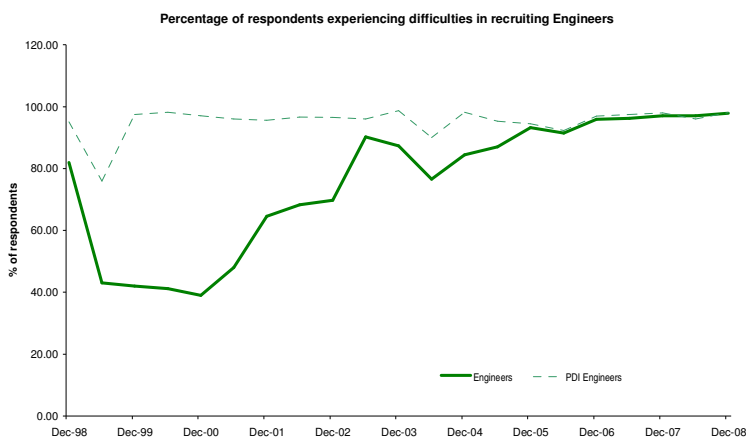


Figure 2

Demand for staff mainly pivots around the need for engineers, although the percentage of respondents looking for engineers fell from 94,5% in the December 2007 survey to 33,2% in the December 2008 survey, the lowest level since the December 1999 survey. Economic uncertainty coupled with rapidly increasing labour costs, means a more cautious approach to employment. Demand for staff has moderated significantly in the last survey, affecting all the major categories including technical staff, technicians, and support staff. Almost all firms (97%) reported problems with recruiting engineers. Fewer however reported difficulties with recruiting technicians (including PDI's).

3.3 Comparison by firm size

Because working conditions are inheritably different between the various size firms, firms that have responded to the survey are categorized based on the number of staff employed on a fulltime or part time basis.

Table 2: Profile by firms: December 2007 Survey

Category	Full and Part time employment	% Distribution based on employment	% Distribution based on number of firms
A	More than 100	73.6%	13.4%
B	Between 20 and 100	22.8%	46.3%
C	Between 10 and 20	2.3%	14.9%
D	Less than 10	1.2%	25.4%
Total		100.0%	100.0%

Table 3: Profile by firms: June 2008 Survey

Category	Full and Part time employment	% Distribution based on employment	% Distribution based on number of firms
A	More than 100	83.0%	16.9%
B	Between 20 and 100	12.2%	33.8%
C	Between 10 and 20	4.1%	29.2%
D	Less than 10	0.7%	20.0%
Total		100.0%	100.0%

Table 4: Profile by firms: December 2008 Survey

Category	Full and Part time employment	% Distribution based on employment	% Distribution based on number of firms
A	More than 100	87%	21%
B	Between 20 and 100	10%	42%
C	Between 10 and 20	2%	26%
D	Less than 10	1%	11%
Total		100.0%	100.0%

Larger firms continue to play the more dominant role in the industry, while smaller firms are gradually getting a smaller piece of the engineering cake. In the December 2004 survey, larger firms represented only 7,5% of the total number of firms, yet employed close to 60% of the employees. In the December 2008 survey, larger firms (21% of the total number of firms) employed 87% of the total employees, and contributed 87% to the industry's fee earnings, which again illustrates that larger firms are increasingly gaining market share in the industry.

The following table provides a quick synopsis of some of the key indicators in the consulting engineering profession by firm size.

Table 5: Summary of key indicators by firm size

Employment category	Data	Average
> 100	Average % of turnover outsourced	24.7
	Average capacity utilization %	94.0
	Average net profit percentage	19.3
	Discounting	15.0
	% of payment outstanding for longer than 90 days	8.2
	Average of salary bill to gross fee income	52.3
Between 20 and 100	Average % of turnover outsourced	16.5
	Average capacity utilization %	98.0
	Average net profit percentage	19.3
	Discounting	16.7
	% of payment outstanding for longer than 90 days	11.5
	Average of salary bill to gross fee income	45.7
Between 10 and 20	Average % of turnover outsourced	15.9
	Average capacity utilization %	91.0
	Average net profit percentage	18.52
	Discounting	10.0
	% of payment outstanding for longer than 90 days	7.3
	Average of salary bill to gross fee income	50.8
< 10	Average % of turnover outsourced	21.1
	Average capacity utilization %	98.0
	Average net profit percentage	12.5
	Discounting	12.5
	% of payment outstanding for longer than 90 days	13.5
	Average of salary bill to gross fee income	54.1
Average % of turnover outsourced		18.8
Average capacity utilization %		95.0
Total average net profit percentage		18.4
Discounting		14.8
% of payment outstanding for longer than 90 days		8.6
Total average of salary bill to gross fee income		51.7

3.4 Financial indicators

Table 6: General financial indicators

Survey period	Employment ¹	Salaries / Wages 2000 prices (Annualised)	Fee Income, R mill (Annualised)			Cost Deflator	
			Current prices	Constant 2000 prices	Y/Y real % change	CPI Index 2000 = 100	CPI y/y % Change
Jun-98	15,347	2,161	3,791	4,323	7.74%	87.7	7.7%
Dec-98	14,272	1,799	3,343	3,598	-20.07%	92.9	8.5%
Jun-99	13,680	1,743	3,366	3,558	-17.69%	94.6	7.9%
Dec-99	12,871	1,574	3,061	3,212	-10.74%	95.3	2.6%
Jun-00	13,183	1,564	3,200	3,259	-8.42%	98.2	3.8%
Dec-00	13,645	1,630	3,456	3,395	5.70%	101.8	6.8%
Jun-01	12,690	1,711	3,905	3,719	14.14%	105.0	6.9%
Dec-01	13,247	1,567	3,788	3,562	4.92%	106.4	4.47%
Jun-02	12,850	1,765	4,394	3,922	5.46%	112.0	6.70%
Dec-02	13,467	1,714	4,418	3,725	4.59%	118.6	11.52%
Jun-03	13,063	1,725	4,396	3,593	-8.39%	122.4	9.21%
Dec-03	12,540	1,713	4,176	3,426	-8.0%	121.9	2.8%
Jun-04	12,791	1,870	4,511	3,666	2.0%	123.0	0.6%
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	5,459	16,965	10,301	43.3%	164.7	12.3%

* Revised due to late returns

Please note that anomalies may still exist in comparing year on year employment trends, due to changes made in the December 2001 questionnaire with regard to full and part time staff.

¹ Revised June 2007

Table 7: 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-98	-8.8 %	-20.1%	-20.1%	8.53%
Jun-99	-10.9 %	-19.3%	-17.7%	7.87%
Dec-99	-9.8 %	-12.5%	-10.7%	2.58%
Jun-00	-3.6 %	-10.3%	-8.4%	3.81%
Dec-00	6.0%	3.5%	5.7%	6.82%
Jun-01	-3.7%	9.4%	14.1%	6.92%
Dec-01	-2.9%	-3.8%	4.9%	4.47%
Jun-02	1.3%	3.2%	5.5%	6.70%
Dec-02	1.7%	9.3%	4.6%	11.52%
Jun-03	1.6%	-2.3%	-8.4%	9.21%
Dec-03	-6.9%	0.0%	-8.0%	2.8%
Jun-04	-2.1%	8.4%	2.0%	0.6%
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%	43.3%	12.3%

* Revised

3.5. Outsourcing

On average, 18,8% of firms total fee income earned during 2008, were outsourced to external enterprises or individuals, including sub-consultants, joint venture and contract workers. This amounted to an estimated R1,9 billion (annualised) in rand terms (constant 2000 prices), or R3,1 billion in current prices, compared to an estimated R1,2 billion (annualized) outsourced during the June 2007 survey.

Larger firms (employing more than 100 people) by comparison to the industry average outsourced a higher percentage of turnover, at 24,7% in the December 2008 survey compared to 22% in the December 2007 survey. Micro firms outsourced a higher percentage, up from 7% in the previous survey to 21%, while medium firms outsourced 16,5% and small firms 15,9%. All the firms reported an increase in the percentage of fee earnings outsourced to external enterprises or individuals.

3.6 Industry Return on Investment

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).

Table 8: Distribution of firms by ROI category

ROI %	% of firms December 2007	% of firms June 2008	% of firms December 2008
More than 100%	20.7%	16.1%	15.2%
50% - 100%	25.9%	32.1%	24.2%
20% - 50%	27.6%	28.6%	24.2%
10% - 20%	17.2%	19.6%	24.2%
Less than 10%	8.6%	3.5%	12.1%

Majority of firms, according to the categories in the above table, reported to have an ROI of between 20% and 100%, with only 15,2% (down from 16,1% in the previous survey) with a ROI of more than 100%.

Considering that there are large variances in the ROI's between different firms, an average ROI by firm size is shown in the following table. Larger firms have a higher average ROI compared to smaller and micro firms.

Table 9: Distribution of firms by ROI category

Firm Size Category	Average ROI
Large	59.2
Medium	56.8
Small	20.8
Micro	20.2

3.7. Human Resources

There was a distinct shift in the demand for engineers in the December 2008 survey. A much lower 33% of respondents reported that they would like to increase engineering staff, compared to an average of 67% and 94% in the previous two surveys. This is the same level as reported in 2003, when there were limited expectations of recruiting engineers. Global economic uncertainty coupled with a rapidly increasing salary and wage bill is encouraging a more cautious approach by firms with regards to increasing employment. It however continues to remain a challenge to find suitable candidates to fill engineering positions. Filling posts for technicians and technologists however has shown some improvement, but also remains challenging.

Table 10: % of firms wanting to increase staff, by type of personnel

Type of personnel	% of firms wanting to increase staff – December 2005	% of firms wanting to increase staff – June 2006	% of firms wanting to increase staff – December 2006	% of firms wanting to increase staff – June 2007	% of firms wanting to increase staff – December 2007	% of firms wanting to increase staff – June 2008	% of firms wanting to increase staff – December 2008
Engineers	76.5	92.1	93.5	91.2	94.5	67.4	33.2
Technologists	83.9	87.8	91.3	88.6	90.6	67.1	11.3
Technicians	58.2	80.8	80.8	89.2	89.4	43.0	9.3
Other technical staff	73.9	56.2	55.2	59.9	52.1	40.06	2.5
Support Staff	23.5	24.0	25.2	26.5	28.7	18.5	2.3

The global financial crisis, although still supported by infrastructure investment globally, may result in retrenchments of engineers internationally, which could see many South African engineers returning to South Africa.

4. Capacity Utilisation

The engineering industry continues to operate at close to 100% capacity, which will sooner or later start to impact on the growth potential in the industry, which can not continue to increase exponentially without a subsequent increase in resources. Capacity levels of technical staff are dangerously close to 100%, but spare capacity has increased from 2% to 5% since the last survey. Larger firms, with higher capacity have more capacity available (average utilization rate 94%) compared to medium and smaller firms where the average utilization rate has exceeded 100%. Compared to June 2008, a lower 31% of respondents expect capacity utilization to increase, compared to 60% in the previous survey. Most respondents, 79%, expect capacity utilization to remain static in the next 6 to 12 months.

