



BI-ANNUAL ECONOMIC AND CAPACITY SURVEY

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ECONOMIC SUMMARY

“Gloomy and more uncertain” – this is how the IMF described the global economic outlook in their July 2022 review.

INTERNATIONAL ECONOMY

Key factors influencing this perturbed outlook include the materialization of downside risks highlighted in the April 2022 review. Higher inflation worldwide is triggering a sharp tightening in global financial conditions, a sharper than expected slowdown in China and further negative cross-border effects from the war in Ukraine. In the IMF’s baseline scenario global growth averages 3.2 percent in 2022 and moderates to 2.9 percent in 2023 (lower than previous projections due to forecast downgrades in US, China and India).

DOMESTIC ECONOMY

After recovering by 1.9 percent in Q1, economic activity contracted by 0,7 percent in Q2. Real GDP surpassed the average 2019 level (before the onset of Covid-19) for the first time in the 1st quarter. At least seven of the ten sectors shrunk in Q2, with significant declines in manufacturing, agriculture, trade and mining. Key contributing factors include the KZN floods and loadshedding. Investment was lower in the residential sector (down 4,7 percent), and construction works (down 1,4 percent) while the non-residential sector was marginally higher (0,4 percent).

Higher levels of investment by the private sector boosted overall gross fixed capital

formation, up 3,7 percent. Investment by government declined for the 4th consecutive quarter (down 4,2 percent) with weaker levels of investment also from SOE’s (down 1 percent).

The **unemployment rate** eased moderately to 33,9 percent in the Q2, from 34,5 percent, (although this is compared to a period where the response rate for the survey was very low due to the change in the method of collecting data by Stats SA), while overall employment in the construction sector declined by an average of 2 percent in the first half of 2022. The 7 percent decline in the formal sector was counteracted by a similar increase in the informal construction labour force market.

Employment in the mining sector ended flat in the 2nd quarter (407 000) of 2022 but this was higher by an average of 2 percent in the first six months of 2022. Mining production has however slowed, and this may very well lead to potential future job losses. **Producer inflation accelerated to a 14-year high** of 18 percent in July 2022, reflecting a sharp rise in input costs, such as fuel, coal and electricity. The Ukraine-Russian war is aggravating global supply chain disruptions. Consumer inflation accelerated to 7.8 percent in July 2022, largely due to rising fuel and food prices.

SA’s total external debt decreased from US\$165 bn at the end of September 2021 to

US\$160 bn as of December 2021, as rand-dominated external debt decreased.

Confidence in the civil sector, fell sharply in the 1st and 2nd quarters of 2022 to an average of just 9.5, despite marginally higher activity levels and less keen competition in tendering during the last six months of 2021. The persistently slow pace of awarding contracts further continues to dampen confidence levels.

Building confidence, by contrast, improved and increased from 34 index points to 40 (a four year high), and while this remains below the 50-neutral level, some activity in the non-residential sector (industrial and renovations market) offered some hope.

The monetary policy committee (MPC) of the Reserve Bank increased the repo rate by 50 basis points in May 2022 and again by 75 basis points in July 2022. Although the MPC continues to regard the current level of the repo rate as accommodative, this stance can be widely debated as the real impact of the bank's more aggressive quantitative tightening, still lies ahead. The Reserve Bank expects headline inflation to average 5.7 percent in 2023 and 4.7 percent in 2024.

The repo rate is expected to reach 5.3 percent by the end of 2022, 6.2 by end of 2023 and 6.7 by end of 2024, suggesting several hikes in lending rates in the next 18 months. GDP growth is expected to remain at or below 2 percent for the next three years, assuming oil prices average below US\$100/barrel during this time.

On a more positive note, two credit rating agencies upgraded their outlook for the South African economy. S&P upgraded their outlook from stable to positive in May 2022, while Moody upgraded their outlook for negative to stable in April 2022. Moody's did however warn of the consequences of government not sufficiently investing in water and energy infrastructure, in particular to highlight the lack of capital expenditure at a municipal level.

INVESTMENT IN CONSTRUCTION

Investment in the construction industry (according to the Reserve Bank's gross fixed capital formation estimates) plunged to below R250bn (2015 prices, annualized) in 2021, from a peak of R384bn in 2016. Investment has been on a gradual decline for the past 34 quarters (since 2014), due to a decline in state owned enterprises and private sector infrastructure expenditure. Investment in construction fell by 1.2 percent y-y in 2021 and 0.8 percent q-q in the 1st quarter of 2022. Other than a marginal increase of 2 percent in investment in non-residential buildings (largely supported by higher investment in industrial space and office to apartment renovations), investment in housing and civil works declined in Q1, down 1.9 percent and 0.8 percent respectively. According to STATS SA the construction sector is the worst performing sector, currently 24 percent lower compared to pre-pandemic levels.

