



BI-ANNUAL ECONOMIC AND CAPACITY SURVEY

July - December 2023

Published by
The Consulting Engineers South Africa (CESA)

April 2024

Report prepared by

Industry Insight CC
www.industryinsight.co.za

ECONOMIC SUMMARY

INTERNATIONAL ECONOMY

Global economic growth moderated to 3.1 percent in 2023 as expected and is projected at 3.1 percent in 2024 and 3.2 percent in 2025. Economic growth was revised slightly higher, off the back of a more resilient US economy and several large emerging market and developing economies and fiscal support in China. Global growth however remains below the historical (2000 – 2019) average of 3.8 percent as elevated central bank policy rates to fight inflation, withdrawal of fiscal support amid high debt weighing on economic activity. As supply issues ease, inflation is falling faster than expected in some regions. Global headline inflation is expected to fall to 5.8 percent in 2024 and 4.4 percent in 2025. The risk to global growth is broadly balanced. On the upside there is the pace of disinflation that could spark quantitative easing, while on the downside there are risks of commodity price spikes due to the geopolitical shocks.

Source IMF World Economic Outlook January 2024

South Africa’s own growth outlook is threatened by a few key elements. Economic weakening of key trading partners, including Eu, China, India, Russia and Brazil. Lower export revenue, combined with domestic constraints related to rail and freight infrastructure will dampen growth outlook for 2024 and 2025. The IMF expects South Africa’s economic growth to slow from 0.6 percent in 2023 to 1 percent in 2024, rising to 1.3 percent in 2024.

Inflationary pressures may have subsided in recent months, but a recent acceleration in regulated administered prices and a weaker rand continue to put pressure on inflation. SARB included a 75-basis point cut in their own assumptions for 2024, but as inflation is moving in the opposite direction, it is uncertain whether this will materialize at some point in the 2nd half of 2024.

Most pertinent focus point is the US economy that is holding up and as inflationary pressure are lingering, investors are pricing in rates going higher for longer, with a material impact on the South Africa economy.

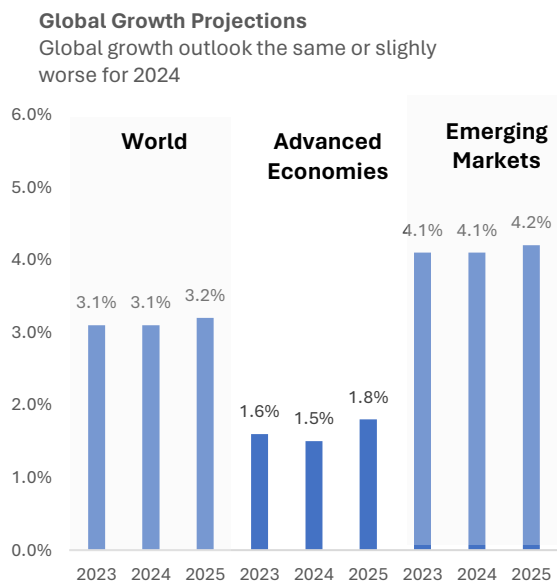


Figure 1: Global Growth Projections

DOMESTIC ECONOMY

GDP Value add by Economic Sector: Annual Change

Source Stats SA

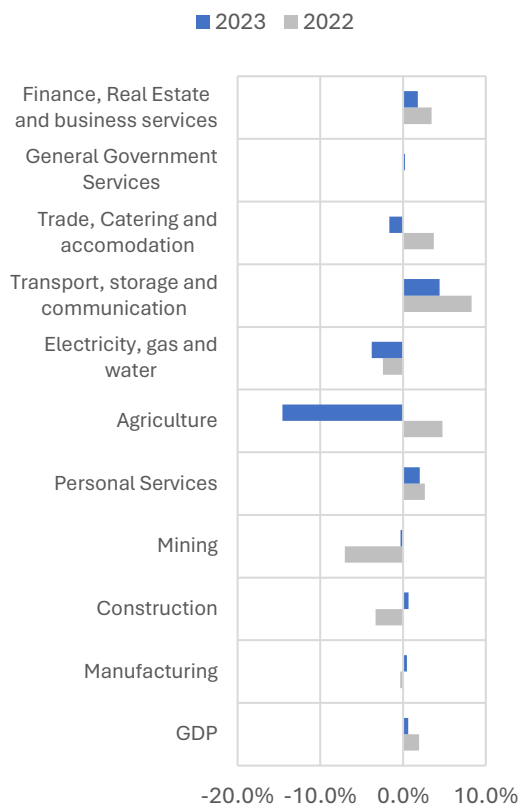


Figure 2: GDP Value add by Economic Sector

Real GDP (measured by production) increased by 0.6 percent in 2023, following a 1.9 percent increase in 2022.

