



anian:

nieved

NO CHALLENGE, NO BUSINESS

he Tiranga is soaring high," said Prime Minister Narendra Modi on 13 August 2022, commenting on the completion of the world's highest Chenab bridge, which stands 35 metres taller than the Eiffel Tower. He reposted a Railway ministry statement on the X platform: "Our national pride, the tricolour, is flying high at the world's highest railway arch bridge, the Chenab bridge, as the golden joint work is completed today."

"With the construction of this 1,315-metre-long single arch railway bridge, we have also achieved new heights of success," observes Krishnamurthy Subramanian, Executive Vice Chairman of Afcons Infrastructure Limited (AIL), which executed the EPC contract. Interestingly, the Northern Railway states that the Chenab Bridge, part of the Udhampur-Srinagar-Baramulla rail link project (USBRL) in Jammu and Kashmir, is also five times taller than the Qutub Minar, with a total height of 359 metres from the riverbed.

Another notable feature is that the bridge can withstand wind speeds of 266 kph at deck level. With a 467metre main arch, it has been installed with 17 spans. "This is one of the toughest bridge projects undertaken in India due to geological and engineering challenges and was the first bridge designed for blast load," says Subramanian, who holds a bachelor's (honours) degree in Mechanical Engineering from Regional Engineering College, Madras University, and a postgraduate diploma in Industrial Engineering from the National Institute for Training in Industrial Engineering (NITIE). Overcoming challenges has become Shapoorji Pallonji Group company, Afcons, keeps India's infrastructure flag flying high amid risks and challenges as they become a listed entity

a way of life at Afcons, the flagship infrastructure engineering and construction company of the diversified conglomerate Shapoorji Pallonji Group. Afcons, with a six-and-a-halfdecade-long legacy, also executed the world's longest Atal Tunnel, connecting Manali to the Lahaul-Spiti Valley across the Rohtang Pass in Himachal Pradesh. The World Book of Records has certified it as the 'World's Longest Highway Tunnel Above 10,000 ft'. The 9.02 km long, strategically significant Atal Tunnel, constructed on the Manali-Leh Highway, was built under the challenging conditions of freezing temperatures and extremely difficult terrain, which has 53 avalanche points. The highway used to remain closed during the winter season for six

months, isolating Lahaul & Spiti from the mainland. But not anymore! The Atal Tunnel has reduced the distance on the Manali-Sarchu road by 46 km and travel time by 4-5 hours, providing all-weather connectivity on the Manali-Leh axis, serving both tourists and defence movements in the strategic area.

"The Atal Tunnel will give new strength to India's border infrastructure. It is an example of world-class border connectivity. There have been demands to improve border infrastructure, but for a long time, such projects either could not get out of the planning stage or got stuck midway," observed Modi.

A Fitch report records that Afcons has, over the years, expanded its presence globally, particularly across Asia, Africa, and the Middle East, undertaking many complex, challenging, unique, and 'first-of-its-kind' projects. It has emerged as one of India's largest international infrastructure companies. Over the last ten-and-a-half years, the company has successfully completed six projects across 15 countries, with a total executed contract value of ₹52,220 crore, says Ramesh K Jha, CFO, Afcons. Among the large infrastructure construction companies in India analysed in the Fitch

FINANCIALS					
Particulars	Till June 24	June 23	FY24	FY23	FY22
Revenue (₹ crore)	3,154.36	3,171.41	13,267.49	12,637.38	11,018.96
EBIDTA (₹ crore)	371.69	314.05	1,583.12	1,373.78	1,068.59
PAT (₹ crore)	91.58	90.96	449.73	410.86	357.60
EBIDTA Margin (%)	11.57	9.75	11.60	10.70	9.48
PAT Margin (%)	2.85	2.82	3.30	3.20	3.17
Source : RHP					

Report, Afcons enjoyed the highest ROCE and ROE margins for FY23.

