BI-ANNUAL ECONOMIC AND CAPACITY SURVEY

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ECONOMIC SUMMARY

INTERNATIONAL ECONOMY

Global economic growth is projected to fall from an estimated 3.4 percent in 2022 to 2.9 percent in 2023, rising moderately to 3.1 percent in 2024. The increase in central bank rates to fight inflation, weighs on global economic activity. With economic outlooks weaker for most of the economies in 2023, China offers some reprieve, with a stronger than expected recover in 2023 as it emerges from covid-19 restrictions. Pent up demand in China may surprise on the upside. Global inflation appears to have peaked towards the end of 2022, but stubborn inflation in US may result in further tightening by the Federal Reserve, or delay the easing cycle, that could spark renewed dollar strength.

As at least 40 percent of South Africa's trading partners are expecting weaker growth in 2023, the outlook for export growth in South Africa is weaker, with rail freight constraints further dampening export potential for the country.

Higher import prices (in lieu of dollar strength), as the country embarks on a renewable energy investment programme, will put pressure on the country's trade balance.

DOMESTIC ECONOMY

Real GDP (measured by production) decreased 1.3 percent in the 4th quarter of 2022, following an increase of 1.8 percent in Q3. This brings the annual GDP growth for 2022 to 2.0 percent, with mining, construction and electricity reporting a contraction**.**

GDP GROWTH BY SECTOR: 2022

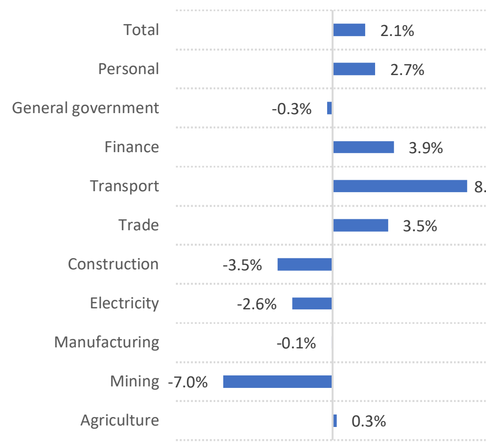

Figure 1

The construction sector contracted by 3.5 percent in 2022, despite the 3.1 percent q-q increase in the 4th quarter of 2022.

Fixed investment increased by 4.7 percent y-y in 2022 (with a 1.3 percent expansion in the 4th quarter of 2022), increasing the GFCF/GDP ratio to 14.6 percent by the end of 2022. Investment by government ended flat in 2022, SOE's continued its disinvestment trajectory as investment fell 3.6 percent, while investment by the private sector increased by 7.3 percent. The private sector contributed 72 percent to total fixed investment in the country, steadily increasing its contribution from 65 percent in the early nineties. The need for private sector investment in critical economic infrastructure is intensifying, in areas such as electricity, water, rail and ports, beyond just renewable energy. The contribution of private sector investment in construction works (normally dominated by government and SOE's) increased from less than 10 percent in 2000 to an average of 24 percent over the last three years. While this was largely due to the higher levels of investment in renewable energy projects, more is needed to expand the private sector's role. The collapse of electricity infrastructure may just be the catalyst to increase future private sector investment as government has no choice but to create an environment that is conducive for private sector investment. The collapse of energy infrastructure is colliding with a broad-based collapse of infrastructure, creating the perfect storm for government, struggling to maintain its social responsibilities to the poor and unemployed, while maintaining and improving infrastructure. The fact that the 2024 elections is around the corner means infrastructure needs to be restored, or real attempts being made to be restored, across the country. Once the private sector becomes involved, it could open a flood gate of private sector investment across all spheres of infrastructure development. Due to the current crisis, government focused mainly on restoring economic infrastructure as outlined in the 2023 Budget. In real terms, allocations increase by an average annual rate 3.1 percent over the base-line period (2023/24 – 2025/26), in economic infrastructure, against a 7.8 percent decline in investment in social infrastructure. Lack of social infrastructure investment will inevitably lead to another (perhaps more violent) crisis, to which government will have to yet again, respond in a more reactive rather than proactive manner. As investment in energy is expected to increase by 10 percent in real terms over the three-year period, the lack of investment in water and sanitation infrastructure, raises a red flag.