Economic sectors that supported economic growth included Transport and Personal Services, while Agriculture, Electricity, Trade and Mining weighed in on economic activity. Construction (gross value add) rose 0.6 percent in 2023, on par with GDP growth. An improved trade balance added some economic support preventing the economy from slipping into a recession in the 4th quarter of 2023.

Fixed investment increased by 4.2 percent y-y in 2023 from 4.8 percent in 2022, as investment by general government

accelerated to an annual increase of 5.7 percent (1 percent 2022), and an average 5 percent increase by the private sector over the last two years. Investment was pulled lower by a 1.8 percent decline by SOE’s (8.2 percent 2022).

Fixed investment as a percentage of GDP however improved to an average of 14.9 percent in 2023, from 14.5 percent in 2022, supported mainly by increased activity levels in the first six months of 2023. Public sector investment as a percentage of GDP hovered at 4.1 percent, failing dismally to reach the NDP target of 10% by 2030.

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 25 percent over the two 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.

GFCF Construction Works

Private sector contribution
Source SARB

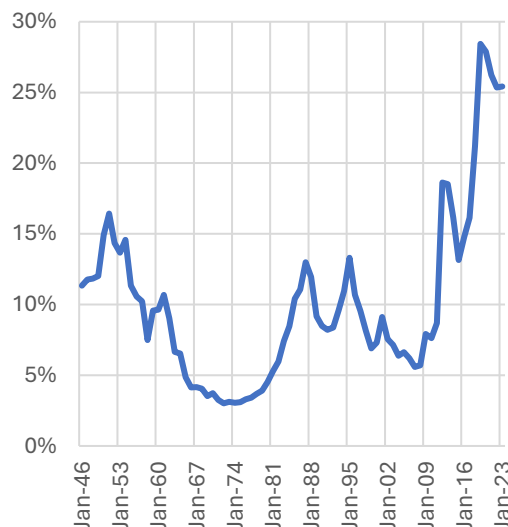


Figure 3: GFCF Construction Works

The collapse of electricity infrastructure, with the water crisis gaining traction, may just be the catalyst to increase future private sector investment as government is rapidly running out of options, and need to become more proactive whilst creating an environment that is more 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 downgrade in the country’s sovereign credit rating status to “Junk” meant access to borrowing to finance infrastructure projects quickly diminished. Portfolio investment fell by 26 percent between 2017 and 2022, or more than R1 trillion in real terms. Foreign Direct investment having been idle since 2010, showed a 36 percent increase in 2021.

2024 Budget, with a reprioritisation towards water and sanitation in the 2024 Budget. This, however, comes at the expense of Transport and Social Infrastructure where allocations were cut over the three-year period. It will be more difficult to encourage private sector participation in social infrastructure development, compared to the returns offered by the more “grandiose” economic infrastructure developments. However, there has been some progress with requests issued by the Department of Public Works and Infrastructure related to maintenance and upgrade contracts for government buildings.

In real terms, infrastructure allocations announced in the 2024 Budget, increased by an average annual rate 4.5 percent over the base-line period (2024/25/24 – 2026/27), in economic infrastructure, against a 8.5 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 8.2 percent and water and sanitation finally received a budgetary boost, with allocations up 9.3 percent on average, much work is needed to not only improve bulk infrastructure, but to improve water service delivery and management across all spheres of government. The reduction in budgetary allocations towards Transport will also impact SANRAL – a major client in the road construction sector - with a R2bn reduction in budgetary allocations over the three-year period.

Foreign Investment

Rm, Constant 2022 Prices
Source SARB

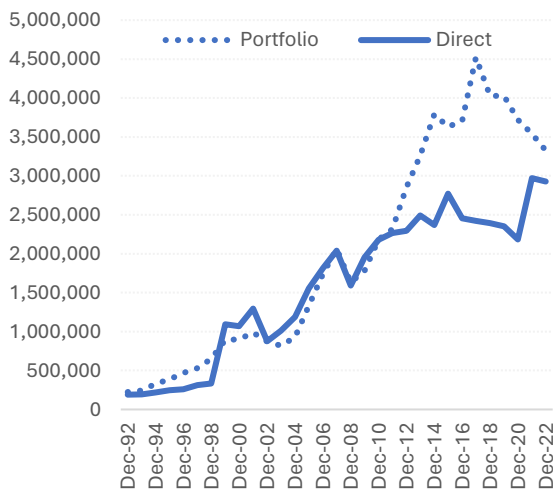


Figure 4: Foreign Investment

Higher levels of involvement by the private sector could unlock significant funds across all spheres of infrastructure development. Due to the current crisis, government focused mainly on restoring economic infrastructure as outlined in the 2023 and

Inflationary pressures have not subsided at the expected momentum but is expected to slow to an average of 5 percent in 2024 from an average of 5.9 percent in 2023. Upside risks remains, for example secondary inflationary pressures due to rand weakness, geopolitical tensions that could

disrupts supply and impact commodity prices, and an acceleration in food prices due to El Nino.