By comparison, the private sector increased fixed investment (up 7.7 percent and 6.7 percent in the first two quarters of 2022, constant prices not seasonally adjusted), supporting an overall increase in GFCF of 3.6 percent q-q in Q1 and a similar increase in Q2. Investment by government fell by 6 percent in the first six months of 2022, with a 1 percent contraction by SOE's during the same period.

Public sector investment (including government and SOE's) as a percentage of GDP declined to 4 percent in the Q1 of 2022, from around 6.5 percent between 2007 and 2015. The public sector failed dismally against the NDP target of 10 percent. The strongest decline is seen in investment by SOE's down from R140bn per annum to just R68bn, while investment by government slowed from R170bn to R110bn in Q4 of 2021, and with an improved performance in Q2 rose to R114bn. The exodus of private sector investment, post covid-19, has had a material impact on overall investment in the country, but after a slow

recovery in 2020/21, investment increased by 4,1 percent q-q in Q2 of 2022.

SURVEY RESULTS

- The analysis of the questionnaires completed by active firms in the consulting engineering profession provides a proxy for current and expected working conditions for the profession, which can be measured and benchmarked on a regular basis.
- CESA welcomes commentary received from firms and invites all members to actively participate in sending commentary on either the survey or conditions in the workplace thereby increasing the relevance of these reports.
- The survey is re-evaluated on a continuous basis to ensure that the questions asked are pertinent to current conditions in the industry. Several new questions were included in the current survey to improve the compilation of benchmark indicators.
- A total of 44 questionnaires were returned via both an on-line and hard copy system. The sample represents a cumulative fee income of R2bn, and 4216 employees for the period Jan – June 2022.

FEE EARNINGS

Fee earnings improved in the first six months, along with stronger outlook for margins and an improved order book.

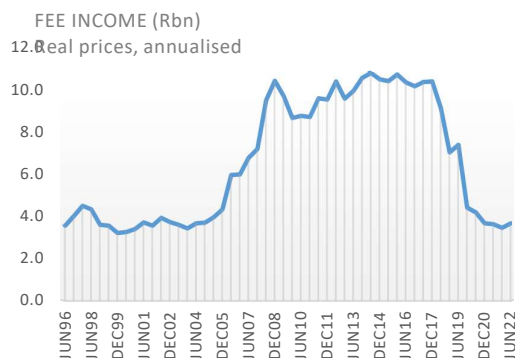


Figure 1

The first half of 2022 was a better six months for the engineering profession as earnings increased by 9.7 percent (current prices) compared to the second half of 2021, in line with expectations. Compared to the same period in 2021, earnings improved by 7.5 percent. In real terms, allowing for inflationary adjustments, earnings basically ended flat, up

0.5 percent y-y. Business conditions improved for the larger firms (employing more than 100 people), as cumulative earnings increased by more than 15 percent. Medium size firms experienced a very difficult period though as earnings reportedly fell by almost a third. Any recovery or improvement in the industry was, however, not broad based and isolated to a few market segments and within selected geographical areas. The outlook for the next 6 months is more negative, as earnings are expected to end flat in nominal terms, with medium size firms hoping for some improvement in the second half, while larger firms hope to maintain current earnings. Based on the order book (value of confirmed appointments not yet invoiced) the outlook for the next 6 months should however not be overly negative, as the order book to income ratio increased to 1:9, the highest level since December 2018. The ratio increased to 2:1 for larger firms, suggesting the value of the confirmed order book is more than double the reported earnings. Overall, the value of confirmed appointments increased by 22 percent compared to the previous survey and

47 percent compared to the first six months of 2021. Respondents were also more positive regarding profitability, as the industry average improved to 14.9 percent (from an average of 12.7 percent), although profitability within larger firms is more modest at around 7 percent. Respondents largely have a stable outlook regarding profitability for the next 6 months, although larger firms expect a marginal improvement (given their below industry average rate). Although margins are currently at the best level since 2015, it remains below the peak of 2007/8. Given the overall improvement, satisfaction rates related to margins also improved, as more than 80 percent of the respondents reported satisfactory levels, compared to 77 percent in the second half of 2021, which is also well above the 5-year average prior to Covid-19). More than 50 percent of respondents expect margins to further improve, with the remainder split between either stabilizing or receding. Larger firms are more optimistic regarding further improvement in margins (considering they also have the lowest margins).