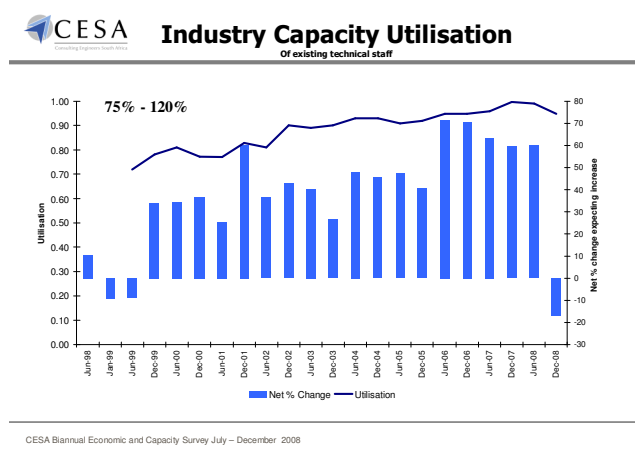


Figure 3

5. Competition in tendering

Competition in tendering generally eases during a time when the availability of work has increased and becomes more severe during times of work shortages. An easing of competition will generally lead to an increase in prices, while prices are consequently cushioned during periods of work shortages due to the fact that many firms tender for the same project. The tendering process is costly and time consuming, and higher levels of competition significantly increases the risk for the engineering firm. The cumbersome tendering process is also seen as a major hurdle for smaller firms. The question is often asked, whether or not the process of tendering for professional services should continue. There are two sides, one against and another in favour of competitive bidding. While the bidding process controls pricing in the industry, uninformed clients that do not understand the terms of reference, adjudicate tenders based solely on price and the BEE component, and do not take into account the quality of services. Therefore while the correct bidding process may be in place (ensuring free market forces to prevail), the mechanisms used is wrong, unless bidding is preceded by a pre-qualification process. The CESA, in conjunction with the CIDB is busy formulating a Register of Consulting Engineers, which will eliminate those firms in the industry that are not adequately qualified to provide professional engineering services. Thus as clients become better informed, less emphasis should be placed on the ECSA Fee Guidelines, and more on competitive bidding, underlined by the pre-qualification process.

The percentage of respondents that said that competition was very keen to fierce dropped marginally from 79% in the December 2007 survey to 78% in the current survey.

6. Discounting

Table 11: Discounting

Employment Category	June 2007	December 2007	June 2008	December 2008
A	14.0%	14.4%	16.3%	15.0%
B	16.3%	16.3%	15.4%	16.7%
C	14.3%	17.5%	13.4%	10.0%
D	21.4%	18.3%	15.0%	12.5%
Average	16.7%	16.6%	15.0%	14.8%

Firms have complained about discounting, as this creates a price war in an industry that already has to grapple with prescribed fees and unproductive procurement procedures. The CESA included a new question in the June 2007 survey, to monitor the extent of discounting offered by firms to clients, benchmarked against the ECSA Guideline Fee Scales.

In the December 2008 survey, the average discount fell to 14,8% from 16,6% in the

December 2007 survey. Larger and medium size firms had the highest discount rate at between 15% and 17%.

7. Market Characteristics

7.1 Sub-disciplines of fee income earned

Table 12: Sub-disciplines: June 2007 – December 2008, Percentage share

Sub-discipline	Jun-07	Dec-07	Jun-08	Dec-08	Change in market share Jun-07/Dec-08	Change in market share Dec-07 / Dec-08
Agricultural	0.1%	0.1%	0.1%	7.5%	7.4%	7.4%
Architecture	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Mechanical building Services	2.8%	3.0%	1.9%	2.0%	0.1%	-0.9%
Civil	50.5%	42.4%	59.4%	45.9%	-13.5%	3.5%
Electrical / Electronic	9.0%	12.3%	5.2%	8.7%	3.6%	-3.6%
Environmental	3.1%	2.9%	1.8%	1.4%	-0.4%	-1.5%
Facilities Management (New)	0.8%	0.3%	0.6%	1.8%	1.2%	1.5%
Geotechnical	1.8%	1.7%	0.9%	0.9%	0.0%	-0.8%
Industrial Process / Chemical	0.7%	0.1%	0.9%	2.1%	1.3%	2.0%
GIS	0.8%	0.4%	0.8%	0.5%	-0.3%	0.1%
Hydraulics (New)	0.3%	0.1%	0.8%	0.2%	-0.5%	0.2%
Information Systems / Technology	0.5%	0.4%	1.4%	1.2%	-0.2%	0.8%
Marine	0.2%	0.6%	5.9%	0.8%	-5.1%	0.2%
Mechanical	2.7%	7.1%	1.6%	1.6%	0.0%	-5.5%
Mining	1.1%	0.8%	0.5%	1.2%	0.7%	0.4%
Project Management	7.6%	6.6%	4.6%	7.0%	2.4%	0.4%
Quantity Surveying	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%
Structural	14.4%	20.8%	12.6%	15.8%	3.2%	-5.0%
Town planning	0.5%	0.2%	0.9%	0.9%	0.0%	0.6%
Total	100.0%	100.0%	100.0%	100.0%		

Table 13: Sub-disciplines: June 2007 – December 2008, Annualized R mill, 2000 prices

Sub-discipline	Jun-07	Dec-07	Jun-08	Dec-08	Change Jun-08/Dec-08	Change Dec-07 / Dec-08
Agricultural	R 7	R 9	R 9	R 775	8591.3%	8896.6%
Architecture	R 5	R 1	R 0	R 2	#DIV/0!	233.5%
Mechanical building Services	R 190	R 212	R 185	R 206	11.4%	-2.7%
Civil	R 3 421	R 3 048	R 5 645	R 4 729	-16.2%	55.2%
Electrical / Electronic	R 612	R 886	R 491	R 899	83.0%	1.4%
Environmental	R 213	R 206	R 170	R 142	-16.5%	-31.1%
Facilities Management (New)	R 53	R 24	R 60	R 190	214.7%	700.3%
Geotechnical	R 119	R 120	R 87	R 93	7.3%	-22.1%
Industrial Process / Chemical	R 46	R 7	R 81	R 219	169.8%	2942.4%
GIS	R 51	R 29	R 78	R 54	-30.7%	88.5%
Hydraulics (New)	R 18	R 5	R 72	R 25	-64.8%	401.5%
Information Systems / Technology	R 33	R 29	R 134	R 127	-5.4%	330.5%
Marine	R 12	R 45	R 558	R 83	-85.1%	83.8%
Mechanical	R 181	R 512	R 155	R 169	9.1%	-67.0%
Mining	R 74	R 60	R 50	R 126	154.0%	109.6%
Project Management	R 517	R 475	R 438	R 723	65.1%	52.3%
Quantity Surveying	R 12	R 4	R 8	R 19	137.7%	438.1%
Structural	R 972	R 1 495	R 1 196	R 1 630	36.3%	9.0%
Town planning	R 36	R 17	R 82	R 88	7.6%	433.1%
Total	R 6 771	R 7 183	R 9 499	R 10 301	8.4%	43.4%

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 also play an important role in earnings.

Table 14: Sub-disciplines: July – December 2008, fee distribution by firm size

Sub-discipline	A (Large)	B (Medium)	C (Small)	D (Micro)	Total (Average)
Agricultural	8.58%	0.00%	0.00%	0.00%	7.5%
Architecture	0.00%	0.00%	1.21%	0.00%	0.0%
Mechanical building Services	1.87%	3.51%	0.50%	0.00%	2.0%
Civil	46.01%	41.45%	63.64%	51.84%	45.9%
Electrical / Electronic	6.50%	29.34%	0.32%	25.60%	8.7%
Environmental	1.33%	1.83%	0.00%	9.76%	1.4%
Facilities Management (New)	2.00%	0.84%	0.00%	0.00%	1.8%
Geotechnical	0.81%	1.83%	0.62%	0.00%	0.9%
Industrial Process / Chemical	2.42%	0.00%	0.00%	0.00%	2.1%
GIS	0.53%	0.63%	0.00%	0.00%	0.5%
Hydraulics (New)	0.26%	0.00%	0.70%	0.00%	0.2%
Information Systems / Technology	1.39%	0.15%	0.00%	0.00%	1.2%
Marine	0.92%	0.00%	0.00%	0.00%	0.8%
Mechanical	1.16%	6.20%	0.00%	0.00%	1.6%
Mining	1.19%	1.83%	0.00%	0.00%	1.2%
Project Management	7.52%	3.58%	2.90%	0.00%	7.0%
Quantity Surveying	0.14%	0.15%	2.41%	0.00%	0.2%
Structural	16.48%	8.66%	23.34%	12.80%	15.8%
Town planning	0.88%	0.00%	4.35%	0.00%	0.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

7.2 Provincial distribution of fee income earned

South African Consulting Engineering Industry

Fee earnings by province: July - December 2008
 R10,301 million (Annualised, constant prices)