The South African Reserve Bank's Monetary Policy Committee (MPC) held rates steady at the March 2024 meeting, leaving the repo rate unchanged over the last 12 months. SARB penciled in a possible 50 to 75 basis point cut this year and a 25-basis point cut for 2025, that could bring interest rates to 10.75 percent at the end of the two-year period. However, monetary policy decisions remain dependent on data and international developments.

Business confidence, strained by political uncertainty, corruption, transport, logistical and energy constraints, weakened by 22 percent in 2023 to a level of 32 (2022: 41). Confidence levels weakened further in the 1st quarter of 2024 to 30, the weakest level since 2019. Higher levels of business confidence is critical to support investment growth, irrespective of the level of interest rates or ease of access to finance. Unless business confidence does not show a more sustained recovery to 50 (neutral) or higher, investment levels will remain depressed.

Business Confidence Index
Satisfaction Rate %
Source: RMB/BER

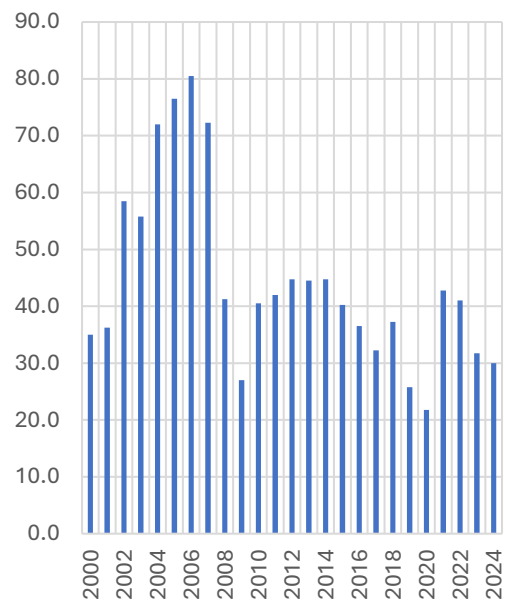


Figure 5: Business Confidence

INVESTMENT IN CONSTRUCTION

Investment in the construction industry (according to the Reserve Bank’s gross fixed capital formation estimates) rose 0.9 percent y-y in 2023 to R247bn (2015 prices), from R245bn in 2022. The momentum gained during the first six months was lost during the last two quarters of 2023, as investment fell by an average of 4 percent y-y.

GFCF Construction 2023

Y-Y Per.chg (Constant prices)

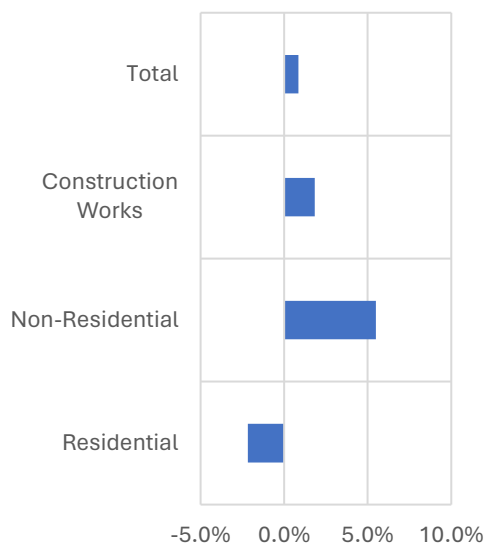


Figure 6: GFCF Construction 2023

Residential investment contracted by 2.2 percent y-y, with a decline reported across private and public sectors. Non-Residential investment rose 5.5 percent, supported by an increase of 13 percent by the private sector. Investment in construction works rose 1.8 percent with a 4.2 percent increase in investment by general government.

The private sector contributed 53 percent to total investment in construction (across all three market segments) followed by general government at 31 percent and SOE’s at 16 percent.

The outlook for investment in residential properties is less positive with a sharp contraction in new approvals of more than 20 percent, that will reduce the pipeline of projects in 2024 and 2025. Budget cuts in the human settlement development infrastructure allocations over the MTEF adds further woes to the residential market outlook. Although approvals for non-residential developments fell by around 6 percent in 2023, there are provincial pockets of growth, where demand for office, retail and industrial space has expanded. Government’s infrastructure allocations to social infrastructure (excluding human settlements) offers no real support to anticipate stronger levels of investment from government. The outlook for civil investment linked to increased allocations towards economic infrastructure development and an accelerate pace of privatisation remains positive and is likely to outperform the building industry in 2024.