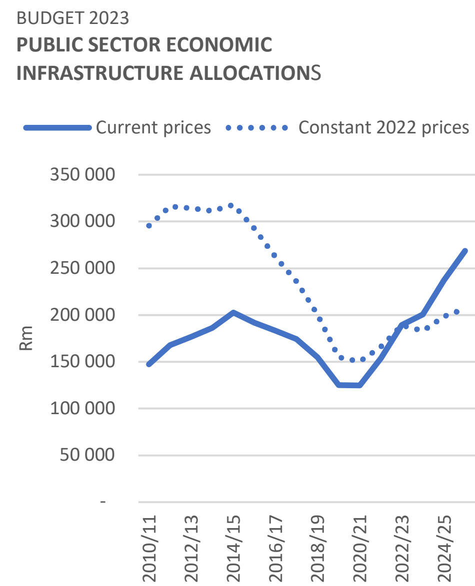

Figure 2

The **unemployment rate** slowed to 32.7 percent in the 4th quarter of 2022, and while this may be an improvement from the 35.3 percent same time in 2020, it remains well above pre-covid levels. Comparison to 2021 is also distorted by the poor response rates received in 2020 and 2021 due to Stats SA's change in methodology to collect information. The construction labour force expanded by 2 percent on average in 2022, adding 23 000 additional job opportunities. The strongest increase was in Kwazulu Natal, followed by Free State, while Western Cape shed 17 000 jobs. The 4th quarter of 2022 however, showed a strong improvement in the Western Cape, posting the strongest increase across all provinces. Formal employment in the construction sector however remains under pressure as formal employment fell on average 1.4 percent in 2022, mitigated by a 8.1 percent increase in the informal job market for construction.

Employment in the mining sector increased by 9.8 percent y-y in 2022, despite being the sector that showed the strongest decline in 2022. The commodity price index has already slumped by 19 percent y-y in the first two months of 2023, reducing the positive impact of higher sales value on the mining industry. Mining production (including gold) fell by 7.2 percent on average during 2022. The outlook for capex expenditure has however improved.

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. Producer inflationary pressures eased somewhat to 13.5 percent by December 2022, supported by lower brent crude prices.

Consumer inflation slowed to 6.9 percent by December 2022, expected to moderate to an average of 5.4 percent in 2023, 4.8 percent in 2024 and 4.5 percent by 2025. Upside risks remains, for example secondary inflationary pressures due to potential dollar strength in 2023.

Confidence in the civil sector recovered in the 2nd half of 2022 to an average of 28 from an average of just 10 in the first half of 2022. There has been anecdotal evidence of some recovery in the civil sector, with an increase in tender activity, but it has been slow to have an impact on the industry. However, as awards of civil projects have started to come through more strongly, confidence levels are reacting more positively.

Building confidence, by contrast, has been sustained at above 30 percent for the past two years, but averaged a lower 34 in the second half of 2022 compared to 37 in the first six months. Pressures are mounting on the building industry, as higher lending rates are starting to have an impact and government's focus is weighed in favour of economic infrastructure expenditure. Expenditure towards education, health and protective service did however increase over the base line period, but it pales by comparison to allocations towards energy, water and transport.

The monetary policy committee (MPC) of the Reserve Bank increased the repo rate by a total of 3.50 basis points since 2021 to a repurchase rate of 7.25 (February 2023). Economic leverage to impose further rate hikes is diminishing. Pushing lending rates to above 11 percent will have a material impact on economic growth, bearing in mind that the growth outlook for 2023 is already on the brink of a recession. There is a broad consensus that the current rate hike cycle may be coming to an end, with rates expected to be lowered in 2024./25. It is highly unlikely that the SARB will lower rates to below 8 percent or even 9 percent as it did 2020/21, given global market volatilities and the impact that lowering the real gap rate will have on the rand.