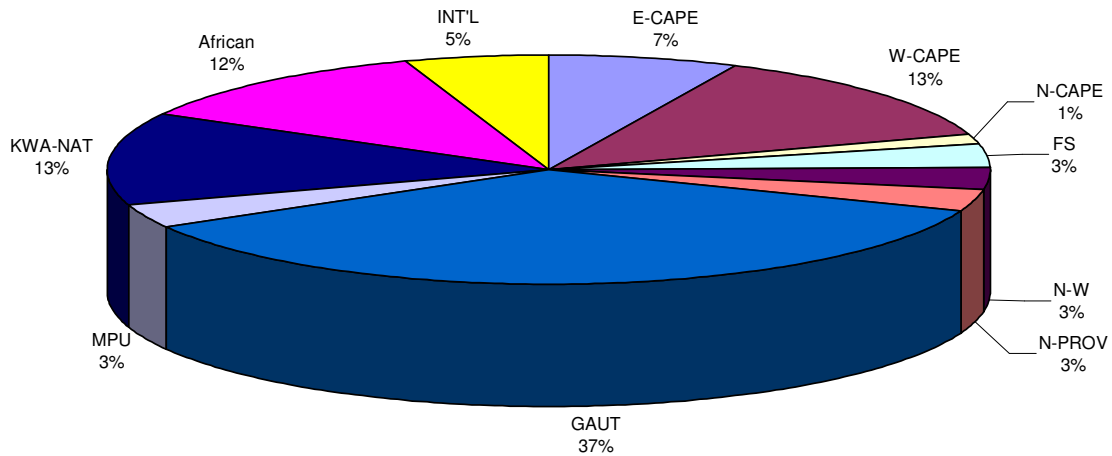


Figure 4

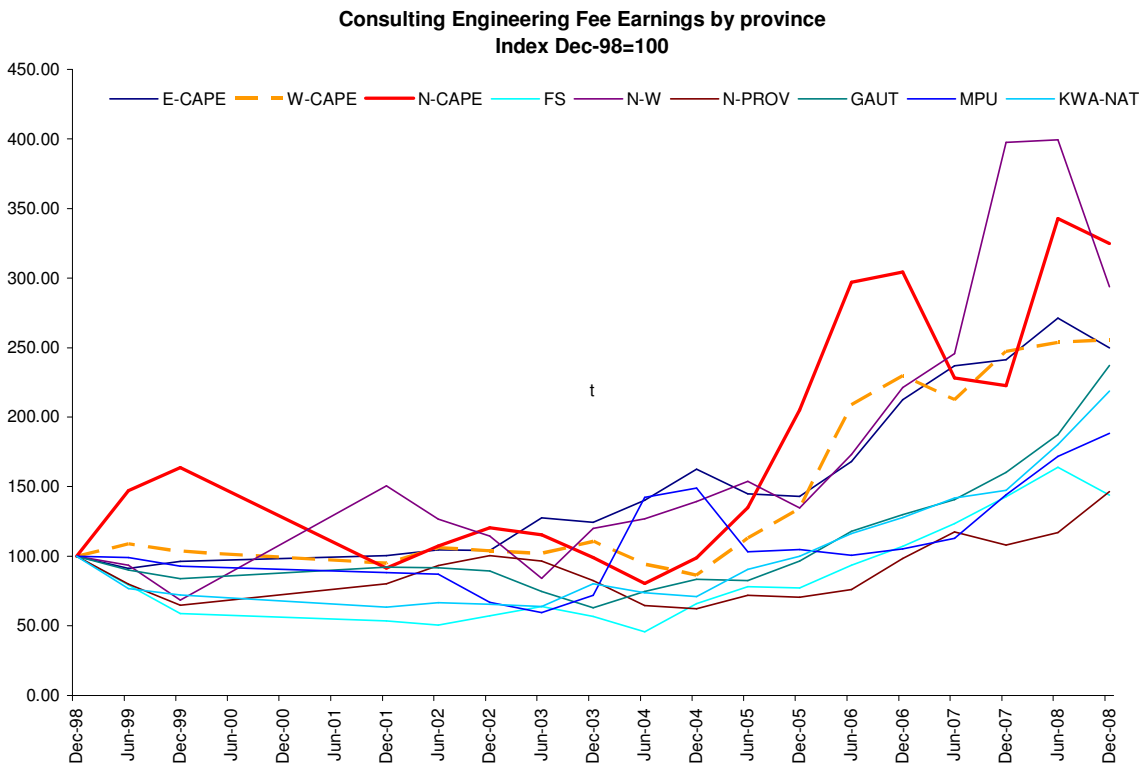


Figure 5

Table 15: Provincial Turnover, R mill, 2000 prices (Annualized)

Province	Survey period							
	Jun-05	Dec-05	Jun-06	Dec-06	Jun-07	Dec-07	Jun-08	Dec-08
EC	396	394	536	640	670	664	836	546
WC	617	745	1,371	956	1,198	1 307	1,263	1 329
NC	62	117	142	123	76	119	180	103
FS	151	191	223	251	296	336	389	247
NW	127	160	210	262	262	586	266	361
LIM	146	126	167	211	242	175	275	288
GAU	1,354	1,550	1,987	1,921	2,306	2 510	3,116	4 007
MPU	198	160	184	176	210	283	304	340
KZN	572	610	766	747	931	811	1,320	1 267
AFRICAN	268	238	306	585	477	324	1,016	1 288
INT'L	65	39	61	112	103	68	532	536
Total	3,957	4,330	5,954	5,983	6,771	7 183	9,499	10,311

Total fee earnings increased in all of the nine provinces, except in the North West province where fee earnings fell by 26% y/y following a 62% annual increase in the June 2008 survey. High capacity provinces gained more prominence contributing a higher 83,2% of total fee earnings, compared to 80% in the December 2007 survey. High capacity provinces include Gauteng, Western Cape, Eastern Cape and Kwazulu Natal.

Table 16: Market share by province and firm size: July - December 2008

Province	A	B	C	D	Industry Average
Gauteng	38.6%	40.8%	43.0%	28.2%	38.9%
Kwazulu Natal	12.4%	12.9%	5.0%	5.4%	12.3%
Western Cape	13.9%	5.7%	0.0%	38.6%	12.9%
Eastern Cape	5.8%	0.4%	10.1%	4.9%	5.3%
Northern Cape	0.7%	3.5%	0.8%	0.0%	1.0%
Mpumalanga	2.2%	11.9%	3.1%	23.0%	3.3%
Free State	1.7%	5.7%	16.2%	0.0%	2.4%
Limpopo	2.1%	5.9%	17.4%	0.0%	2.8%
North West	3.4%	4.2%	4.4%	0.0%	3.5%
Africa	13.9%	3.9%	0.0%	0.0%	12.5%
International	5.3%	5.1%	0.0%	0.0%	5.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

More than a third of annualized fee earnings were generated in Gauteng (38,9%), followed by 12,9% in Western Cape and 12,3% in Kwazulu Natal. In the latest survey, a higher 12,5% (compared to only 4,5% in the December 2007 survey) of fee earnings were generated in Africa and a 5,2% percent in the international market.

Figure 6: Map of fee earnings, by province: July - December 2008

**CESA Fee Earnings Distribution (Rm, constant prices)
July - December 2008 (Annualised)**

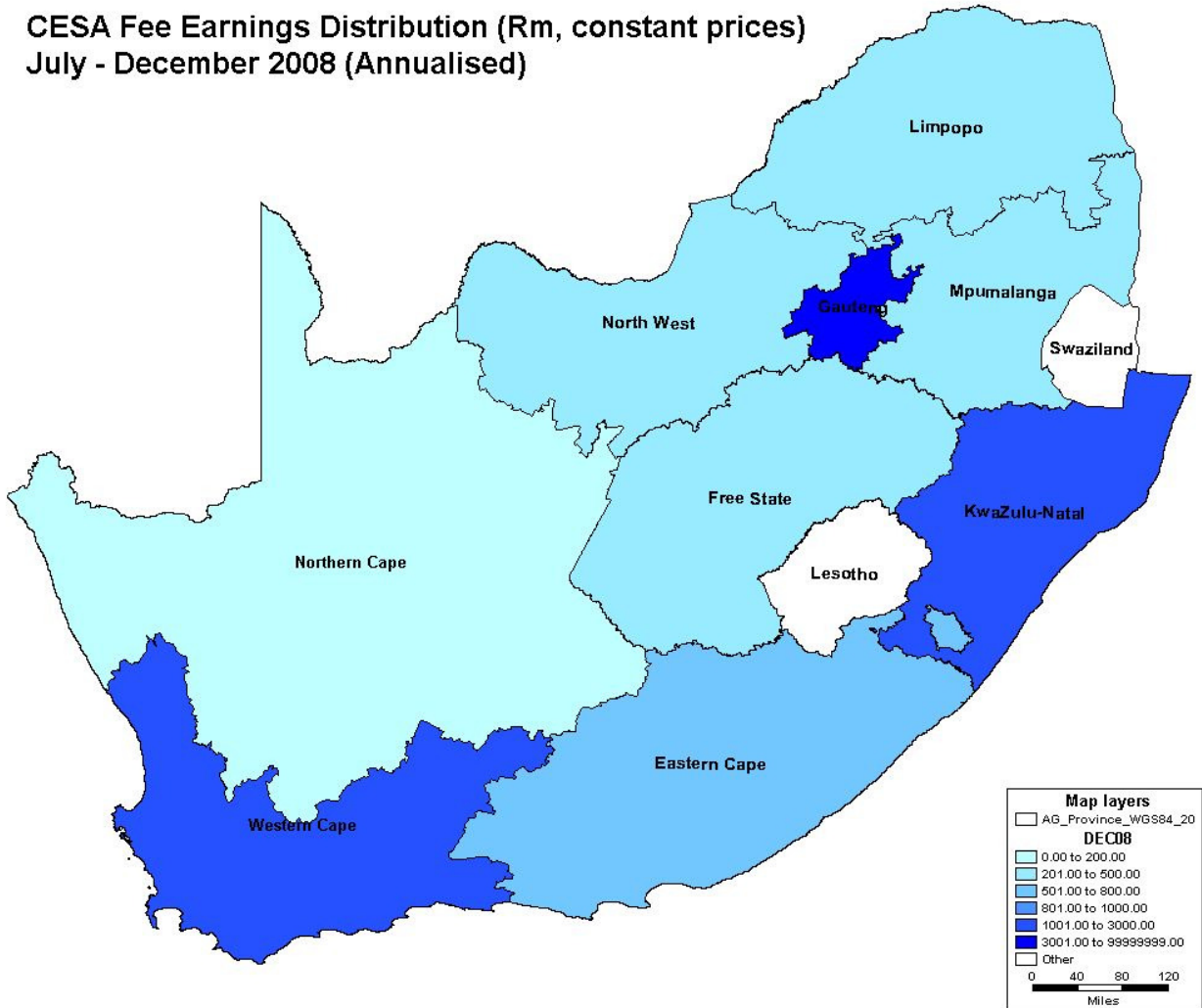
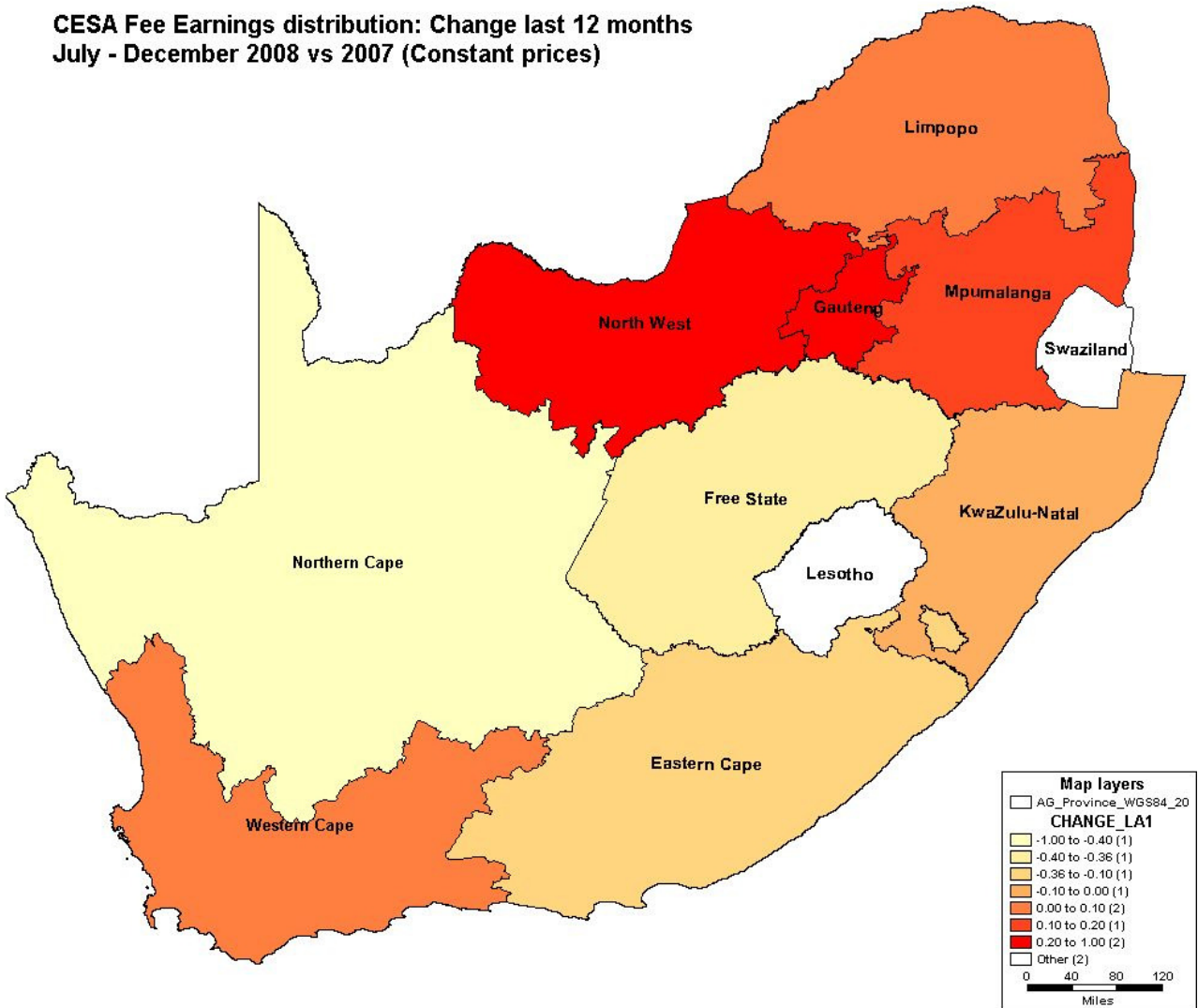


Figure 7

**Fee Earnings (Annualised) as at December 2008
R10,300 (Rm, constant prices - CPI deflated)**

Figure 8: Map of fee earnings, by province: July - December 2008 Percentage Change last 12 months

**CESA Fee Earnings distribution: Change last 12 months
July - December 2008 vs 2007 (Constant prices)**



The strongest growth in the last 12 months was reported in the upper northern parts of South Africa, including Gauteng, North West Province, Mpumalanga and Limpopo. More mediocre growth was reported in Western Cape and Kwazulu Natal.