GFCF Construction

Rm Constant 2025 prices
 Source SARB

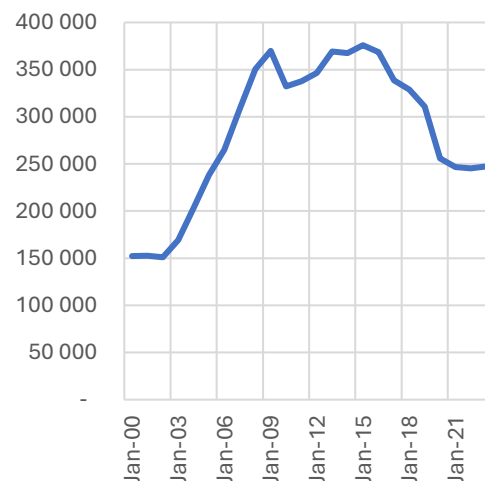


Figure 7: GFCF Construction Rm 2015 prices (Source SARB)

Confidence in the civil sector, according to the RMB/BER confidence surveys, rebound in 2023, from an average of 18.5 in 2022 to 41.8. This supports anecdotal

evidence of a recovery in the civil sector, including the expansion in the labour force, an increase in tender activity, and re-prioritised budgetary allocations in favour of economic infrastructure expenditure. This momentum was sustained in the 1st quarter

Civil Contractor Confidence Index

Satisfaction Rate %

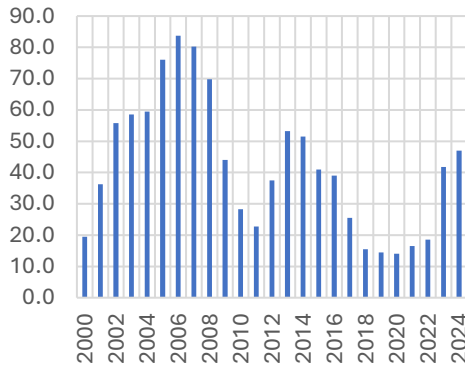


Figure 8: Civil Contractor Confidence Index (Source RMB/BER)
of 2024, as confidence levels rose to 47, the highest level in 8 years.

Building confidence, by contrast, weakened to 32 percent to 34.5 in 2023, slowing further to 27 in the 1st quarter of 2024, as an increase in demand constraints put immense pressure on the industry. Pressures related to higher lending rates are weighing heavily on the residential market, while weak economic growth and lackluster business confidence dampen investment in the non-residential market.

Building Contractor Confidence Index

Satisfaction Rate %

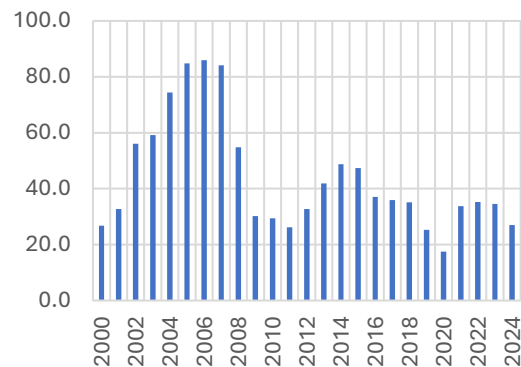


Figure 9: Building Contractor Confidence Index (Source RMB/BER)

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 49 questionnaires were returned via both an on-line and hard copy system.

Respondents Profile
Jul - Dec 2023

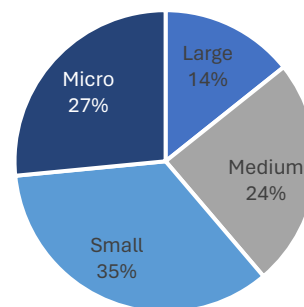


Figure 10: Sample Profile

The sample represents a cumulative fee income of R2.6bn, and 4 371 employees for the period July - December 2023.

FEE EARNINGS

Fee earnings continue to improve, along an improved order book, but outlook on profitability softens

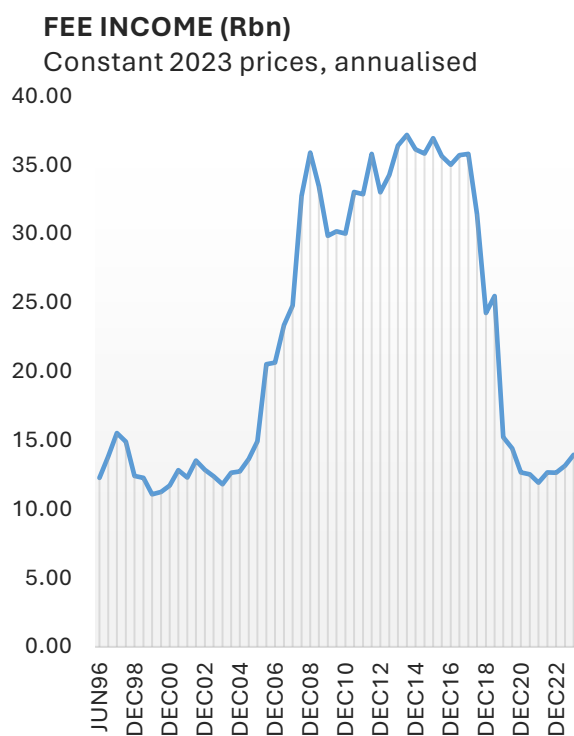


Figure 11: Fee Income

Fee earnings improved by an average of 7.0 percent y-y in real terms in 2023, with earnings growth accelerating to 10 percent y-y (real terms) in the 2nd half of 2023, from a (revised) 4 percent in the first six months. This shows that the momentum seen in the June 2023 survey has been sustained, adding support to the more improved outlook for the sector, and the consulting engineering profession. Earnings were supported by a notable increase by the private sector, (up 18 percent), but was pulled lower by a decline in earnings generated by central and local governments.