Further developments impeding South Africa's outlook is the country's grey listing by the FATF in February 2023, and a somewhat unexpected downgrade by S&P that downgraded the country's outlook from positive to stable. The credit rating agency is casting doubt on government's reaction to restore energy supplies. Neither of these are good news for South Africa, desperate to attract much needed foreign direct investment and will increase currency volatility due to foreign portfolio investment withdrawals.

INVESTMENT IN CONSTRUCTION

Investment in the construction industry (according to the Reserve Bank's gross fixed capital formation estimates) contracted to R233bn in 2022 (2015 prices), from R242bn in 2021, a decline of 4 percent y-y in real terms.

Investment in construction has been on a decline since 2014, as government disinvested in infrastructure and corruption and mismanagement battered SOE's. Investment by the private sector was uneventful due to weak investor confidence, low economic growth, and political instability.

Residential investment increased modestly by 1.1 percent in 2022 to R85bn, following an increase in approvals for residential developments in 2021. Approvals for further residential construction ended flat in 2022, suggesting a slowdown in the pipeline for 2024/25. Non-residential investment fell by 10.5 percent y-y in 2022 to R32bn, as weak demand in offices and retail slumped investment. Construction works fell by 5.6 percent, likely pulled lower by a lack of investment by SOE's. More details will only be released by the SARB towards the end of March 2023.

The financial impact of the renewable energy investments on the construction industry is still being considered, as reports floods the market with new investments announced almost daily. Solar energy investment has a limited impact on construction, with wind power generation slightly higher, but not excessive, with some estimates ranging between 10 and 15 percent. However, listed contractors often refer to the opportunities presented in the renewable energy market.

There are significant direct and indirect benefits for the local construction industry in the development of the Green Hydrogen economy that could transform the construction industry through the supply of reliable power sources and reducing the carbon footprint of construction. The construction industry will directly benefit through the construction of various production and distribution facilities., including retrofitting of existing buildings to accommodate hydrogen based technologies. Around nine projects have already been gazetted as part of the Hydrogen Economy, but implementation will more than likely be slow give the size and scope of these projects.

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 51 questionnaires were returned via both an on-line and hard copy system. The sample represents a cumulative fee income of R.42bn, and 4 400 employees for the period July - December 2022.

FEE EARNINGS

Fee earnings continue to improve, along with an improved order book, although profitability outlook fades

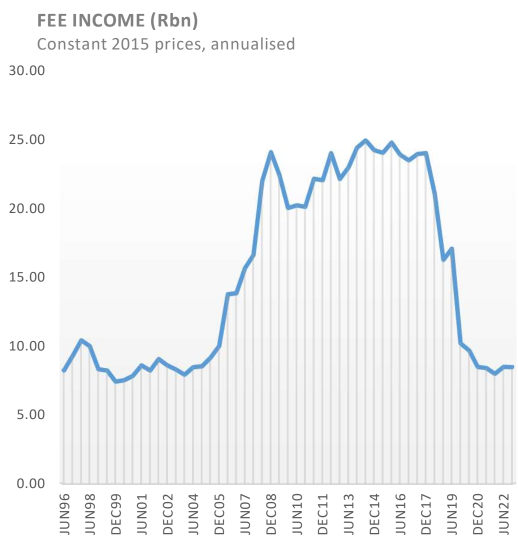

Figure 3

The second half of 2022, followed on the improved environment in the first six months, with a 4 percent nominal increase in earnings compared to the June 2022 survey, although in real terms, earnings ended 0.2 percent lower. Compared to the same period in 2021, earnings improved by 6.1 percent y-y in real terms, following the 1.2 percent increase in the first six months. This brings the overall increase in fee earnings to 3.6 percent in 2022, supported by a stronger than expected increase in earnings in the public sector. As earnings have decline consistently since 2016/17, it appears that the lower turning point may have been reached.