SA Consulting Engineering Industry Fee earnings by type of client

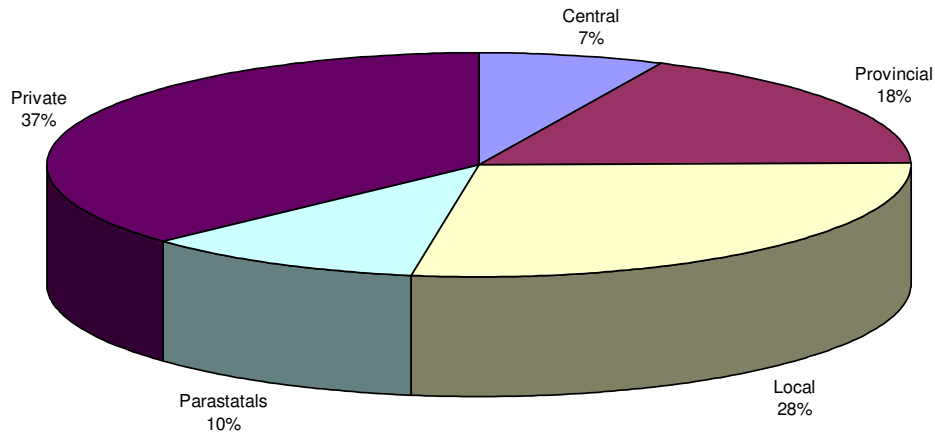


Figure 9

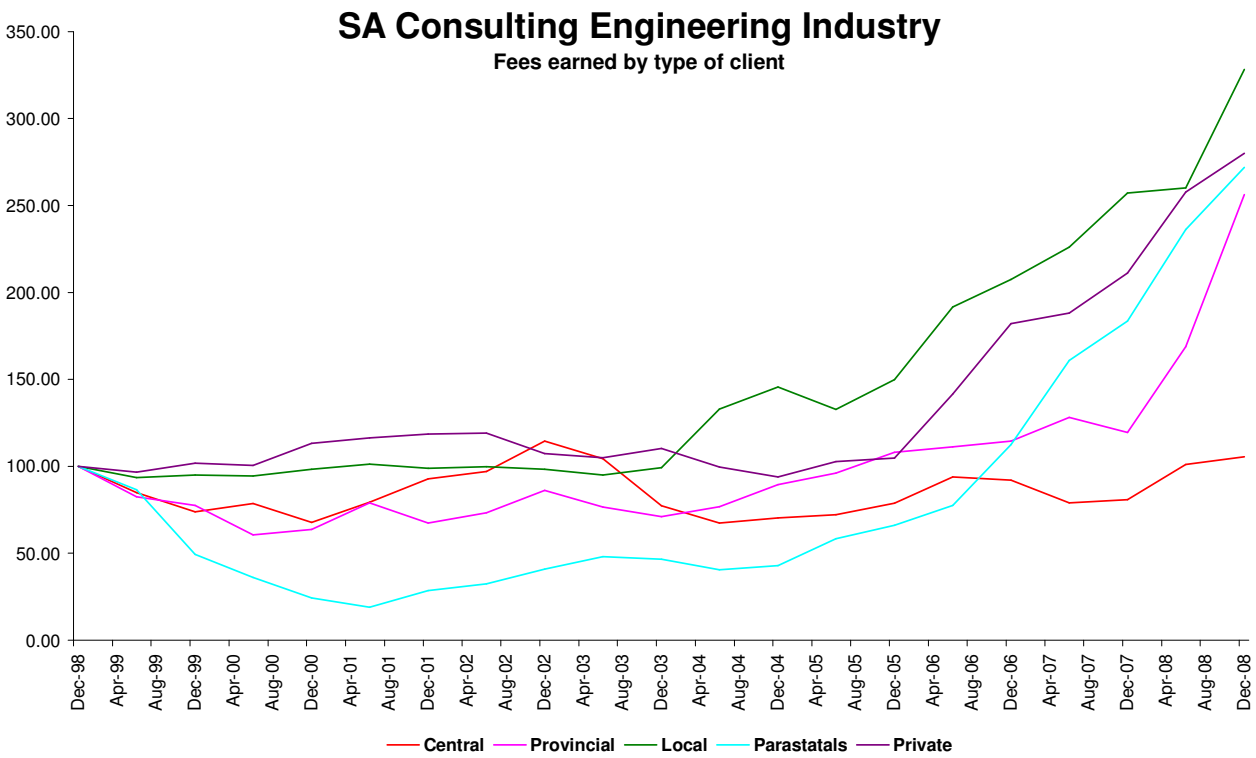


Figure 10

The contribution of local authorities, private sector and state owned enterprises increased notably. Capital projects from state owned enterprises and smaller to medium size infrastructure projects funded through the municipal infrastructure grant supported earnings from state owned enterprises and local government. Fee earnings from the private sector were supported mostly from an increase in commercial developments and some from mining, energy and tourism related projects. The public sector, contributed 61,2% to fee earnings in the last six months of 2008, while the role of the private sector moderated from just over 40% in December 2007 to 38% in December 2008. The role of central government continued to soften and moderated to just 7% in December 2008, from more than 20% in 2002. State owned enterprises represent between 10 and 12% of total fee earnings, a major increase compared to between 3% and 5% in 2004/05.

Table 17: Fee income earned by type of client, R mill, 2000 prices (Annualized)

Client	Survey period						
	Dec-05	Jun-06	Dec-06	Jun-07	Dec-07	Jun-08	Dec-08
Central	658	807	628	605	654	921	721
Provincial	761	683	802	860	692	1,501	1 823
Local	1,165	1,674	1,400	1,950	1,863	1,995	2 874
State Owned	287	366	580	772	771	1,216	1 071
Private	1,459	2,423	2,573	2,587	3,204	3,866	3 811
Total	4,329	5,953	5,983	6,771	7,183	9,499	10, 301

Table 18: Percentage market share by client

Client	Survey period						
	Dec-05	Jun-06	Dec-06	Jun-07	Dec-07	Jun-08	Dec-08
Central	15.2%	13.6%	10.5%	8.9%	9.1%	9.7%	7.0%
Provincial	17.6%	11.5%	13.4%	12.7%	9.6%	15.8%	17.7%
Local	26.9%	28.1%	23.4%	28.8%	25.9%	21.0%	27.9%
State Owned	6.6%	6.1%	9.7%	11.4%	10.7%	12.8%	10.4%
Private	33.7%	40.7%	43.0%	38.2%	44.6%	40.7%	37.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 19: Gross income earned by type of client, by firm size: July - December 2008

Firm Category	Client				
	CEN	PROV	LOC	STATE OWNED	PRIV
> 100 employees (Large)	6.7%	18.2%	28.6%	9.9%	36.5%
Between 20 and 100 (Medium)	9.1%	14.2%	18.1%	16.5%	42.1%
Between 10 and 20 (Small)	10.0%	10.9%	46.0%	0.8%	32.3%
Less than 10 (Micro)	0.0%	17.9%	33.5%	0.0%	48.6%
TOTAL Industry	7.0%	17.7%	27.9%	10.4%	37.0%

By comparison larger firms are more involved with provincial and local government departments, while medium size firms earned 16,5% of their earnings from state owned enterprises. Micro firms focus primarily on the local government and the private sector. The slowdown in the private sector investment is likely to have a negative effect on firms as the private sector is a major source of fee earnings. Small firms where 46% of earnings were generated in the local government departments rely on an effective implementation of government’s infrastructure expenditure which includes allocations towards the municipal infrastructure grant. More emphasis should be placed on the maintenance of infrastructure, where the municipal infrastructure grant can make a significant contribution. CESA is duly concerned over the lack of emphasis on infrastructure maintenance and in particular that of municipal water and waste water treatment works around the country.

7.4 Economic Sectors

Fee earnings (annualised) by Economic Sector 2006, 2007, 2008

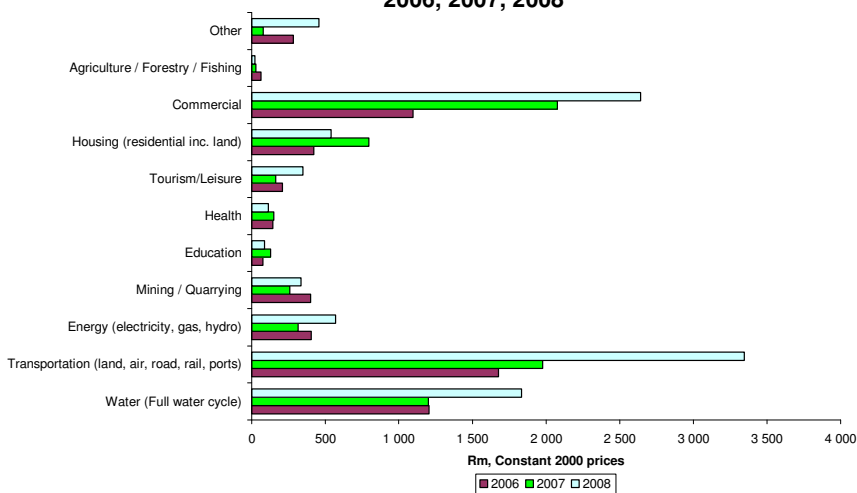


Figure 11

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.

In the last six months of 2008, compared with the first half of the year, more focus was placed on energy, mining/quarrying, tourism/leisure, and commercial sector developments.

Key sectors that lost market share in the last six months, include transportation which fell from 41,2% to 32,5%, and housing down from 9,2% to just 5,2%.