Earnings were better than expected in the last six months of 2023, up 9 percent, against an expected 3 percent increase.

Larger firms' expectations were exceeded with an 11 percent increase, but medium size firms reported an average 20 percent decline in earnings.

The outlook for the first six months of 2024 is a mixed bag, with larger firms expecting earnings to stabilise, while medium firms, having experienced a contraction in earning over the last two surveys, are expecting earnings to increase by between 5 percent and 7 percent.

In line with larger firms' expectations of a softer start to 2024, the order book to income ratio (value of confirmed appointments not yet invoiced) fell from an average of 2.7 in the June 2023 survey to 1.3, while medium size firms' order books improved from 0.3 to 1.1 Overall, the value of confirmed appointments decreased by 1 percent compared to the previous survey, following the 34 percent increase in the previous survey. The value of confirmed appointments was weaker for larger firms, with a 15 percent increase reported by medium-sized firms.

Overall, profitability was marginally weaker at 14.1 percent, from 14.9 percent, but on average, improved to 14.5 percent for 2023, from 13.8 percent in 2022. Given the slightly weaker order book, just under 50 percent of respondents expect margins to recede, with 21 percent expecting further improvement (up from 17 percent in the previous survey). Those expecting margins to improve are mainly in the medium to smaller firm size category.

Although margins are currently close to their best level since 2015, they remain below the peak of 2007/8, but are in line with the longer-term average of 14.7 percent (2006 – 2019).

The ratio of outstanding payment for work already done and invoiced moderated to 59 percent (from 62 percent), with an improvement reported across all firm size categories, except for micro firms, where the ratio increased from 29 percent to 55 percent over the last two surveys. While it is not possible to say whether these payments are overdue or late, levels remain too high and suggest undue financial pressure to receive payments timeously.

Overall employment increased by 4 percent in the last six months of 2023, with increases reported across all firm categories, except micro firms that cut employment by 9 percent. Given the improved conditions, employment rose on average 6.5 percent in 2023, following the 10 percent increase reported in 2022. The industry’s employment levels remain around 15 percent below the 2015/16 levels, or an estimated 4 000 job opportunities.

SALARY AND WAGE BILL AND EMPLOYMENT

Improved outlook for employment

The contribution of the salary and wage bill averaged 63 percent, from an average of between 60 percent and 65 percent over the last two years. Larger firms increased employment by an average of 3.9 percent, resulting in a 13.7 percent increase in the cumulative salary and wage bill. Other firms (medium to micro) increased employment by 4.9 percent with a similar increase in the salary and wage bill by 7.6 percent compared to the previous survey.

The weighted response in terms of employment demand for engineers detracted in the current survey, falling from 93 percent in the June 2023 survey (the highest level since 2006) to 51. Demand for technologist edged up to 77 percent (Jun-23: 70 percent), with close to 60 percent also showing an increase in demand for other technologists. Being a weighted average, responses are influenced by the demand from larger firms. A vast majority continue to experience difficulties in finding engineering candidates (81 percent), although fewer reported on recruitment difficulties related to technologist and technicians. 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 12.6 percent of total engineers in 2023, a moderate downward adjustment from 13.5 percent in 2022, with the last six months slowing to 12.6 percent.

Over the course of the survey, the number of female engineers increased from around 50 in 2008 to over 300 in 2022, falling to 260 on average in 2023, with the number of black female engineers, increasing from fewer than 10 to over 100. These numbers only reflect CESA estimates and does not include

CESA EMPLOYMENT ESTIMATES

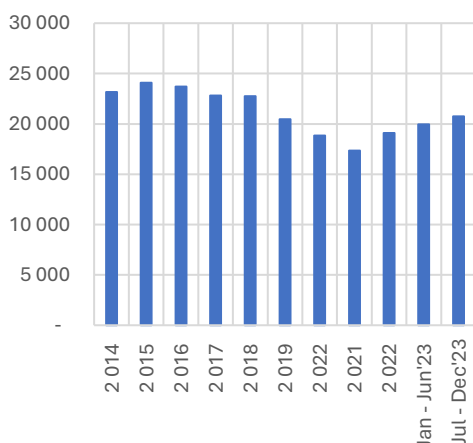


Figure 13: Employment Estimates

engineers employed by the public sector for example. Finding suitable candidates remains a challenge, with close to 90 percent of respondents experiencing recruitment problems finding a female engineer and 94 percent from a previously disadvantaged background.

the first six months of 2023 and a 29 percent average in 2022. On average 21 percent was outsourced by larger firms for transformation purposes including black owned enterprises, the lowest rate since 2021. Medium size firms outsourced a higher percentage for transformation purposes (18.9 percent), the highest level in 3 years.

