

State of the Consulting Engineering Industry

Period January 1998 to June 1998
(Published March 1999)

GENERAL ECONOMIC BACKGROUND

The South African economy managed to survive by a mere 0,1% growth in gross domestic product (GDP) and is expected to be much the same for 1999. Forecasts of between 0,5% and 1,5% are promulgated, but most economists expect no more than a 1% growth. However, optimism returns for the year 2000, with some even expecting a growth of as much as 3,6%. "Cognisant of the lags between economic growth and construction growth, 2000 may still be a difficult year for the civil engineering industry", says Henk Langehoven, Executive Director of SAFCEC.

Real fixed investment in construction works, machinery, transport and other equipment increased significantly by 6,5% during the first nine months of 1998. Construction investment represents 33% of the total gross domestic fixed investment and includes residential, non-residential and civil industry investment. These are markets served by the consulting engineering industry. Construction investment, specifically residential investment, was stimulated, as a result of expectations that interest rates would drop. However, the rise in gross domestic fixed investment was not associated with an increase in the construction activity, but rather as a result of the growth in Machinery and equipment, ie information and technology, and would include the expansion of the telecommunications network and the purchase of aircraft.

The turmoil on international financial markets, selling of bonds by non-residents and domestic speculation against the currency, caused the rand to lose about 20% of its value from April to August 1998 against the currencies of major trading partners. Subsequently, it regained around 10% of its value until the first week in November 1998, before depreciating again by some 7,5% because of a weakening in the balance of payments. The rand thus remained sensitive and vulnerable to international perceptions, which still tend to become negative.

A full analysis of the budget speech delivered by Mr Trevor Manual, earlier this month, can only be made available after further investigations have been undertaken. Feedback on the implications of the budget will be given in our next report.

Based on SAFCEC's report "State of the Industry: 1st Quarter 1999", a dramatic slump has occurred in the civil industry. Startling is the fact that capital expenditure budgets are spent on people rather than on investment of capital assets. The decline in the civil industry during 1999 is expected to be equal, if not worse, than the downturn experienced during 1990 to 1993. New contract awards to the civil industry ended at 20% lower in 1998 vs 1997. The "state" represents more than 80% of the civil industry's client base, signifying the reason for the industry's distress in the state of the provincial and local finances where capex budgets simply bears no meaning as very little or none of the so-called available funds are spent on capital investments. A 10% decline in turnover generated in the civil industry is expected in 1999, after which no real growth is expected in 2000.

Africa is becoming increasingly more attractive to the local industry. In both the civil and building industry, this trend is expected to continue. Unfortunately very little information currently exist on this market, but surveys done by SAFCEC and BIFSA hope to embrace a better understanding of this market in the near future. The impact of the African continent on our local industry is ever increasing and more emphasis should be placed on this market in future surveys.

THE POSITION OF THE INDUSTRY

Statistics

The aim of this section is to give an overview of the recent past and current statistics in the Industry. The Report represents the results of a survey done amongst SAACE members during the first half of 1998. Of the 380 questionnaires that were sent out, some 129 were returned, representing 34% of SAACE membership. This is lower than the responses received from the previous questionnaire. This must be carefully watched and the importance of completing the questionnaires must be re-enforced amongst the members.

Table 1

Year	Employment	Salaries and Wages (R mill)	Fee income (R mill)	Cons Deflator (Cost escalation)
6/96	11938	961,8	2660	100.0
6/97	12185	1185,0	3266	108.0
1/98	12618	1332,0	3854	114.7
6/98	12379	1554,0	3791	115.4

The (inflation adjusted) changes in the important indicators are shown in the table below.

Table 2

Indicator	Years 6/98 on 1/98
Employment	- 2 %
Salaries	13 %
Fee Income	- 4.5 %
Confidence	-8 %
Capacity utilisation	76 %

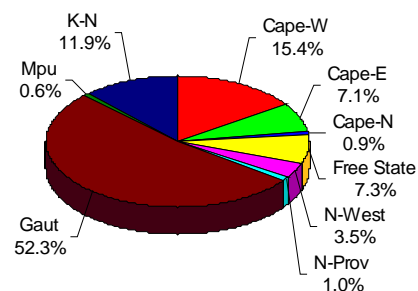
REGIONAL EMPLOYMENT DISTRIBUTION

Table 3 reflects the regional employment distribution in 1997 compared with the distribution ten years ago in 1987. Employment distribution appears to be stable with very little movement from one region to the next. Gauteng increased its market share by 1.4% to 52,3%, as well as Eastern Cape by 2% to 7% and the Free State by 2,4% to 7,3%. The largest drop in market share is shown in Kwazulu Natal of 2,5% down to 11,8%. The figure on the bottom right is indicative of the regional employment market share as at 1997.