Table 20: Percentage of fee income earned by economic sector

Economic sector	Jun-06	Dec-06	Jun-07	Dec-07	Jun-08	Dec-08	Change in 6 months
Water (Full water cycle)	22.15%	20.11%	19.7%	16.7%	19.5%	17.8%	-1.7%
Transportation (land, air, road, rail, ports)	24.73%	28.05%	29.1%	27.5%	41.2%	32.5%	-8.7%
Energy (electricity, gas, hydro)	7.96%	6.78%	5.0%	4.4%	3.0%	5.5%	2.5%
Mining / Quarrying	1.04%	6.70%	4.4%	3.6%	2.1%	3.3%	1.1%
Education	0.52%	1.29%	1.3%	1.8%	1.0%	0.9%	-0.1%
Health	4.02%	2.40%	2.6%	2.1%	1.4%	1.1%	-0.3%
Tourism/Leisure	0.83%	3.47%	1.4%	2.3%	1.0%	3.4%	2.4%
Housing (residential inc. land)	8.05%	7.09%	8.6%	11.1%	9.2%	5.2%	-4.0%
Commercial ²	25.37%	18.30%	20.5%	28.9%	16.6%	25.6%	9.0%
Agriculture / Forestry / Fishing	1.07%	1.08%	1.9%	0.4%	0.8%	0.2%	-0.6%
Other	4.26%	4.73%	5.7%	1.1%	4.2%	4.4%	0.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 21: Fee income earned by economic sector, Constant 2000 prices, Annualized

Economic sector	Jun-06	Dec-06	Jun-07	Dec-07	Jun-08	Dec-08	Real % Change Dec-07/Dec-08
Water (Full water cycle)	1,319	1,203	1,336	1,200	1,848	1 834	52.9%
Transportation (land, air, road, rail, ports)	1,472	1,678	1,973	1,975	3,913	3 345	69.3%
Energy (electricity, gas, hydro)	474	406	336	316	289	571	80.6%
Mining / Quarrying	62	401	297	259	204	336	29.9%
Education	31	77	86	129	92	89	-31.5%
Health	239	144	173	151	134	115	-23.5%
Tourism/Leisure	50	208	95	165	93	348	110.7%
Housing (residential inc. land)	479	424	582	797	875	540	-32.3%
Commercial	1,511	1,095	1,385	2,076	1,580	2 641	27.2%
Agriculture / Forestry / Fishing	64	65	125	29	74	23	-21.1%
Other	254	283	383	79	397	456	477.5%
Total	5,954	5,983	6,771	7,183	9,499	10 300	43.5%

² Commercial includes: Manufacturing, industrial buildings, communication, financial, facilities management

7.4.1 Economic sector, for high capacity provinces (Fee earnings of 70% or more)

Table 22: Fee income by sector, by high capacity province (representing more than 70% of firm's fee income during period under review) Average 2007

	Water (Full water cycle)	Transportation (land, air, road, rail, ports)	Energy (electricity, gas, hydro)	Mining / Quarrying	Education	Health	Tourism/Leisure	Housing (residential inc. land)	Commercial	Agriculture / Forestry / Fishing	Other	TOTAL
Western Cape	6.7%	21.6%	4.9%	0.0%	0.5%	0.8%	6.4%	24.6%	26.2%	0.0%	8.2%	100.0%
Gauteng	16.0%	23.2%	9.0%	0.8%	2.2%	1.4%	1.4%	7.6%	36.7%	0.0%	1.7%	100.0%
Kwazulu Natal	14.0%	35.0%	6.4%	1.5%	2.0%	5.7%	2.6%	8.0%	12.7%	3.2%	9.0%	100.0%
Eastern Cape	35.1%	8.5%	1.8%	0.0%	4.5%	7.1%	2.5%	4.1%	34.2%	2.3%	0.0%	100.0%

Table 23: Fee income by sector, by high capacity province (representing more than 70% of firm's fee income during period under review) Average 2008

	Water (Full water cycle)	Transportation (land, air, road, rail, ports)	Energy (electricity, gas, hydro)	Mining / Quarrying	Education	Health	Tourism/Leisure	Housing (residential inc. land)	Commercial	Agriculture / Forestry / Fishing	Other	TOTAL
Western Cape	5.6%	72.3%	0.1%	0.0%	0.5%	0.1%	0.8%	7.9%	9.0%	0.0%	3.6%	100.0%
Gauteng	21.2%	26.6%	1.5%	0.0%	2.2%	0.0%	0.7%	31.1%	16.6%	0.0%	0.0%	100.0%
Kwazulu Natal	20.0%	8.2%	5.8%	0.0%	12.6%	18.4%	4.2%	10.0%	20.8%	0.0%	0.0%	100.0%
Eastern Cape	Data not available due to inadequate sample size											100.0%

8. Cost escalation trends

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 index is being closely monitored, but the CPI will be used in the meanwhile to deflate all financial information, until such time CESA formally agrees to apply the CESA Labour cost index as a price deflator.

The average unit labour cost in the consulting engineering industry increased by 66,0% between 2002 and 2007, from an average of R75 per hour (based on 160 hours per month) to R127.21 (2007). Average unit costs, smoothed

over a 12 month period (2 surveys) increased by an average annual rate of 21,7% in 2008, compared to 9,6% in 2007, and 10% in 2006. In the December 2008 survey labour unit costs escalated by a staggering 12,8% since the previous survey, which is 25,5% higher compared to the December 2007 survey.

Since 2004 labour cost inflation in the consulting engineering industry has consistently surpassed the consumer inflation rate, which may suggest that it is time to use the CESA Labour cost to deflate fee earnings, as an unrealistic deflator will skew real growth percentages of fee earnings for the industry.

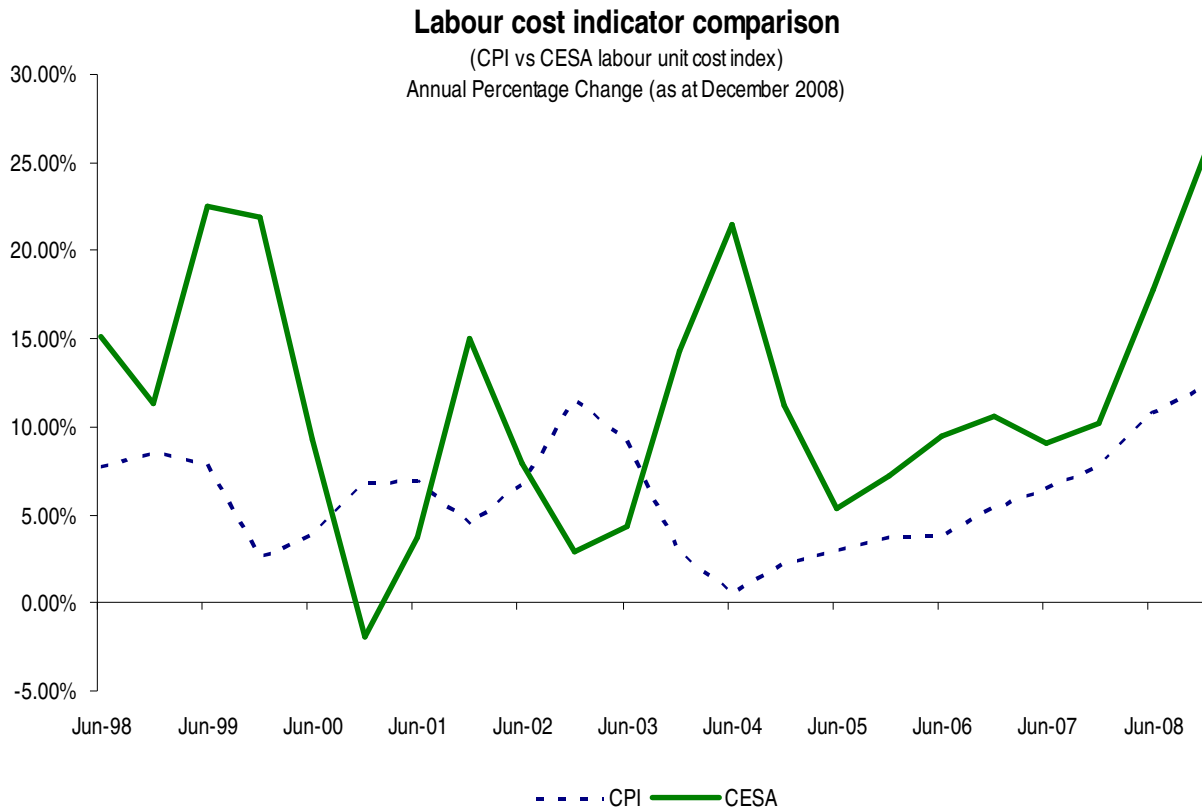


Figure 12

Table 24: 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-96	R 41.85			
Jun-97	R 43.75	67.41		
Dec-97	R 51.64	75.13		
Jun-98	R 46.93	77.63	15.2%	
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%

Changes in the general cost of living (as measured by the Statistics South Africa's Consumer Price Index) are not necessarily indicative of labour cost changes in the consulting engineering industry. Since 2003, changes in labour costs in the engineering industry have persistently exceeded the CPI and are likely to continue doing so in the near term. However, the CPI may have a strong influence in the determination of ECSA Fees, which has shown an average increase of 6,2% in 2005, 4% in 2006 and 4,5% in 2007 and 9,2% in 2008. As expected the CPI accelerated to an annual increase of 11,6% in the first six months of 2008, due to strong increases in food, oil and energy prices.

The cost of employment in the consulting engineering industry (a major contributor to cost in the services industry)

has increased substantially over the last couple of years, which means the increase in ECSA fees are clearly not keeping pace with rising input costs as experienced by the engineering industry.

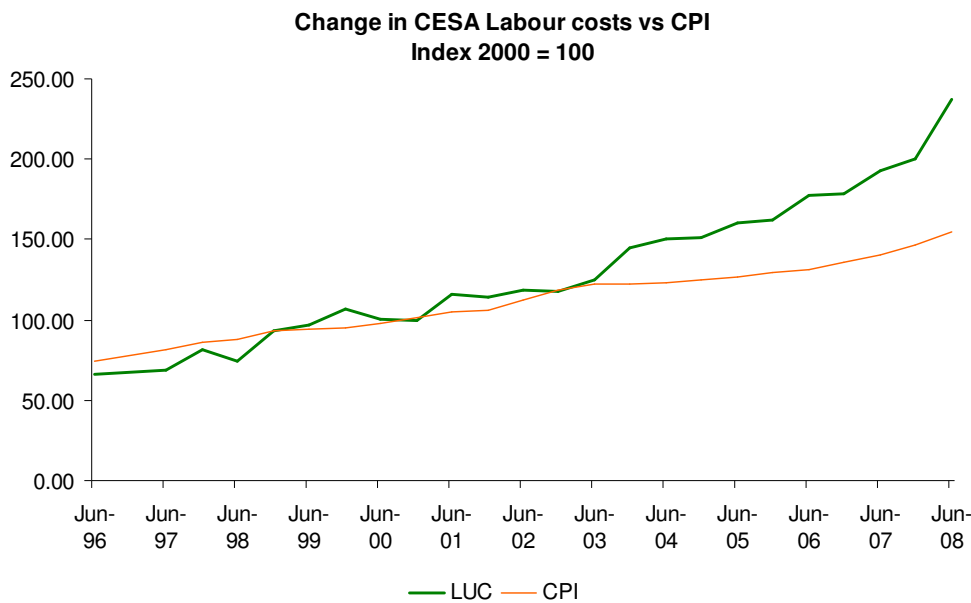


Figure 13

Table 25: Labour unit cost per hour, high capacity province: June 2006 –December 2008
 (Where more than 70% of fees were earned)

High capacity Province	Unit cost per hour (based on 160 hours) June 2006	Unit cost per hour (based on 160 hours) December 2006	Unit cost per hour (based on 160 hours) June 2007	Unit cost per hour (based on 160 hours) December 2007	Unit cost per hour (based on 160 hours) June 2008	Unit cost per hour (based on 160 hours) December 2008
Gauteng	R173	R106	R114.2	R175.0	R208.14	
Western Cape	R95	R97	R98.5	R124.8	R128.74	No Data available due to limited sample size
Kwazulu Natal	R75	R76	R92.4	R117.4	R108.64	
Eastern Cape	R82	R67	R87.4	R97.8	R120.31	

The average unit cost per labour was the highest in Gauteng, followed by Western Cape, Eastern Cape and Kwazulu Natal, based on information received in the June 2008 survey. Earnings per province were based on average earnings of 70% or more within a particular province, which does unfortunately produce a relatively smaller sample per province.