Afcons has built an impressive track record of completing projects ahead of schedule, including notable ones like the Jammu-Udhampur Highway Project, Nagpur Metro Reach 3, and Agra-Lucknow Expressway. As of 30 June, 2024, Afcons is actively involved in 79 projects across 17 countries.

The history of Afcons dates to 1959, when Rodio Foundation Engineering Limited, Switzerland, and Hazarat & Company, India, began operations as a civil construction firm. Asia Foundations and Construction Private Limited, formed in 1976, took over Rodio Foundation Engineering Limited and Hazarat & Company, India, through an indenture on 22 March 1977. The company commenced bridge construction operations in 1979, bagged its first project in Ethiopia in 1987, and entered road construction when large road projects funded by the World Bank/Asian Development Bank were tendered in 1988. The company was renamed Afcons Infrastructure Limited in 1996 due to its major focus on infrastructure-related work. Sterling Investment Corporation Limited, a Shapoorji Pallonji Group company, acquired Afcons in 2000, when the company took up the elevated metro segment project at Tis Hazari and Tri Nagar in Delhi. Subsequently, the ownership of Afcons was transferred to Shapoorii Pallonii and two other group companies: Goswami Infratech Private Limited and Floreat Investments Private Limited.

Sustainable growth

As of 30 June, 2024, Afcons Infra's order book stood at ₹31,747.43 crore. "Over the last three years, we have expanded and diversified our order book, reflecting our commitment to organic and sustainable growth while pursuing a broader range of projects," says Jha.

The company's revenue from operations increased from ₹12,637.38 crore in FY23 to ₹13,267.50 crore in FY24. Profit after tax grew ₹449.74 crore in FY24 from ₹410.86 crore in FY23. Among large infrastructure construction companies in India analysed in the Fitch Report, Afcons has the highest ROCE and EBITDA margins and



Jha: expanded our order book

the second highest ROE and PAT margins for FY24, and the PAT has grown at the fastest rate between FY22 and FY24. For the three months ended 30 June, 2024, revenue from operations stood at ₹3,154.36 crore, and profit after tax stood at ₹91.59 crore.

"Our track record showcases our ability to capitalise on our design and extreme engineering capabilities, management expertise, and robust internal systems," says S Paramasivan, managing director, Afcons, who holds a bachelor's degree in Commerce from Madurai University, and is a fellow of the Institute of Cost Accountants of India and the Institute of Company Secretaries of India.

"With our experience, we tap a steady stream of opportunities, for greater stability and visibility of revenues," says Paramasivan. "Large, complex projects allow us to distinguish ourselves from other EPC companies. For example, we have been engaged for the execution and design of the Greater Male Connectivity Link. Valued at ₹3,752 crore, this is the biggest infrastructure project in the Maldives," he explains. (See box).

Afcons' customers, both in India and overseas, include central or state governments, governmental organisations such as the NHAI, public sector undertakings such as ONGC, and private sector clients, including a leading global steel manufacturing and mining company headquartered in Western Europe, a prominent global food and agri-business company headquartered in Singapore, and one of India's top global conglomerates.

Afcons faces competition from L&T Construction (buildings and factories, transportation infrastructure, heavy civil infrastructure, water and effluent treatment, power transmission and distribution, minerals and metals); KEC International Limited (transmission and distribution, railways, civil, urban infra-structure, oil and gas pipelines, cables and solar); Kalpataru Projects International Limited (power transmission and distribution, water, buildings and factories, railways, urban infrastructure, oil and gas, biomass); Tata Projects Limited (transportation, oil and gas, space and nuclear, metal and minerals, power, water); and Dilip Buildcon Limited (roads and highways, railways and metro, airports, mining, irrigation, special bridges, and urban development).