NUMBER OF FEMALE ENGINEERS

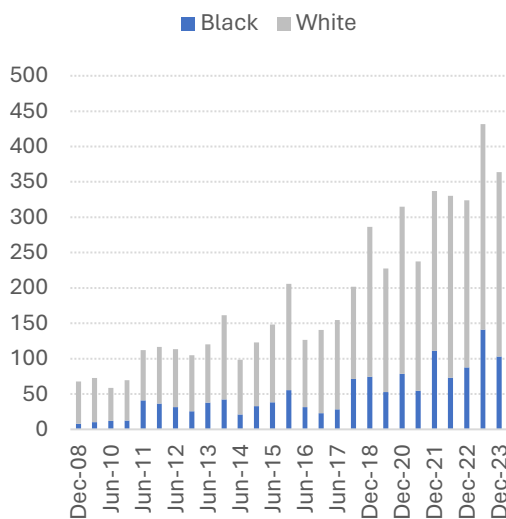


Figure 14: Female engineers

OUTSOURCING, DISCOUNTING AND COMPETITION

On average firms **outsourced** 17.8 percent to external enterprises and a similar rate for transformation purposes, with 14 percent of earnings outsourced to black enterprises. Outsourcing is generally higher in the last six months of the year, with the December 2023 survey results on par with comparable period.

Larger firms outsourced a higher percentage of earnings compare to medium size firms, with the outsourcing rate to black owned enterprises slowing slightly to 22.5 in the current survey against an average of 24 in

Given the highly competitive environment, many firms continue to report very keen to fierce competition, and after falling to 67 percent of respondents in the June 2023 survey, this rate increased to 70 percent. More than 50 percent of respondents experienced fierce competition. However, compared to 2022, on average, respondents may have experienced a marginal improved competitive environment, with on average 50 percent having experienced fierce competition in 2023 compared to 56.2 percent in 2022. Less than 1 percent reported low competition levels.

Majority of larger firms continue to report on fierce competition (47 percent) while fewer 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 rose to 25 percent (Dec-23) from 23 percent and increased to an average of 24 percent in 2023 (2022: 22 percent).

CAPACITY UTILISATION

Capacity utilisation of technical staff has steadily decreased since 2008, falling to near record lows of 74 percent in 2020 (similar to levels experienced in the 1998/99

financial crisis). Although levels have since then recovered to an industry average of 80 percent to 82 percent over the previous two surveys, utilisation levels recovered to 84 percent in the December 2023 survey, the best level since 2018. Majority expect utilisation rates to increase in the next 6 months (55.5 percent), lower than the previous survey, with close to 50 percent expecting levels to stabilise, up from 29 percent the previous survey. On average for 2023 however, more than 60 percent expect utilisation levels to improve, the last time respondents responded this positively was in 2007.

BREAK-EVEN RATIO

Capacity Utilisation

Annual average

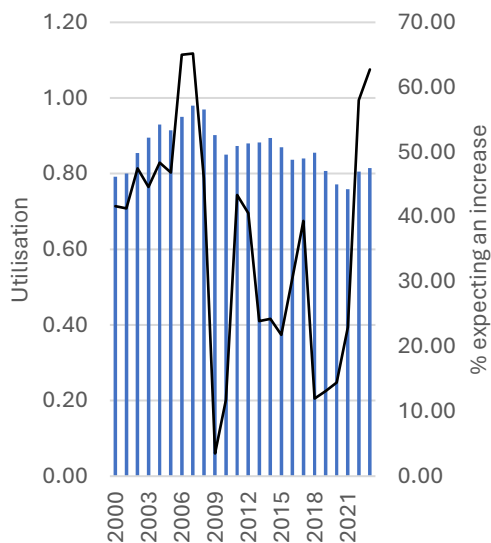


Figure 16: Capacity Utilisation

Despite improved conditions, larger firms continue the struggle to reach breakeven ratios. The cumulative break-even ratio (income to break even revenue) for larger firms deteriorated to an average of 0.52, from 0.53 in June 2023 and an average of 0.58 in 2023. The average break-even ratio for medium, smaller, and micro firms

improved to higher levels surveyed in June 2023, from an average of 1.33 to 1.65. Conditions were more challenging at the higher end of the market (due to economies of scale) where margins are also potentially lower.