9. Delayed payments

Table 26: Fee income outstanding for 90 days or more (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
	July-Dec 2006 (revised)	Jan-Jun 2007	July - Dec 2007	Jan - Jun 2008	Jul - Dec 2008	
	%	%	%	%	%	
Central government	4.1%	4.8%	10.4%	5.3%	3.9%	R38
Provincial government	7.5%	5.7%	5.4%	5.8%	4.6%	R112
Local government	9.9%	6.9%	8.3%	10.5%	7.4%	R289
State owned enterprises	7.2%	3.2%	5.9%	5.8%	8.6%	R128
Private Sector	8.5%	9.9%	8.6%	9.6%	11.9%	R657
Foreign (all EX-RSA)	30.0%	29.2%	42.0%	17.5%	32%	R1 096
Total	11.2%	10.3%	11.3%	11.1%	13.6%	R2 321

*** 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.

10. Education and Training

Table 27: Contribution to education and training (excluding 1% CETA Levy)

Survey	Bursaries % of salary bill	Bursaries R mill current prices	Training % of Salary bill ³	Training R mill current prices
Jun-98	1,0%	R20	2,2%	R 42.1
Dec-98	1,0%	R17	2,7%	R 45.1
Jun-99	1,9%	R12	0,7%	R 38.9
Dec-99	0,7%	R11	1,5%	R 23.1
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% ⁴	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

Training expenses, which includes the costs directly associated with the training as well as the cost of salaries but excludes the 1% CETA skills development levy, moderated to 11,8%, from 32% in the June 2008 survey. Direct training costs represented a lower 0,8% of the salary and wage bill. Bursaries also decreased from 1,1% of the salary and wage bill to 0,5% - the lowest level since June 2005. The industry spent a higher R111 million (annualized) on direct training during the second half of 2008.

As engineering and technical skills remain a scarce resource the need for training intensifies. Firms are very sensitive to the availability of training, in terms of location and the type of training provided. There is also a growing need for a greater distribution (provincially) of training courses offered.

Approximately 23% of the firms that responded to the survey spent more than 2,5% of their salary and wage bill on direct training costs. This compares well to previous surveys.

Bursaries decreased from an average of 1,1% of the salary and wage bill during the first six months of 2008, to 0,5% in the last six months of 2008. The industry spent approximately R40 million on bursaries according to the December 2008 survey.

The engineering industry has already achieved (in fact exceeded) the target set in the Construction Charter, which states that 0,3% of the payroll must be spent on bursary expenditure on black students. In the June 2007 survey, 0,44% of the salary bill was spent on black bursaries. However, the rate fell back to 0,34% in December 2007, increased to 0,5% in the June 2008 survey, but slipped again to 0,24% in December 2008.

Table 28: Contribution by firm size on direct costs relating to training: June 2007 - December 2008

Firm category	Training: Direct Costs % of Salary and Wage Bill December 2007	Bursaries % of Salary and Wage Bill December 2007	Training: Direct Costs % of Salary and Wage Bill June 2008	Bursaries % of Salary and Wage Bill June 2008	Training: Direct Costs % of Salary and Wage Bill December 2008	Bursaries % of Salary and Wage Bill December 2008
A	1.5%	0.7%	1.1%	0.8%	0.7%	0.4%
B	0.7%	0.4%	0.8%	0.6%	1.1%	0.5%
C	1.7%	0.6%	1.1%	3.1%	0.7%	1.2%
D	1.7%	1.3%	1.6%	1.5%	6.1%	0.3%
Total	1.3%	0.6%	1.4%	1.1%	0.8%	0.5%

Smaller firms are spending 1,6% of their salary bill on training, compared to 1,1% spending by larger firms..

Information supplied by the Department of Education showed that there has been an increase in student enrolments within the field of **Science, Engineering and Technology**, between 2001 and 2007.

Full-time equivalent student enrolments of contact and distance mode students in public higher education institutions increased by 17,7% from 130 320 in 2001 to 214 341 in 2007. There has been a 39% increase between 2005 and 2007, or almost 61 000 students. It must be remembered though that not all these students will finally graduate.

³ Training now includes all training, in-house and external. Comparisons with previous surveys not compatible.

⁴ Revised: Removed outlier questionnaire erroneously included in previous sample.

CESA along with other professional employer organizations in the industry suspended their participation in the activities of the CETA council and all its committees in October 2008. They jointly appealed to the Minister of Labour to intervene by placing CETA under administration. Frustrated by the lack of “training and skills development action” from the CETA has resulted in many large firms opening their own training centers and are spending millions on training.

11. Professional Indemnity Insurance

The annual premium as a percentage of gross fee income over a 12 month period, averaged 2,3% for the industry (unweighted) compared to a lower 1,4% in the previous survey. The premium for professional indemnity insurance was still the lowest amongst larger firms, but rose to 1,3% (up from 0,7% in June 2008).

Claims represented on average 27% of total premiums paid over the last five years.

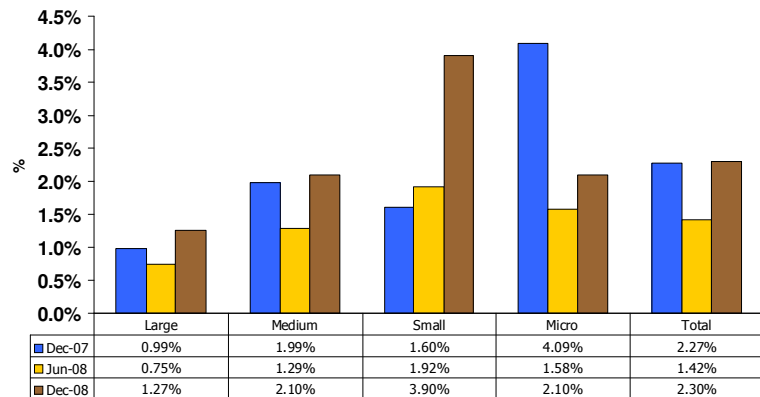
In terms of the various firm’s perceptions of risk, close to 60% of respondents said that their firm had a low risk exposure, almost 40% said medium. Larger firms are exposed to medium risk, while smaller firms reported overwhelmingly that their firms operated under a low risk environment.

The industry’s average limit of indemnity as a percentage of gross fee income over the 12 month period ranged from 15% to as much as 200%, with a weighted industry average of 16%. Larger firms averaged 12,0%, medium size firms a higher 35%, while small and micro firms have the highest indemnity insurance cover of 100% and 75% of annual gross fee income, even though they perceive their firms to be operating in a low risk environment, they can not afford the risk of not being adequately covered. Although their monthly premiums are a higher percentage of gross income, monthly contributions average between R4000 and R10 000 per month for small firms compared to an average of R123 000 per month for larger firms. The premiums may vary according to a firm’s exposure and can be affected on a project by project basis.

During the last five years, the majority of claims were however reported by large firms (70% of claims as per the December 2008 survey), although a few large firms reported that between 60% and 70% of their claims were not refunded. Out of a total of 44 claims submitted by large firms in the last 5 years, 40% or 17 claims were not funded by the insurers for reasons most likely related to exclusionary clauses. This seems to be prevalent mostly amongst larger firms as medium, small and micro firms did not report on any claims not refunded.



Professional Indemnity Insurance: Annual Premium %



CESA Biannual Economic and Capacity Survey July – December 2008

Figure 14

Table 29: Professional Indemnity Insurance, Summary by firm size: December 2008

	Premium as % of gross fee income	Value of claims paid	Limit of indemnity as % of gross fee income (weighted)	Current deductible as % of limit of indemnity (weighted)
Large	0.7%	39.2%	12%	3.9%
Medium	2.1%	11.2%	32%	2.2%
Small	3.9%	6.5%	100%	4.8%
Micro	2.1%	0%	74%	1.9%
Industry Average	2.2%	27.8%	16%	4.9%

Quality Management System

A quality management system is a control that is implemented at various stages of production process or service delivery stages. A QMS system is important for all firms, big and small. All the large firms reported to have a QMS in place, compared to 93% of medium size firms, and 75% of micro firms, averaging 84% for the industry as whole.

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:9001:2000 frame work, recognizing this framework as being comprehensive and internationally recognized.

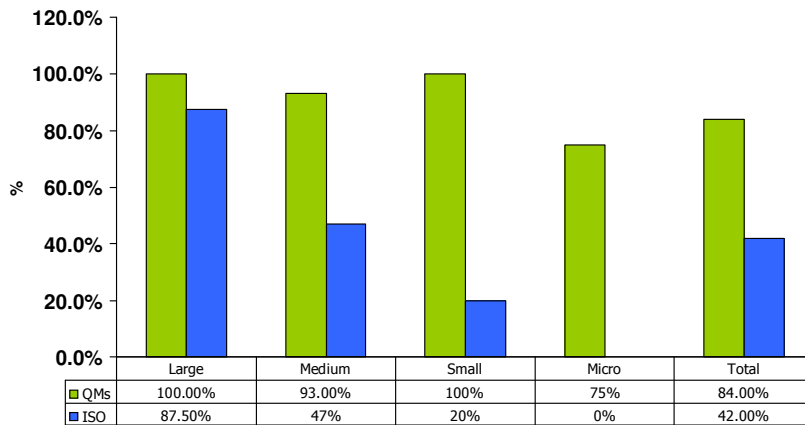
Members can, provided the correct procedures are followed, claim a portion of the skills development levy for quality management training.

For more information on statutory requirements for members, please refer to the advisory note released by CESA.

Members are obliged to use accredited agents should they wish to obtain an ISO 9001:2000 certificate. Details of certification

bodies used by Members consenting to make this information available, is published on the CESA website. Compared to 75% of the smaller firms that said they do have a QMS, none of them were ISO accredited. In the larger firms, where 100% reported to have a QMS in place, approximately 87% were ISO accredited, an improvement compared to the 81% in the June 2008 survey. With regards to the medium size firms, a higher 47% were ISO accredited, also an improvement from the 36% in the previous survey. Smaller firms improved from 11% to 20% compliance.