Table3

Region	1987	1997
Cape-W	1720	1682
Cape-E	537	776
Cape-N	57	101
Free State	519	802
N-West	578	378
N-Prov	166	106

Regional employment distribution



Gaut	5380	5728
Mpu	78	70
K-N	1527	1299

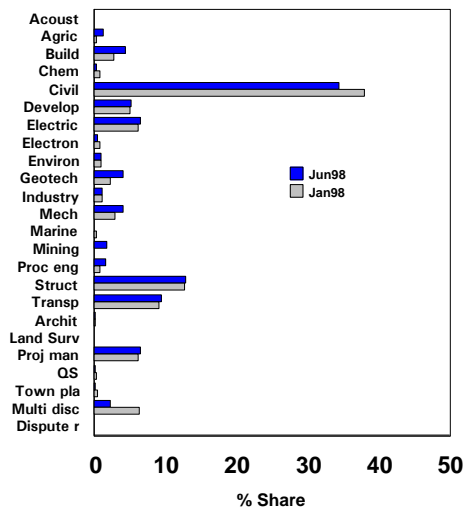
Members reported that overall employment dropped by 1,8 percent during the first half of 1998.

Gross income was reported to have declined by 1,6 percent in nominal terms during the first 6 months of 1998. However, the members expected a 2 percent improvement in gross income during the following 6 months.

SALIENT FEATURES OF THE MARKET

Several characteristics of the market can be followed over time:

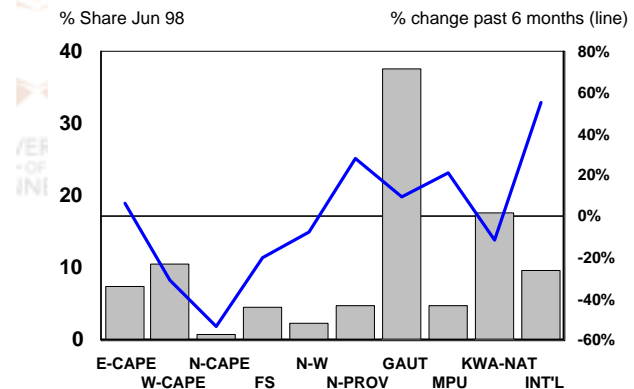
Engineering Submarkets



The graph to the left shows the sub disciplines members are involved in, and how the picture has changed during the past 6 months.

The graph below shows the provincial distribution of work, and how it has changed during the past 6 months. International

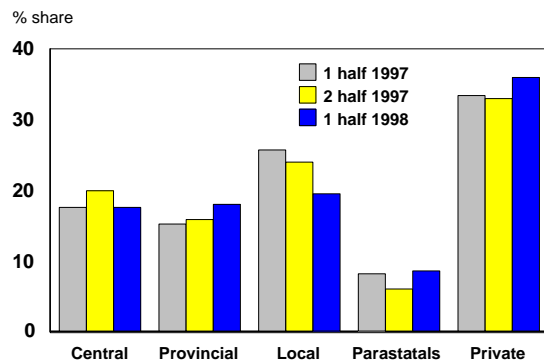
Provincial Market Share



exposure has risen to 9,8 percent of total turnover compared to 6,3 percent during the last 6 months of 1997. Western Cape has dropped down to a 10,5 percent share, compared with 15,1 percent in 1997.

The shifts in client distribution are shown in the following graph. After a slight decline in the private sector as the main client during the second half of 1997, the importance of this client rose again during the first half of 1998. Over 35 percent of all work done reside in the private sector, followed by the local authorities (19,6%), provincial governments (18%) and the central government (17,7%).

Client Distribution



TEMPO OF ACTIVITY, COMPETITION, PROFITABILITY AND CAPACITY UTILISATION

Several questions in the survey were meant to highlight trends that would indicate whether the industry was growing or stagnating during the 6 months under review.