The ratio of outstanding payment for work already done and invoiced increased to 75 percent of earnings, from 45 percent in the previous survey. While it is not possible to say whether these payments are overdue or late, it does suggest an increase in delays to receive payment.

SALARY AND WAGE BILL AND EMPLOYMENT

Improved outlook for employment

The contribution of the salary and wage bill increased to an average of 63 percent, from 52 percent in the December 2021 survey, slightly above the average for the previous two surveys. Larger firms reported the strongest

increase in their salary and wage bill, while the rest either reduced or maintained their current bill, despite reporting an increase in total employment. Employment increased by 12 percent, with a similar increase reported by larger firms, and a more moderate 3 percent reported by medium size firms, as some of the medium size firms reported an increase in employment despite reduced earnings.

The weighted response in terms of employment demand for engineers increased to the highest level since 2014. On average 85.2 percent of respondents are looking to increase employment of engineers, with 78.4 percent looking for technologists. Being a weighted average, the responses are influenced by the demand from larger firms. In line with demand, a higher percentage are finding difficulties in recruitment, 71.4 percent for engineers and 73.4 percent for technologists. As has been the case since 2014 (when the survey was adapted to distinguish between male and female engineers), it is more difficult to find suitable female engineers compared to their male counterparts and even more so from a previously disadvantaged background. Female engineers represented 13 percent of total engineers in the current survey, on par with the average over the last two surveys.

FEMALE ENGINEERS DISTRIBUTION
Jan - Jun 2022

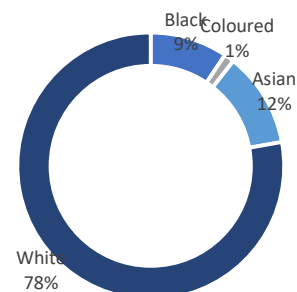


Figure 2

OUTSOURCING, DISCOUNTING AND COMPETITION

On average firms **outsourced** a higher percentage of turnover to black owned enterprises compared to external enterprises or for public sector requirements, although this moderated to an average of 15.1 percent (from 21.7 percent). Larger firms mainly outsourced to black owned enterprises or for transformation purposes (averaging 25 percent), while smaller firms are less likely to outsource. Medium size firms mainly outsourced to external enterprises, not for transformation purposes. Overall outsourcing was lower, compared to previous survey across all three categories.

Given the highly competitive environment, many firms continue to report very keen and fierce competition, although in this survey, it dropped to below 90 percent (86.7 percent) for the first time in 4 years.

A higher percentage of respondents from larger firms reported fierce competition, up from 53 percent to 59 percent, while less than a third of the participants in all the other firm size categories reported similar levels of competition. Higher levels of competition are supported by higher tendencies to discount hence the correlation between the level of discounting and competition. As competition started to intensify after 2009, the propensity to discount also started to accelerate. The average discounting rate has however slowed to an average of 19 percent, from an average of 26 percent in 2021. Although larger firms continue to face fierce competition their average discounting rate moderated quite substantially over the same period. Discounting slowed across all the firm size categories, in line with reduced pressure on competition.

CAPACITY UTILISATION

Capacity utilisation of technical staff has steadily decreased since 2008, falling to near record lows of 74 percent in 2020 (this is like levels experienced in the 1998/99 financial crisis). Levels have since then recovered to an industry average of 80 percent, with roughly a third of the respondents expecting capacity utilisation to increase in the next 6 months, including respondents from larger firms. Majority expect levels to stabilise.

BREAK-EVEN RATIO

The cumulative break-even ratio for larger firms improved slightly to 0.57 from an average of 0.54 as at December 2021, thus despite improved conditions in the first six months of 2022, conditions remain challenging for larger firms. The average break-even ratio for medium, smaller, and micro firms moderated back to levels more in line with June 2021, albeit moderately higher. Conditions were more challenging at the higher end of the market (due to economies of scale) where margins are potentially lower as well, with the absence of higher value projects over the last few years, making that segment of the market highly competitive.

PROJECT POSTPONEMENTS AND CANCELLATIONS

Project postponements and cancellations have been rife within the construction industry for quite some time. The reasons for the cancellations vary, but can range from an uncertain economic environment, budget constraints, community interference, as well as a lack of skills to plan and execute tenders.

An increasing number of respondents reported that they have been involved in project

cancellations, up from 35 percent in the previous survey to 46 percent. Notably all firm size categories reported an increase from the second half of 2021, with the highest percentage of respondents from larger firms at 57 percent.