Break-Even Ratio

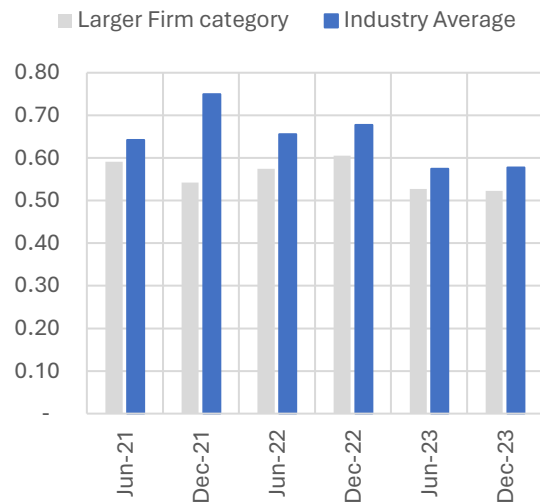


Figure 15: Break-Even Ratio

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 41 percent of respondents reported incidences of tender cancellations during the last six months of 2023, compared to 31 percent in June 2023, and an average of 47 percent in 2022. All firm size categories reported an increase, with the highest percentage of respondents from larger, medium and micro firms, at an

average of more than 40 percent of respondents.

% of Respondents that reported tender cancellations

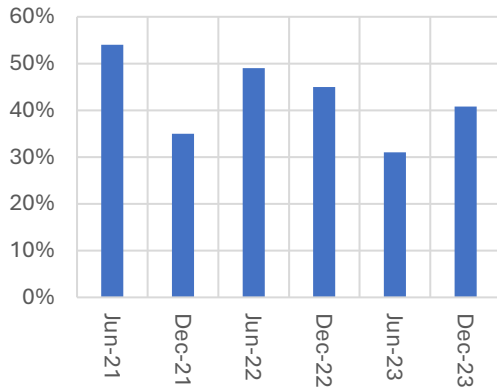


Figure 17: Tender Cancellations

In terms of the costs associated with cancellations, there was a more even disbursement between the various clients. Provincial Governments contributed 25 percent, with central government, local government and SOE’s between 21 percent and 22 percent. The private sector contributed 12 percent, up from 5 percent in the December 2022 survey. Larger firms were primarily affected by Central government and SOE’s cancellations, with a similar impact on medium firms, although at a lower scale. As a percentage of fee earnings, cancellation costs contributed 0.2 percent of large firms’ earnings, medium size firms follow closely at 0.4 percent with small to micro firms impacted more direly at between 1.1 percent and 2.8 percent of fee earnings. For smaller firms for example, 5.4 percent of earnings in local government were impacted by cancellations and 9.1 percent by SOE’s.

ORIGIN OF PROJECT CANCELLATIONS CURRENT SURVEY

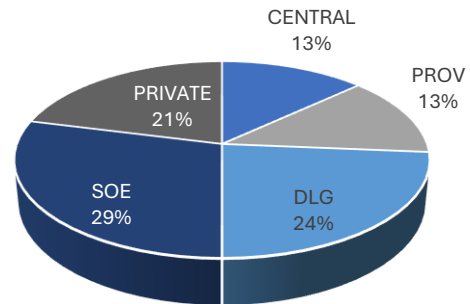


Figure 18: Origin of tender cancellations

Overall cancellation costs represented 0.4 percent of cumulative fee earnings, from 2.1 percent in the June 2023 survey.

A study by Industry Insight on project cancellations, found that a moderate increase of 7 percent in cancellations reported during the last six months of 2023 compared to the first six months to 262 projects. In total over 500 projects were cancelled, that we are aware of, during 2023. An increase was reported across all provinces, except Western Cape where cancellations fell by 56 percent during the last six months of 2023. The bulk of

Project Cancellations by Province

Number of Projects

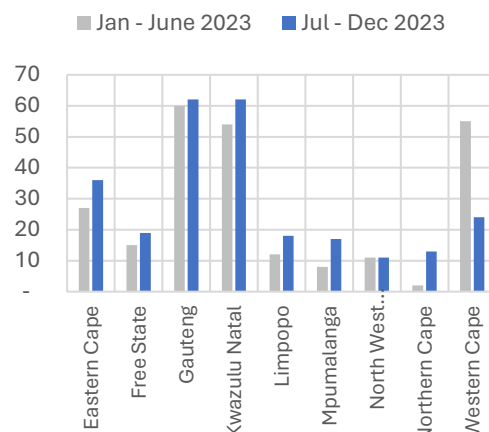


Figure 19: Project Cancellations by Province

cancellations were in Gauteng and Kwazulu Natal, followed by Eastern Cape. Road and water projects were mainly affected by cancellations during the last six months of 2023 where postponements increased by 213 percent and 120 percent respectively.

ECONOMIC SECTOR

The contribution of the water sector dropped to 15 percent, from an average of 26 percent in 2022, below the 5-year average. In this survey, the transportation sector gained 5 percentage points to 31 percent, housing and education 2 percentage points respectively to 8 percent and 3 percent. While levels are on par in the energy sector, exposure to the housing and transportation sectors are above the 5-year, with mining and water under performing against the 5-year average. Transportation remains an important sector the industry, with a contribution of 31 percent, up from 26 percent in the previous survey.