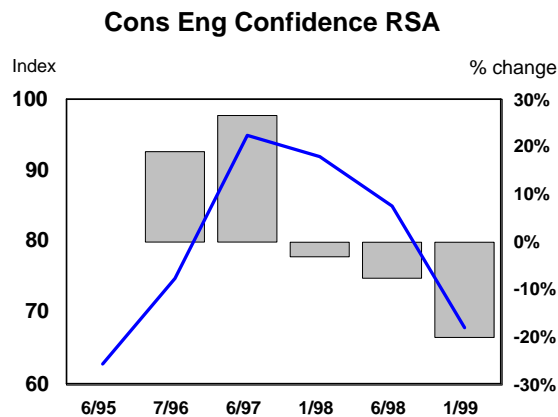
- Members expected the tempo of activity to slow down during the following 6 months. Fewer members expected the tempo of activity to increase.
- During the first 6 months of 1998, competition for work was mostly very keen to fierce. This ties in with the expected slow down, meaning less work available. Competition appeared to be keenest in the Gauteng regions.
- As anticipated in the previous report, fewer members were satisfied with the profit margins. In our previous report over 90 percent of members were satisfied with profit margins, whereas 52 percent of the latest survey are satisfied. 40 percent of members reported that profit margins are static and only a hand full has experienced an improvement.
- Capacity utilisation dropped a further 1 percent to 76 percent during the first 6 months of 1998 compared with the last 6 months of 1997. A net percentage of 10.8 of the members expected to increase capacity utilisation during the second half of 1998.
- Majority of the respondents has been working within normal working hours, or up to 5 hours overtime.

PROSPECTS FOR 1999/2000

Confidence levels amongst SAACE members

Many of the questions relate to members' confidence about current and future trends. These have proved invaluable in similar exercises in the construction industry.

The general confidence index shows how members feel about the current and future situation regarding market developments. This is a "weighted" answer (each company weighted according to employment size), and shows the percentage of members satisfied with the conditions. Several data points are now available.



The decline in confidence levels of 4 percent reported during the second half of 1997, continued during the second half of 1997, continued with a 8 percent drop during the first half of 1998 and a 20 percent drop was expected during the second half 1998.

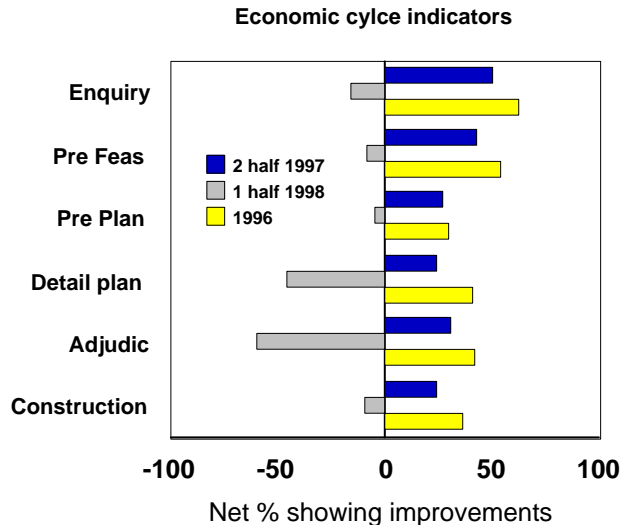
It is thus clear, however not exactly to what extent, that the consulting engineering industry will slow down during the next 6 to 12 months.

PHASES OF THE PRODUCT CYCLE

We asked respondents to indicate whether they are experiencing better, the same or deteriorating conditions in terms of the “phases of the product cycle”, i.e.

1. enquiries
2. pre-feasibility / proposals
3. preliminary planning
4. detailed planning and design
5. tender adjudication and appointment, and
6. construction of project (s).

We now have a three point time series, by which to compare the developing trends in the flow of work in and out of the market. The graph on the right is indeed a sad picture. The decline was evident from the second half of 1997, but has worsened considerably during the first half of 1998.



The only conclusion that can be drawn from the accompanying graph is that great pessimism currently reigns amongst the SAACE members. Confidence levels have dropped significantly and further drops were expected during the second half of 1998.

FEE INCOME

SAACE members recorded an inflation-adjusted decrease in fee income of 4,5 percent for the six months ended June 1998, compared with the last 6 months in 1997. This decline is not as bad as the 12 percent inflation adjusted decrease anticipated by members at the time of the previous questionnaire. Projected gross income for the following 6 months to the end of 1998 is was anticipated to increase by 2 percent in nominal terms. If this figure is adjusted with the inflation rate for December 1998, this translates into a 3,6 percent drop.

COST ESCALATION TRENDS

No specific escalation index is available for the consulting engineering industry. The industry forms part of the “financial, insurance, real estate and business services” sector. Unfortunately, it contributes less than a percent to this sector, and has therefore almost no impact in the index.