Origin of project cancellation
Current Survey

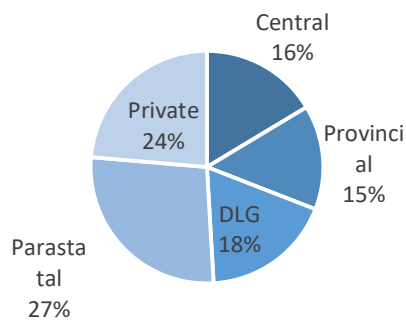


Figure 3

In terms of the costs associated with cancellations, central government accounted for the largest contribution, (65 percent) followed by the private sector at 17 percent. This does not mean however, that central government had the most projects cancelled, as the size and scope of the project plays a role in the costs associate. Central government therefore may have had fewer but larger projects. Due to the size and scope of central government projects, cancellation costs are higher by comparison to other clients, representing an estimated 4.7 percent of earnings. Micro firms are more vulnerable to cancellations, as it represented a higher portion of their earnings, at an average of 6.2 percent, against an industry average of 0.5 percent. Overall costs associated with earnings were less severe in the current survey, as it moderated from an average of close to 3 percent in the previous two surveys, to 0.5 percent. With fee earnings estimated at R11bn (in current prices), this equates to around R60m.

A study by Industry Insight on project cancellations, found that over 160 public sector projects have been cancelled between January and June 2022, mainly in the road, commercial and water market segments. Central government is the only sphere of government that recorded an increase in 2022, where the number of projects cancelled increased by 31.8 percent y-y. This does not include projects that have been postponed or delayed. Overall cancellations were lower for the provincial government down 42 percent, local government down 52 percent and SOE's down 56 percent, making the current environment less dire compared to 2021. However, public sector tender activity has also weakened, down 40 percent y-y in the first half of 2022, with fewer tenders issued by all spheres of government. Local government accounted for most of the projects cancelled (35 percent) followed by provincial government (32 percent). Central government accounted for 18 percent. Cancellations by the private sector was also lower, although close to 70 projects that we know of were cancelled so far this year, representing a decrease of 43 percent. At a provincial level, most of the public sector projects cancelled were in Kwazulu Natal, Eastern Cape and Gauteng. Most of the provinces reported fewer projects cancelled, with just the Western Cape reporting an increase compared to the same period last year. From these results it is more the regulatory requirements that are impacting the cost to tender, adding additional pressure on an industry where work opportunities are not in abundance, rather than the higher prevalence of cancellations. Even cancellations at a similar pace, but with fewer tenders, will negatively impact the industry. The cancellation rate (*the number of projects cancelled in relation to the number of tenders issued during the same period*) increased to 17 percent in the first half of 2022 from an average of 15 percent in 2021 and 30 percent during Covid-19 (2020). Gauteng has the highest cancellation rate at 40 percent, followed by Eastern Cape at 19 percent. This

implies that 40 percent of tenders issued in Gauteng were ultimately cancelled. Findings are more startling considering tenders issued by central government, where the cancellation rate increased to 84 percent (from 27 percent in 2021), as cancellations are on the rise and tender activity on the decline. Provincial departments had a cancellation rate of 30 percent, and local government 11 percent during the period January to July 2022.

ECONOMIC SECTOR

The contribution of the commercial sector fell to 13.7 percent of fee earnings in the first six months of 2022, below the 5-year and 2-year average, as commercial activity in the office and retail sector has slowed to near unprecedented levels. The contribution of the mining and health sectors returned to more normal levels in this survey (albeit below the 5-year average) of 8.6 percent and 1.9 percent respectively. The contribution of mining averaged 21 percent in 2021. The decline in the commercial, mining and health sectors, resulted in the contribution by the Transportation sector to increase to 25 percent (from an average of 18 percent in 2021). The contribution of the water sector marginally increased to 17.6 percent from an average of 15 percent in 2021. Energy and housing remained below 10 percent at an average of 7 percent.

ECONOMIC SECTOR Distribution of fee earnings

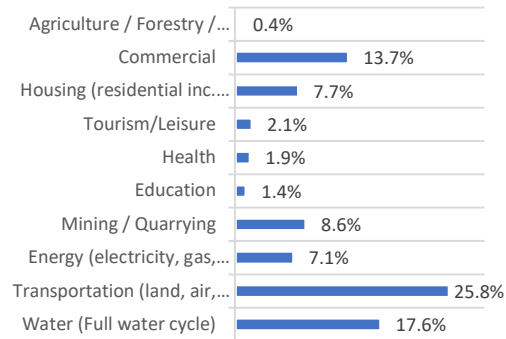


Figure 4

OUTLOOK

The consulting engineering confidence index (satisfaction rate) eased to 52.1 in the first half of 2022, from 56.4 in the last six months of 2021, on par with the average of 52 for 2021. This is coming off the back of fallout from the Covid-19 pandemic and subsequent lockdowns, which seem to have been mostly felt in the latter half of 2020, with the index falling to an all-time low of under 20 points in the 2nd half of 2020. Although awarded tenders still seem to be somewhat lacking, tender activity in the civil construction sector improved in 2021, positively affecting turnover in the first half of 2022. However, tender activity has slowed in the first half of 2022, suggesting a potential contraction in the pipeline adversely affecting the outlook for turnover.