Business conditions were better than expected in the last six months of 2022, with larger firms having expected a contraction in earnings, that turned to a 6 percent increase. This was however somewhat expected given the more favourable outlook of the order book in the June 2022 survey. The outlook for the first six months of 2023 is positive, with earnings expected to increase by between 5 percent and 10 percent. Medium size firms however, experienced worse than expected conditions in the last six months, but is projecting a rather robust increase for the 2023.

Based on the order book (value of confirmed appointments not yet invoiced) the outlook for the next 6 months is stable, as the order book to income ratio moderated only slightly to 1.8 (from 1.9 in the June 2022 survey – that was at the highest level since December 2018). The ratio stabilized at 2:1 for larger firms, suggesting the value of the confirmed appointments is more than double the reported earnings. Overall, the value of confirmed appointments increased by 17 percent compared to the previous survey, following the 22 percent increase in the June 2022 survey. Respondents were less optimistic regarding profitability, as the average margin slowed to an average of 12.7 percent, from close to 15 percent. Larger firms, that generally have lower margins, is steadily improving their profitability expecting to breach an average of 10 percent in the next six months.

Respondents largely have a less favourable outlook regarding profitability for the next 6 months, with over 40 percent expecting margins to recede, with a similar percentage saying margins are at an unsatisfactory level. Larger firms are also apprehensive, with most of the respondents expecting margins to either stabilise or recede. Although margins are currently close to best level since 2015, it remains below the peak of 2007/8.

The ratio of outstanding payment for work already done and invoiced, moderated to an average of 61 percent of earnings, from 75 percent in the June 2022 survey. While it is not possible to say whether these payments are overdue or late, it does suggest undue financial pressure to receive timeously payments.

SALARY AND WAGE BILL AND EMPLOYMENT

Improved outlook for employment

The contribution of the salary and wage bill averaged 57 percent, from an average of between 60 percent and 65 percent over the last two years. Larger firms downsized employment by an average of 8 percent, resulting in a 1.3 percent cut in the cumulative salary and wage bill. Despite a cut in employment for the other firm categories, the wage bills increased by an average of 4 percent.

Employment declined by 8 percent in the last six months of 2022, with decreases reported across all firm categories, except medium size that ended flat. Overall employment increased by 10 percent in 2022 following six years of consecutive declines.

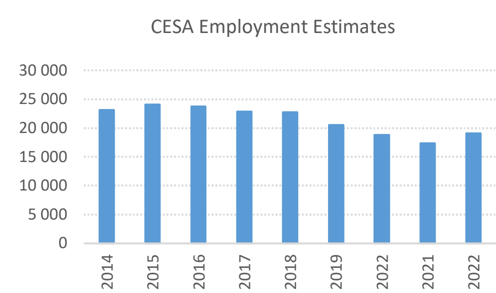

Figure 4

The weighted response in terms of employment demand for engineers increased further, now to the highest level since 2006. On average 88.0 percent of respondents are looking to increase employment of engineers, with 81.0 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, averaging 69 percent in 2022 (from 61 percent in 2021), percent for engineers and an average of 64.0 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 13.5 percent of total engineers in 2022, on par with the average in 2021.

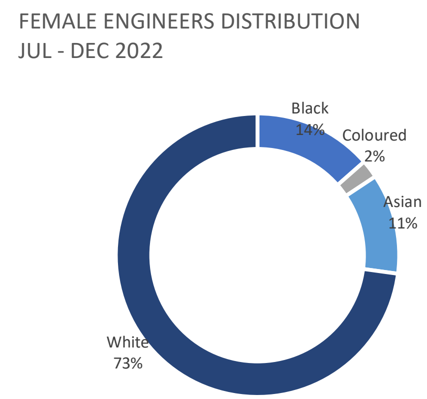

Figure 6

Over the course of the survey the number of female engineers increased from around 50 in 2008 to over 300 in 2022, with the number of black female engineers, increasing from fewer than 10 to close to 90. These numbers only reflect CESA estimates and does not include engineers employed by the public sector for example.