CESA Quality Management System vs ISO 9001:2000 Certificate December 2008



CESA Biannual Economic and Capacity Survey July – December 2008

The industry has now improved from an average of 24,6% ISO compliance in the December 2007 survey to 42% in last survey.

Figure 15

12. Employment profile analysis

Consulting Engineering Industry Employment Profile: JULY - DECEMBER 2008

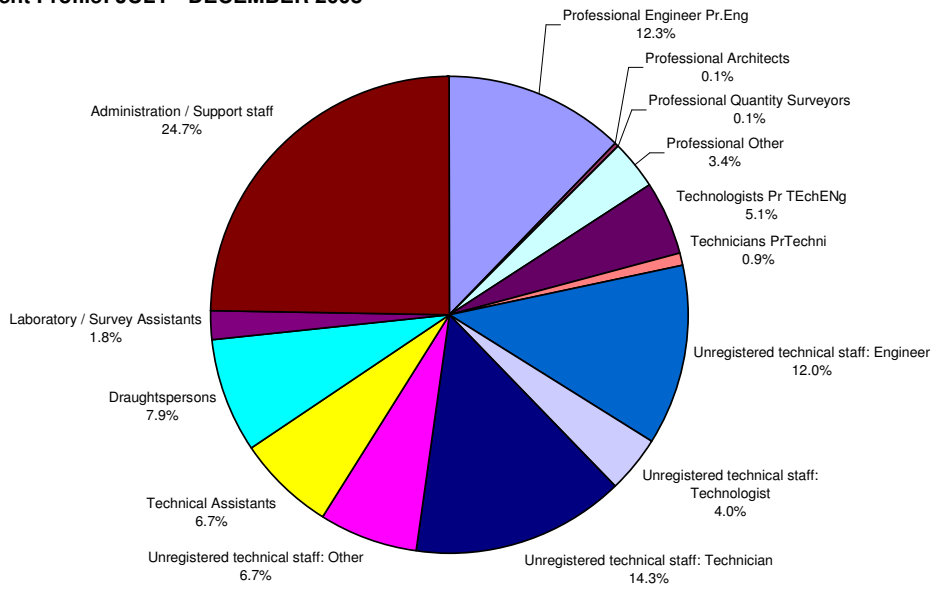


Figure 16

Table 30: Employment profile of the consulting engineering industry: Percentage contribution: July - December 2008

Job Category	Black	Coloured	Asian	White	Total
Professional Engineer Pr.Eng	4.7%	2.4%	2.6%	90.3%	100.00%
Professional Architects	0.0%	0.0%	0.0%	100.0%	100.00%
Professional Quantity Surveyors	0.0%	0.0%	16.7%	83.3%	100.00%
Professional Other	15.2%	3.5%	4.5%	76.8%	100.00%
Technologists Pr TEchENg	5.4%	3.7%	4.4%	86.5%	100.00%
Technicians PrTechni	19.6%	7.8%	7.8%	64.7%	100.00%
Unregistered technical staff: Engineer	22.5%	4.4%	14.0%	59.1%	100.00%
Unregistered technical staff: Technologist	26.3%	7.3%	5.6%	60.8%	100.00%
Unregistered technical staff: Technician	42.3%	8.4%	6.9%	42.3%	100.00%
Unregistered technical staff: Other	38.5%	3.6%	7.7%	50.3%	100.00%
Technical Assistants	39.5%	6.7%	4.4%	49.5%	100.00%
Draughts Persons	17.6%	9.5%	10.1%	62.8%	100.00%
Laboratory / Survey Assistants	88.0%	1.9%	8.3%	1.9%	100.00%
Administration / Support staff	37.6%	10.7%	4.8%	46.9%	100.00%
Total	28.9%	6.8%	6.6%	57.7%	100.00%

Table 31: Employment profile of the consulting engineering industry: Percentage contribution: July - December 2008: Change in distribution June 2008 survey

Job Category	Black	Coloured	Asian	White
Professional Engineer Pr.Eng	0.3%	0.2%	-0.9%	0.4%
Professional Architects	0.0%	0.0%	0.0%	0.0%
Professional Quantity Surveyors	-75.0%	0.0%	16.7%	58.3%
Professional Other	-0.2%	-0.3%	0.1%	0.5%
Technologists Pr TEchENg	-0.7%	-4.1%	-0.8%	5.6%
Technicians PrTechni	-16.3%	-1.8%	-3.5%	21.6%
Unregistered technical staff: Engineer	3.2%	0.8%	-3.2%	-0.8%
Unregistered technical staff: Technologist	-26.7%	-0.9%	2.2%	25.4%
Unregistered technical staff: Technician	-1.5%	0.5%	4.1%	-3.1%
Unregistered technical staff: Other	13.5%	3.6%	7.7%	-24.7%
Technical Assistants	-3.1%	-4.5%	-2.9%	10.5%
Draughts Persons	5.3%	0.7%	4.7%	-10.7%
Laboratory / Survey Assistants	4.6%	-0.5%	7.1%	-11.2%
Administration / Support staff	2.7%	-1.1%	0.9%	-2.5%
Total	-0.9%	-1.0%	0.3%	1.6%

13. Ownership / Equity

Table 32: Black ownership / equity by company and professional type, as % of TOTAL Equity (including⁵ Asian, Colored)

Company Type	Owner category	Professional Category	Jun-06	Dec-06	Jun-07	Dec07	Jun-08	Dec-08
(PTY) LTD	Executive Directors	Pr.Eng	16.9%	16.4%	14.9%	11.5%	12.3%	7.4%
		PrTechEng	29.6%	33.3%	24.4%	38.5%	25.0%	16.7%
		Other	61.4%	65.8%	47.2%	28.9%	37.8%	43.7%
		TOTAL	25.6%	25.3%	21.9%	16.8%	18.6%	13.5%
	Non-Executive Directors	Pr.Eng	9.9%	7.4%	34.5%	27.3%	40.0%	71.4%
		PrTechEng	20.0%	20.0%	50.0%	33.3%	-	-
		Other	51.0%	48.4%	75.6%	69.2%	80.0%	85.0%
	TOTAL	21.7%	23.9%	58.5%	55.0%	72%	81.5%	
CC	Members	Pr.Eng	16.1%	12.1%	12.2%	20.8%	41.7%	28.6%
		PrTechEng	40.0%	37.5%	36.8%	50.0%	33.3%	66.7%
		Other	57.1%	70.0%	65.2%	33.3%	42.9%	50.0%
		TOTAL	31.7%	28.8%	32.5%	24.1%	41.2%	36.8%
Partnership	Partners	Pr.Eng	50.0%	16.7%	0.0%	0.0%	0.0%	0.0%
		PrTechEng	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%
		Other	100.0%	66.7%	33.3%	-	-	-
		TOTAL	75.0%	40.0%	7.7%	-	0.0%	0.0%
Total			25.3%	25.5%	28.4%	21.7%	27.3%	22.4%

Black (including Asian and Colored) equity, including executive directors, non-executive directors, members and partners, represented a lower 22,4% (down from 27,3% in the June 2008 survey) of total equity in the industry. Black executive directors represented 13,5% of total equity, while black non-executive directors represented 81,5%. Black members taking equity in closed corporations were still higher by historical terms, but softened from 41% in the June 2008 survey to 36,8%.

⁵ Changed from previous survey to include Asians and Colored

14. 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.⁶ 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.

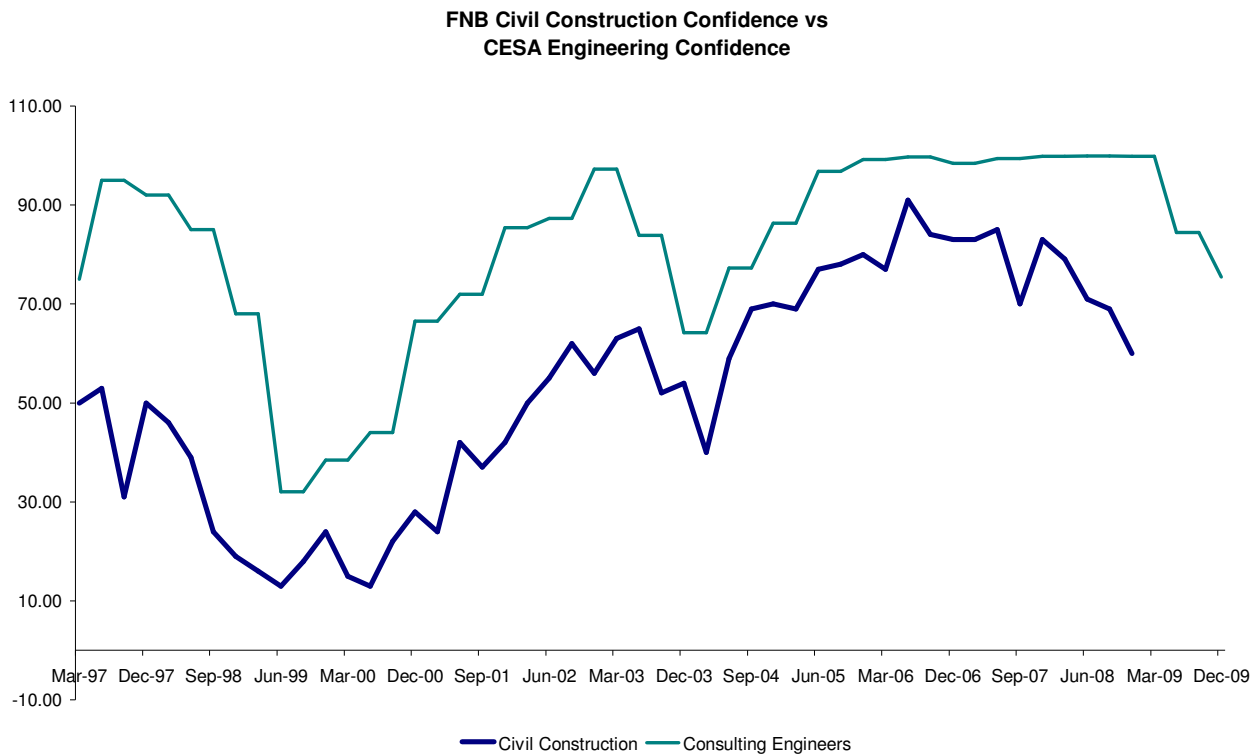


Figure 17

For the first time since 2002 there has been a marked shift in the engineering confidence. Confidence levels amongst consulting engineers remained above 98% since 2005, showing exceptional levels of satisfaction with current working conditions, despite facing challenges such as skills shortages. However, confidence levels have deteriorated for 2009, as the index falls from 99.8 to an expected 84.3 in the first half of 2009 and to 75.2 in the last six months of 2009 (the lowest level since December 2003).

Confidence in the engineering sector has lagged business sentiment, following initial signs that business sentiment has started to weaken in the first 6 months of 2008. The SACCI Business confidence index moderated from an average of 97.3 in the last six months of 2007 to 93.5 in the first six months of 2008 and 88.0 in the second half of the year. Data for the first two months of 2009 has shown an accelerated decline in confidence averaging 83.4.