Overall, there is a general sentiment in the broader economy that conditions will nonetheless improve, as government is starting to take a more earnest step towards including the private sector in critical infrastructure development, through renewable energy projects while Transnet is actively engaging with the private sector in terms of its port renewal and development programmes. The delay in tender awards by SANRAL has had a notable impact on the

industry, and although there has been increased tender activity in the water sector, it is not sufficient to counteract the decline in road projects. Although the development of several large housing projects has been announced in Gauteng and the Western Cape, these are still in early stages of development and will take time to have a real positive impact.

CESA CONFIDENCE INDEX

Satisfaction rate (including Satisfactory to Very Good business conditions)

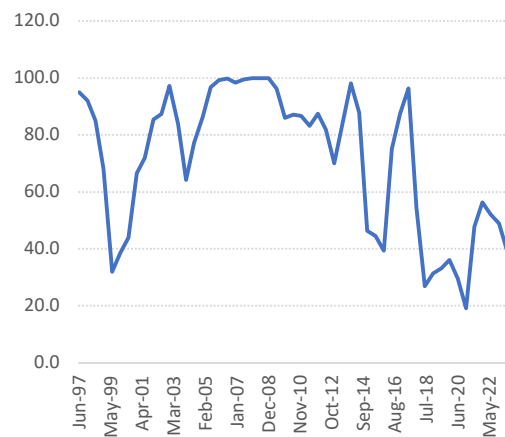


Figure 5

The FNB/BER business confidence index weakened in the 2nd quarter of 2022, largely due to the high prevalence of load shedding, to an index level of 42 from an equally depressed 46 in the preceding quarter. Overall civil contractors are extremely negative, as the BER/FNB index for civil contractors plunged to 9 in the 1st quarter (almost at Covid-19 level), and 10 in the 2nd quarter. Civil contractor confidence has been below 20 for most of the time over the past 5 years, suggesting that 80 percent or more of the contractors are not positive regarding business conditions in the civil engineering sector. The glimmer of hope experienced in the second half of 2021 with increased levels of tender activities, was short-lived. Overall, the medium-term outlook has yet again turned more depressed this time with added economic pressure, higher inflation and higher lending rates dampening

consumer and investor demand. Ultimately government's fiscus will feel the brunt of weaker economic growth, and unless government can maintain its current focus to include and not discourage private sector investment in critical infrastructure, infrastructure expenditure will again be re-prioritised in favour of operational commitments. Despite government's commitment to infrastructure expenditure as part of a pillar to revive the SA economy, budgetary allocations were reduced. Announcements will soon be made on how Treasury is going to deal with Eskom's R400bn debt and if taken from the fiscus, it will further delay spending on other important social and economic infrastructure. Unfortunately, the continuance of energy constraints and load shedding will catapult the already fragile economy into potentially recessionary territory and that is not good for anyone. The short-term pain may be to reprioritise expenditure, but without active private sector participation, the nett effect will be less available funding for new infrastructure and/or the maintenance of existing infrastructure. The use of pension funds for infrastructure investment, may be a game changer in 2023, pending the regulatory requirements around the implementation of these funds and the appointment of the right skill base to manage the fund's new asset base.

Overall, the weak sentiment amongst consulting engineers remains concerning as it implies further weakening to downstream stakeholders. The dire need for increased spending on economic and social infrastructure is undeniable, but there is more that government can do for example ensure available funds (even within budgetary cuts) is spent effectively and efficiently, within all spheres of government, especially at municipal level. So far it would seem that spending by municipal departments have improved compared to last year and whether this is accurate or a reporting correction, remains to be seen. Government simply can not do this

alone, but government themselves need to acknowledge their own constraints and actively pursue private sector participation within an environment that is conducive for investment, and this includes engaging with the private sector engineering skills. There seems to positive progress in terms of private sector participation (through Transnet, Eskom and renewable energy programs), and the reality is, once the private sector can successfully mitigate its risk, the fortunes of

the local construction sector can be turned around, and swiftly. Until then its likely business as “per the new” usual.

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