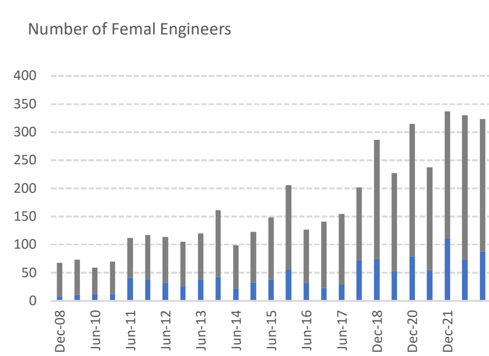

Figure 5

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. According to respondents, on average 21.7 percent of fee earnings were outsourced to black owned enterprises and averaged 18.4 percent in 2022. The tendency to outsource on average seems to be lower in the first six months of a year. Larger firms outsourced a much higher percentage of earnings to black owned enterprises, with 33 percent outsourced on average in the last six months of 2022, up from 25.3 percent in June 2022 survey and 18.7 percent in the December 2021 survey. At 33 percent it is the highest level going back to at least 2014.

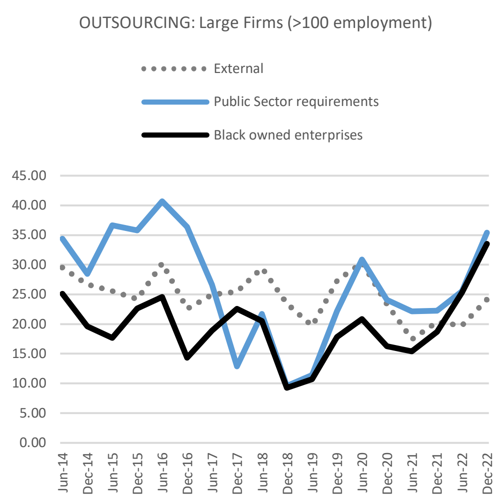

Figure 7

Given the highly competitive environment, many firms continue to report very keen and fierce competition, although in this survey, it dropped further to 83.1 percent.

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 accelerated to an average of 24.3 percent, from an average of below 20 percent in June 2022. On average the discounting rate was lower in 2022 at 22 percent compared to an average of 26.3 percent in 2021.

Larger firms are experiencing above average competition, with more than 60 percent of respondents reporting fierce competition (against an average of 40 percent for the current survey), and compared to 34 percent for medium size firms. It is thus not surprising that the average discounting rate for larger firms accelerated to 30.4 percent in December 2022.

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 to 82 percent over the last two surveys, with roughly a third of the respondents expecting capacity utilisation to further increase in the next 6 months, including respondents from larger firms. Majority expect levels to stabilise.

BREAK-EVEN RATIO

The cumulative break-even ratio (income to break even revenue) for larger firms improved to 0.61 from an average of 0.55 over the last two surveys, 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.

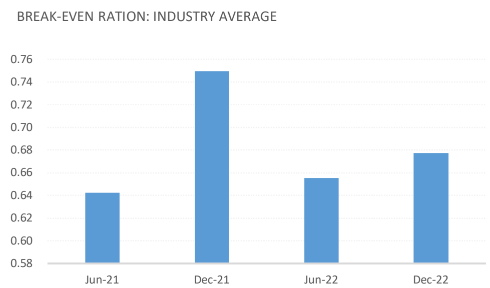

Figure 9

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.

On average 42 percent of respondents reported incidences of tender cancellations during the last six months of 2022, compared to 46 percent and 35 percent in the last two surveys. 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.