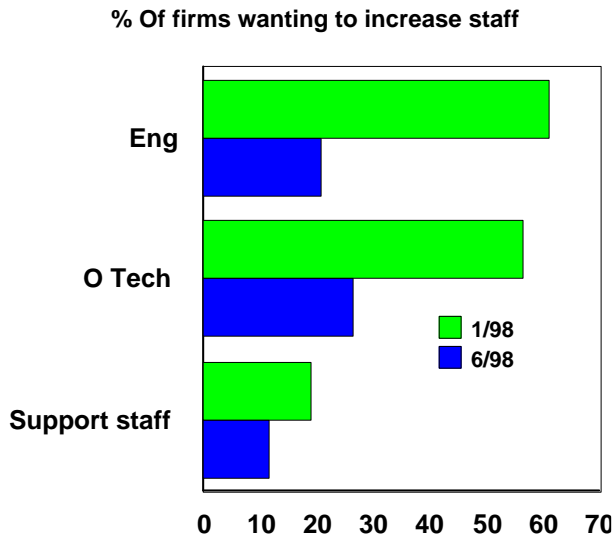
Therefore price movements are based on the civil engineering index. The slowdown in economic growth and tight fiscal discipline will keep inflation at low levels. The civil industry has changed over to a single index formula, based on the consumer price index (CPI). This index must therefore be closely watched in future.

The CPI rose by 6,9% during 1998, and is expected to average around 6% during 1999, and to be around 7% during 2000. The rand is expected to depreciate by a further 10% on average against the US dollar, during 1999 and 2000.

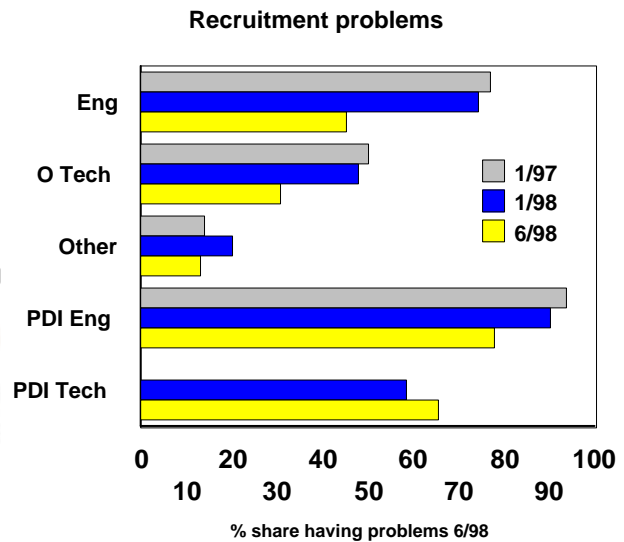
MANPOWER / TRAINING ISSUES

Several questions in the survey related to personnel issues. These warrant separate discussion.

The graph to the right shows the broad composition of personnel in the consulting engineering industry. The current situation is shown, and then compared with the situation 6 months ago. The largest decline in composition was in "Other technical" staff, mostly in favour of the employment of engineering personnel.



In line with lower confidence levels and an expected slow down in the consulting engineering industry, it is clear from the latest survey done that fewer members are expecting to increase staff.



The fact that the recruitment of new personnel is not a top priority at this stage, could be a reason for the apparent decline in finding the right people. However, the employment of previously disadvantaged individuals in both the engineering and technical field remains a problem. Almost 80 percent of members are having problems in finding PDI engineers to fill positions. A comparison of PDI technical staff is now available and this is the only category that has increased in that it is becoming more and more difficult to find the right individuals. A large portion of the members also indicated difficulty in filling engineering positions.

Table 4

Type of Training	1/98	6/98
Bursaries	622	310
PDI	323	215
Other	299	95
Training value		
Bursaries	R11.40	R16.00
In-house training	R32.60	R34.50
% of Salary bill		
Bursaries	0.86%	1.04%
In-house training	2.45%	2.22%

The respondents recorded that they spent 1,04 percent of their salary and wage bill on bursaries for students, which comes to an estimated R16 million for the industry as a whole (up from an estimated R11 million in the previous report). The number of students reported by the members for the period December 1997 to June 1998 was 310, of which close to 70 percent were from previously disadvantaged (PDI) backgrounds. The average bursary amount, based on June 1998 figures, was R13 000 per annum. In addition members also spent a reported 2,2 percent on in-house training (down from 2,45 percent) which amounted to R34 million. However, gradually less is being spent on in-house training and a greater percentage of the salary bill is being spent on bursaries.