ECONOMIC SECTOR

Distribution of fee earnings

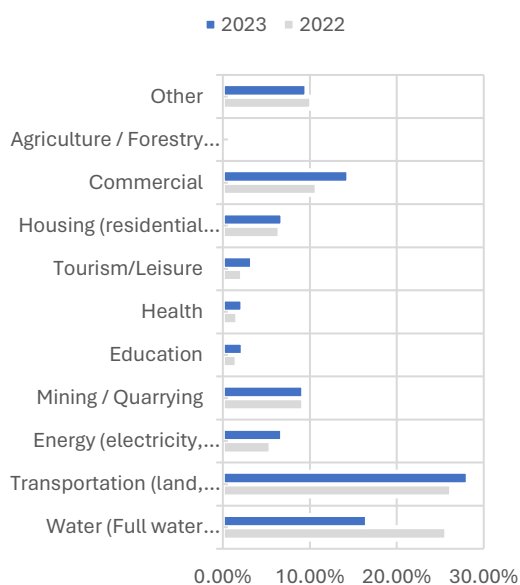


Figure 21: Fee income distribution by Economic Sector

OUTLOOK

Improved expectations were met for the last six months of 2023, as the consulting engineering index (satisfaction rate) improved from 52.5 percent in the last six months of 2022 to 97.2 percent, in line with expectations reported during the June 2023 survey. Expectations for 2024 remain high, with satisfaction rates of 99.3 and 96.9 expected for the first and last six months of 2024. The outlook for business conditions in 2023, into 2024 is therefore considerably more positive. Expectations were however lowered in terms of how busy firms expect to be, from “busy” to satisfactory, that may hint to underlying challenges that could impact confidence in the sector. An increasing percentage of respondents expect to very busy in the first six months (69 percent) falling to 24 percent for the last six months of the current year.

EARNINGS VS CONFIDENCE

Annual Change in Real Earnings of Consulting Engineering vs Confidence

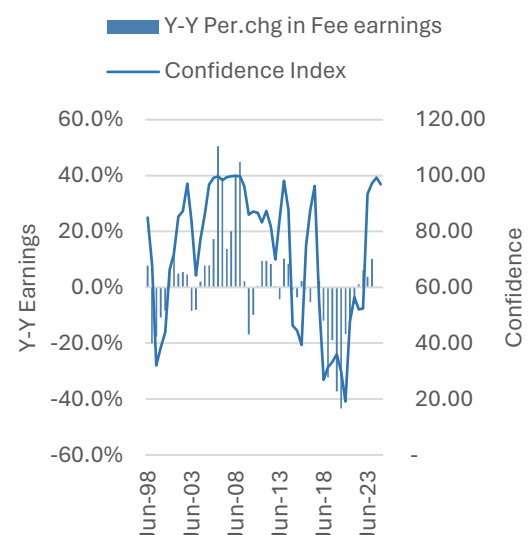


Figure 20: Fee Earnings vs Confidence

The focus in terms of construction investment remains firmly within the economic infrastructure environment, with

focus on renewable energy, roads, and water infrastructure. Enhancing private sector participation remains a critical catalyst for success, and inroads are being made in this regard. The private sector has already surpassed anticipated investment levels in the renewable energy sector, although this has had little direct impact on the consulting engineering industry, the spinoff to the domestic economy remains positive with lower and fewer stages of loadshedding. Multibillion-rand projects remain in the pipeline, with announcements of high economic impact project announcements rose 159 percent y-y to close to R130bn in the first three months of 2024, with close to 70 percent related to PPP projects.

Minister Enoch Godongwana announced PPP reforms in February 2024, to reduce procedural complexities of undertaking PPP projects, amongst other. Another support agency, an Infrastructure Finance and Implementation Support Agency will be established in 2024/25 to coordinate the planning and preparation of large projects. Infrastructure Fund chief investment officer, Mohale Rakgate also announced in March 2024, that a R70bn pipeline is at an advanced stage and ready to go out to market for requests for proposals.

The construction industry, and the need for sustainable investment in infrastructure remains a key topic, with continuous and regular announcements by stakeholders from both the private and public sector of anticipated investment in infrastructure ranging from energy projects, water infrastructure to port developments. Slow and steady progress is being made, although the upcoming election in May 2024 can slow progress due to heightened uncertainty around the outcome of the elections.

The improved outlook by consulting engineering firms in South Africa nonetheless casts a more positive outlook, as it suggests increased activity in terms of infrastructure design and planning. The challenge is to follow through on these projects with a sustainable pipeline for consulting engineers to not only maintain and increase job creation opportunities in the sector, but also to support, while improving and expanding the country's critical economic infrastructure to enhance and support real, sustained economic growth.

Consulting Engineers South Africa

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