In terms of the costs associated with cancellations, provincial governments surpassed central government in this survey, contributing over 60 percent of the total cumulative costs associated reported by respondents, followed by local governments at

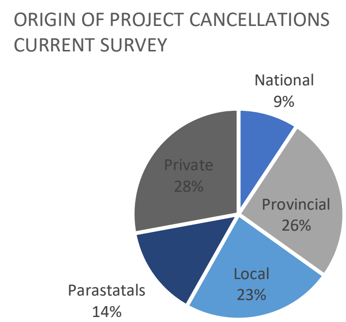

Figure 8

27 percent. The cost of provincial cancellations in relation to earnings, averaged 4.1 percent, compared to less than 1 percent for all the other clients.

Overall cancellation costs represented 0.8 percent of cumulative fee earnings, (from 0.5 percent in June 2022) with larger firms (due to economies of scale) at an average of 0.1 percent, medium size firms at 2.1 percent and small to micro firms averaging an impact of 4 percent.

Micro firms remain more vulnerable to cancellations, as it represented a higher portion of their earnings, an average of 6.4 percent - against an industry average of 0.8 percent - and up from 6.2 percent in the previous survey. With fee earnings estimated at R12.2bn (in current prices), this equates to around R90m.

A study by Industry Insight on project cancellations, found that fewer cancellations were reported in the second half of 2022 compared to the first six months, down 18 percent to around 134 projects. This still brings the total number of projects that we know off close to 300 in 2022, but at least it is an improvement from the over 450 projects in 2021.

Projects were mainly cancelled in the roads, water, and education sector during the last six months of 2022, compared to several social housing projects also cancelled in the first half of 2022. Local government accounted for the lion share (last six months of 2022), but reported 12 percent fewer cancellations compared to the first six months. Provincial government also reported close to 40 project cancellations, down 26 percent, while SOE's increased cancellations by 20 percent to 30 projects.

This does not include projects that have been postponed or delayed. Cancellations by the private sector was also lower, although close to 50 projects that we know of were cancelled between July and December (compared to 70 up to June), representing a decrease of 28 percent. At a provincial level, most of the public sector projects cancelled were in Kwazulu Natal, Gauteng and Western Cape. Most of the provinces reported fewer projects cancelled, with just the Western Cape reporting another 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*) moderated to 13 percent in the second half of 2022, from 17 percent in the first six months, from an average of 15 percent in 2021 and 30 percent during Covid-19 (2020). Gauteng continues to have the highest cancellation rate, although when compared to the first six months it is lower from 40 percent to 25 percent, with Kwazulu Natal and Northern Cape both at 20 percent. The cancellation rate by central government eased to 38 percent (still very high), from 84 percent in the first six months of 2022, as cancellations are on the rise and tender activity on the decline. Provincial departments had a cancellation rate of 23 percent, and local governments 9 percent during the period under review.

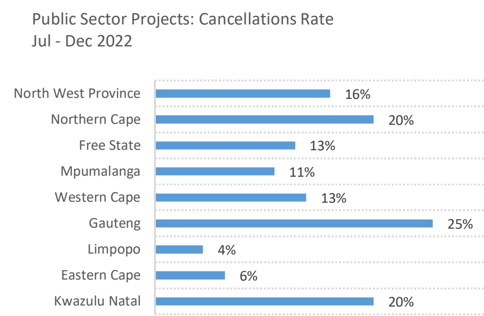

Figure 10

ECONOMIC SECTOR

The contribution of the commercial sector fell dropped to below 10 percent, from to 13.7 percent well 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 returned to more normal levels in this survey (albeit below the 5-year average) of 10 percent, compared to an average of 21 percent in 2021. Surprisingly the contribution by the energy sector declined to 4 percent, also below the 5-year and 2-year average of between 6 percent and 7 percent. The biggest mover in the current survey is the water sector, that increased its share of fee earnings to 34 percent, from an average of 15 percent in 2021. This translates to a real increase in fee earnings of more than 70 percent y-y in 2022. Earnings in the transport sector rose 53 percent as it increased its share of earnings to 27 percent in the last six months, or an average of 26 percent in 2022 compared to 18 percent in 2021.