Asset-right approach

Afcons' asset-right approach, which focuses on investing in and maintaining a strategic equipment base while leasing non-core equipment from external parties, has helped the company control costs and keep capital expenditure in check. Subramanian explains: "As a key component of our asset-right approach, we continuously expand our subcontractor base. By strategically partnering with a diverse and reliable network of subcontractors, we can flexibly scale our resources based on project demands, ensuring optimal utilisation of assets and minimising capital expenditure. We typically do not bid for projects that require us to incur significant capital expenditure. We also aim to extend the useful life of our equipment through various initiatives undertaken by in-house and external expert teams. This allows us to defer the purchase of new equipment, resulting in cost savings," he says, explaining the business strategy.

Afcons, however, owns and maintains a large and strategic equipment base comprising a wide range of heavy machinery and specialised equipment. Its equipment base includes 10

marine barges, 133 cranes, 16 tunnel boring machines, eight large-capacity jack-ups, and 20 piling rigs. Four tunnel boring machines are also pending delivery. It has dedicated workshops in Delhi and Nagpur for the maintenance of its equipment base. Fitch estimates the value of its indigenous strategic equipment base to be approximately \$450 million, as of 30 September, 2023. Mahakaya and Samrat, its jack-ups, are among the biggest of their kind in India, and its inventory of customised tunnel boring machines is one of the largest among its peers in India. This strategic equipment fleet provides it with a technological edge in executing unique and challenging projects.

The company draws strength from the strong parentage of the Shapoorji Pallonji Group, which has a legacy of over 150 years, a strong reputation, a global presence, and extensive industry experience. "The group's network enables Afcons to engage in strategic collaborations, explore business development opportunities, and facilitate knowledge sharing," says Subramanian with a sense of pride.

The organisational culture fosters an execution-driven mindset committed to achieving project milestones with precision and effectiveness. The company's workforce comprises highly skilled professionals with strong technical expertise, and their knowledge and skillsets help solve complex challenges and deliver timely solutions to its clients. Afcons has over 4,150 permanent employees on its rolls. Afcons' key management personnel have an average of 35 years of experience, with an average of 22 years in the organisation.

Elaborating on the strategy, Paramasivan says: "The company executes certain projects through joint ventures, which enhances its competitive position. Collaborating with established and respected companies in the industry allows us to leverage their expertise, networks, and credibility, facilitating smoother entry into new markets and enhancing our overall business reputation. Furthermore, we actively seek collaboration through technical partnerships and maintain longstanding relationships with various original equipment

manufacturers, which helps in customisation, technical support, and technology sharing. These alliances enable us to gain access to specialised technologies required for the successful implementation of our projects and have helped us execute complex projects such as the Atal Tunnel, Chenab Bridge, and Delhi Metro Phase IV underground projects," he says.

According to the Fitch Report, the Indian infrastructure industry has grown at a compounded annual growth rate (CAGR) of 11.4 per cent from ₹5,04,110 crore in FY18 to ₹7,75,060 crore in FY22. Further, it estimates India's infrastructure industry will grow at a CAGR of 9.9 per cent from ₹8,56,050 crore in FY23 to ₹13,71,930 crore in FY28.

With its dedication to integrating environmental, social, and governance (ESG) best practices into its business and ensuring a sustainable and responsible approach to its operations. Afcons has over 40 specialist auditors to track its environmental footprint. The company's corporate social responsibility initiatives cover areas such as education, healthcare, environmental preservation, and local employment. Its focus is on rural development, primarily covering sanitation; providing ground-level support to communities with basic needs like food, drinking water, and medicines; supporting the education of children from backward areas; and contributing to environmental causes.

Afcons has a team of over 250 health, safety, and environment (HSE) professionals, including 20 dedicated environment professionals. Over 60 per cent of the members of this team have engineering and advanced safety degrees. "We have been able to reduce our total energy consumption to 2.7 million gigajoules in FY23 from 2.76 million gigajoules in FY22 and are committed to further reducing our energy consumption. We also recycled over 46 per cent of the wastewater discharged at our project sites in FY23," discloses Paramasivan.