A comparison of confidence levels within the contracting fraternity and the engineering industry, shows that although the engineering profession was until recently relatively optimistic, conditions amongst contractors were less optimistic. The exact reason for this is uncertain, and the fact that the engineering confidence index has been weighted while the FNB confidence index (compiled by the BER) is not, could be a possible reason as smaller firms are certainly less optimistic given the challenges that these firms have to deal with. Another possible explanation is the fact that although many projects are in planning stages,

⁶ The net percentage reflects only those members that expect conditions to be satisfactory, quite busy or very busy.

implementation of these projects are challenged by various obstacles including provincial and local government inefficiencies and rising building costs eroding available budgets.

Overall engineering confidence levels are expected to contract by 15% and 24% year on year during the first and second half of 2009.

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
Jun-98	85.0	-7.61%	-10.5%
Dec-98	68.0	-20.00%	-26.1%
Jun-99	32.0	-52.94%	-62.4%
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	84.3	-15.53%	-15.6%
Dec-09	75.2	-10.79%	-24.6%

15. Pending concerns

- Due to the lack of skills in the engineering profession and the multi billion infrastructure programme outlined by national government, and state-owned enterprises such as Eskom, ACSA and Transnet, engineers should be classified as a “scarce” resource. Furthermore it is believed that remuneration should reflect the high value the engineering profession brings to the economy in support of infrastructure development.
- Clients seem to enforce BEE procurement policies on firms that have a turnover of less than R5 million. This is not in line with current BEE legislation that clearly stipulates that these firms are seen as 100% compliant. Smaller firms should obtain a “BEE compliance certificate” to accompany all tendering documentation.
- Lack of skills remains a critical challenge, but a potential global slowdown may have a positive impact on skills availability in the country as South African engineers may return to the country. Firms are nonetheless subjected to rigid targeted procurement policies and while the industry has succeeded in increasing black participation across all employment categories, increasing black participation at both senior management and professional levels are much harder to achieve, due to the unavailability of experienced black professionals in numbers sufficient to cater to the industry’s requirements. The unfortunate reality is that, based on current estimates, experienced black professionals will be in short supply for a number of years to come. Firms have reported that work has to be turned down due to lack of available resources.
- The tendering environment remains difficult and is worsened by irresponsible pricing by some of the firms. Clients are also putting greater emphasis on price, forcing engineers to take a bigger risk in their tendering approach. There is a call from firms to CESA to push for reforms in the seemingly one sided tendering environment and to take a more aggressive approach towards government to improve the tendering and pricing environment on behalf of its clients. Due to this problem in the industry, discounting is now more closely monitored through the CESA Surveys.
- The growing responsibility placed on local municipalities to manage and implement infrastructure budgets, can be catastrophic for the entire industry (not just the consulting engineering profession) if municipalities do not act with responsibility, transparency and integrity. The Department of Provincial and Local Government regularly withhold grants from municipalities due to poor spending and/or delivery. Professionals are however becoming more involved to aid service delivery.
- A key challenge faced by the industry is uninformed clients, who accept tenders from firms that are not qualified to do the work, because the tender is adjudicated on price and the client isn’t always educated in engineering services. However, “large” clients put pressure on firms to reduce rates, sometimes by as much as 50% of ECSA fees. The establishment of a national Register of Consulting Engineers (an initiative by the CIDB) will ensure that only properly qualified engineers will be able to get work from the government. It will therefore become more difficult for disreputable firms to prey on uninformed clients.
- Rates prescribed by government must take cognizance of the fact that skill shortages are pushing up labour costs, affecting the firms’ ability to operate profitably. The CESA labour cost indicator can provide meaningful input in CESA’s negotiations with government to ensure fair and accurate adjustments to prescribed rates. The growing deficit between ECSA fees and labour costs has already been illustrated in the report.
- The industry is also faced by the challenge that its image has suffered over the years due to poor payment, low fees and shortage of work. This needs to be addressed as a matter of urgency. Appropriately addressing remuneration will be a good place to start.

15. Employment Tables

Table 34: Employment Breakdown, by race, gender and job category: July - December 2008

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	104	7	111	55	0	55	59	3	62	2 035	75	2 110	2 253	85	2 338
Professional Architects	0	0	0	0	0	0	0	0	0	26	0	26	26	0	26
Professional Quantity Surveyors	0	0	0	0	0	0	3	0	3	13	3	16	16	3	20
Professional Other	62	36	98	13	10	23	10	20	29	316	179	495	400	244	645
Technologists Pr TEchENg	46	7	52	33	3	36	42	0	42	752	81	833	873	91	964
Technicians PrTechni	33	0	33	7	7	13	13	0	13	98	10	107	150	16	166
Unregistered technical staff: Engineer	449	68	518	94	7	101	293	29	322	1 065	293	1 358	1 901	397	2 298
Unregistered technical staff: Technologist	176	23	199	42	13	55	36	7	42	413	46	459	667	88	755
Unregistered technical staff: Technician	912	247	1 159	192	39	231	156	33	189	944	215	1 159	2 204	534	2 738
Unregistered technical staff: Other	303	189	492	39	7	46	72	26	98	462	179	641	876	400	1 276
Technical Assistants	365	137	501	62	23	85	39	16	55	433	195	628	899	371	1 270
Draughts Persons	169	98	267	75	68	143	130	23	153	544	407	951	918	596	1 514
Laboratory / Survey Assistants	296	13	309	7	0	7	29	0	29	7	0	7	339	13	352
Administration / Support staff	736	1 039	1 774	130	374	505	55	173	228	433	1 781	2 214	1 354	3 366	4 721
Total	3 650	1 862	5 512	749	550	1 299	938	329	1 266	7 540	3 464	11 004	12 876	6 205	19 081
% of total	19.1%	9.8%	28.9%	3.9%	2.9%	6.8%	4.9%	1.7%	6.6%	39.5%	18.2%	57.7%	67.5%	32.5%	100.0%

Table 35: Employment Breakdown, by race, gender and job category: July - December 2008: 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	0.5%	0.0%	0.6%	0.3%	0.0%	0.3%	0.3%	0.0%	0.3%	10.7%	0.4%	11.1%	11.8%	0.4%	12.3%
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%	0.0%	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 Other	0.3%	0.2%	0.5%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	1.7%	0.9%	2.6%	2.1%	1.3%	3.4%
Technologists Pr TEchENg	0.2%	0.0%	0.3%	0.2%	0.0%	0.2%	0.2%	0.0%	0.2%	3.9%	0.4%	4.4%	4.6%	0.5%	5.1%
Technicians PrTechni	0.2%	0.0%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.5%	0.1%	0.6%	0.8%	0.1%	0.9%
Unregistered technical staff: Engineer	2.4%	0.4%	2.7%	0.5%	0.0%	0.5%	1.5%	0.2%	1.7%	5.6%	1.5%	7.1%	10.0%	2.1%	12.0%
Unregistered technical staff: Technologist	0.9%	0.1%	1.0%	0.2%	0.1%	0.3%	0.2%	0.0%	0.2%	2.2%	0.2%	2.4%	3.5%	0.5%	4.0%
Unregistered technical staff: Technician	4.8%	1.3%	6.1%	1.0%	0.2%	1.2%	0.8%	0.2%	1.0%	4.9%	1.1%	6.1%	11.6%	2.8%	14.3%
Unregistered technical staff: Other	1.6%	1.0%	2.6%	0.2%	0.0%	0.2%	0.4%	0.1%	0.5%	2.4%	0.9%	3.4%	4.6%	2.1%	6.7%
Technical Assistants	1.9%	0.7%	2.6%	0.3%	0.1%	0.4%	0.2%	0.1%	0.3%	2.3%	1.0%	3.3%	4.7%	1.9%	6.7%
Draughts Persons	0.9%	0.5%	1.4%	0.4%	0.4%	0.8%	0.7%	0.1%	0.8%	2.8%	2.1%	5.0%	4.8%	3.1%	7.9%
Laboratory / Survey Assistants	1.6%	0.1%	1.6%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	1.8%	0.1%	1.8%
Administration / Support staff	3.9%	5.4%	9.3%	0.7%	2.0%	2.6%	0.3%	0.9%	1.2%	2.3%	9.3%	11.6%	7.1%	17.6%	24.7%
Total	19.1%	9.8%	28.9%	3.9%	2.9%	6.8%	4.9%	1.7%	6.6%	39.5%	18.2%	57.7%	67.5%	32.5%	100.0%

Table 36: Ownership profile: Employment, company type, race & gender: July - December 2008

Comp any Type	Owner category	Professional	Black			Coloured			Asian			White			Total		
		Category	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
(PTY) LTD	Executive Director	PrEng	23	0	23	10	0	10	10	3	13	478	6	484	520	10	529
		PrTechEng	3	0	3	0	0	0	0	0	0	16	0	16	19	0	19
		Other	39	6	45	3	0	3	3	0	3	55	3	58	100	10	110
	Non-Executive Director	PrEng	10	6	16	0	0	0	0	0	0	6	0	6	16	6	23
		PrTechEng	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	23	16	39	10	6	16	0	0	0	10	0	10	42	23	65
CC	Member	PrEng	3	0	3	6	0	6	3	0	3	32	0	32	45	0	45
		PrTechEng	3	0	3	3	0	3	0	0	0	3	0	3	10	0	10
		Other	0	0	0	3	0	3	0	0	0	3	0	3	6	0	6
Partnership	Partner	PrEng	0	0	0	0	0	0	0	0	0	6	3	10	6	3	10
		PrTechEng	0	0	0	0	0	0	0	0	0	3	0	3	3	0	3
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL			103	29	132	36	6	42	16	3	19	613	13	626	768	52	820
% distribution			12.6%	3.5%	16.1%	4.3%	0.8%	5.1%	2.0%	0.4%	2.4%	74.8%	1.6%	76.4%	93.7%	6.3%	100.0%
% directorship only			9.8%	1.0%	10.8%	2.0%	0.0%	2.0%	2.0%	0.5%	2.5%	83.3%	1.5%	84.8%	97.1%	2.9%	100.0%
Total employment			3 706	1 869	5 575	742	549	1 291	936	329	1 265	7 505	3 444	10 950	12 890	6 191	19 081
% ownership / equity			2.8%	1.6%	2.4%	4.8%	1.2%	3.3%	1.7%	1.0%	1.5%	8.2%	0.4%	5.7%	6.0%	0.8%	4.3%

Table 37: National Value of construction contracts awarded, categorized by economic sector: 2005 - 2008, by project type: % Distribution (Based on current values)

Economic Sector	2005	2006	2007	2008
Economic	19.7%	19.7%	21.3%	21.5%
Energy (Excluding new generation)	0.1%	0.2%	0.2%	0.2%
General	0.9%	1.0%	0.8%	2.0%
Housing	37.4%	26.6%	17.8%	16.9%
Manufacturing	3.8%	7.2%	3.2%	3.7%
Recreational	4.9%	5.7%	25.8%	11.2%
Safety	0.7%	1.8%	1.6%	1.8%
Social	8.9%	9.9%	5.7%	12.5%
Transport	15.3%	19.9%	14.9%	23.7%
Water & Sanitation	8.2%	7.9%	8.8%	6.4%
Total	100.0%	100.0%	100.0%	100.0%

Source: Industry Insight project database

Note:

- Contracts awarded on a national basis
- Excluding major power projects
- Private and public sector projects
- Sample size: R74 billion at current prices in 2007
- Includes new and renovation projects

End of report

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