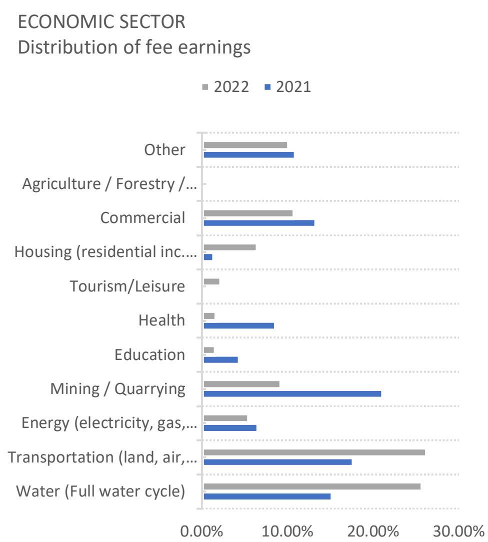

Figure 11

OUTLOOK

The consulting engineering confidence index (satisfaction rate) eased to 52.1 in the first half of 2022, with a more depressed outlook for the last six months at the time, with satisfaction rates below 50 percent. However, better than expected conditions in the last six months of 2022 increased the satisfaction rate to 52.4 percent. The outlook for business conditions in 2023 is considerably more positive, with the confidence index increasing to a satisfaction rate of 96 percent for the first six months and 95 percent for the second half of 2023. A highlight in this survey, is the number of respondents, that not only expect satisfactory conditions, but anticipate "very busy" conditions. Almost a third of the larger firms, and on average 20 percent of the respondents from medium to smaller firms. Larger firms expect to maintain this momentum into the second half of the year, with a slight drop in expectations by the medium to smaller firms.

The 2023 Budget incorporated a real increase in infrastructure allocations and together with higher levels of investment by the private sector, the outlook has certainly turned more positive. Government's infrastructure investment programme, albeit coming of such a low level, can play a countercyclical role in the otherwise battered economy. One of the most important developments will be the rationalisation and reshuffle of government departments, and while there hasn't been a major shakeup yet, with a few ministers moving positions, talk of scrapping the Department of Public Enterprises holds with it a host of opportunities. Some argue that this is the first step to establish the Public Enterprises Holding Company that may ultimately be privately owned. After lengthy delays, SANRAL finally awarded several multibillion projects in the last six months of 2022. 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. The building industry is likely to benefit from the delayed impact of lower interest rates introduced in 2020/21 that fuelled demand for housing, particularly multi-unit housing developments, but this is not sustainable without quantitative easing. Approvals for private sector building construction increased by only 2 percent in 2022, slowing the potential pipeline for 2024/25.

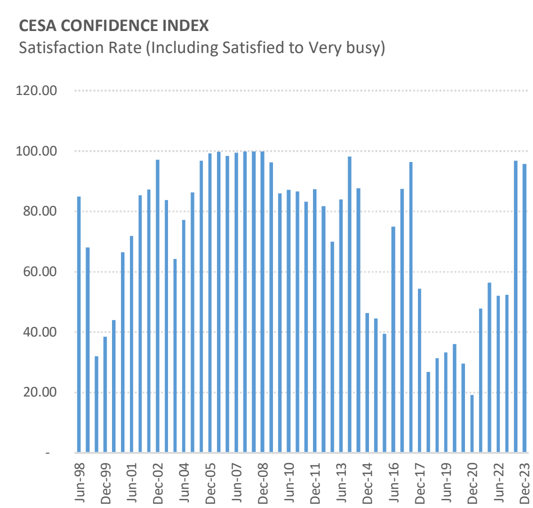

Figure 12

Consulting Engineers South Africa

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