"We constantly focus on procuring and harnessing knowledge from our prior projects to inform our ongoing and future projects. We have implemented an operational excellence model, which encompasses the

pillars of people, process, technology, and relationships, across all our projects. We have established a dedicated department called the Knowledge Services Group, which is responsible for driving knowledge management processes across the organisation," says Subramanian.

"For instance," he adds, "we follow a unique 'Learn Before, Learn During, and Learn After' framework, which acts as a pivot around which our knowledge processes are embedded into the project lifecycle". This model ensures that the teams constantly strive for improvement and fosters a culture of continuous learning. In 2023, Afcons launched its Talent Management Academy with the aim of enhancing the knowledge and capabilities of its engineers.

Pursuit of excellence

Afcons' continuous pursuit of excellence in knowledge management is reflected in its MIKE (Most Innovative Knowledge Enterprise) awards at both the global and domestic levels. These awards are given by the International Global MIKE Study Group, which comprises experts in effective knowledge management and innovative practices. Afcons won the MAKE (Most Admired Knowledge Enterprise) awards in 2016 and 2017. It also received the Outstanding Global MIKE Award in 2023 and achieved the status of a Five-Star Export House in accordance with the Indian government's provisions under the Foreign Trade Policy 2023.

As renowned US businessman Gary Cohn said: "If you don't invest in risk management, it doesn't matter what business you're in, it's a risky business." The nature of Afcons' business is not without inherent risks, particularly when close to 70 per cent of its contracts come from governments. "We operate a systematic risk management system that assists in identifying, measuring, and monitoring the various risks that may arise in our operations," says Paramasivan, who has over 40 years of experience in finance, secretarial, and legal roles.

The company relies on a riskinformed decision-making culture across its operations. To facilitate this approach, the management has formed a team of experienced senior



















Big slice in infra pie

With its extensive national and international presence, Afcons designs and executes projects across five major infrastructure business verticals: Marine and Industrial; Surface Transport; Urban Infrastructure; Hydro and Underground; and Oil and Gas. Here is a snapshot of the company's performance record:

Marine and Industrial: The vertical covers ports and harbour jetties, dry docks, wet basins, breakwaters, outfall and intake structures, liquified natural gas (LNG) tanks, and material handling systems. Since its inception, Afcons has executed 235 Marine and Industrial projects in 15 countries, including 206 projects in India. It has constructed eight LNG tanks in India. It was the 10th largest international marine and port facilities contractor in the world and the only Indian company in the top 25 for marine and port projects as per the 2023

ENR (Engineering News-Record, US) Top International Contractors rankings based on International Revenue for FY23, as per Fitch Report.

Its completed projects include: New Owendo International Port, Gabon – Phase I and Phase I; New Sulphur Jetty, Kuwait; Fourth Container Terminal, at Jawaharlal Nehru Port, Mumbai; LNG Standby Jetty, Dahej, and Agalega island infrastructure development (Mauritius), while the ongoing ones include; Liquid cargo berth for GCPL, Multiple projects at the Liberian Western Range Iron Ore Project, and Two projects for the subsidiary of one of India's leading global conglomerates.

Surface Transport: It covers highways and roads, interchanges, mining-related

infrastructure, and railways. The scope of activities includes laving of new roads, rehabilitation and strengthening of existing roads, construction of bridges and flyovers, including over river and other water bodies, construction of tunnels, railway bridges and other surface transport structures. Afcons was the 42nd largest international contractor in the transportation segment and the only Indian company in the top 50 international transportation contractors as per the 2023 ENR (Engineering News-Record, US) Top International Contractors rankings based on International Revenue for the Financial Year 2023, says Fitch Report. The company's completed projects under this vertical include: Two expressway packages in one of the largest states in Northern India; Maharashtra Samruddhi Mahamarg Package 2; South Surra Road Project, Kuwait; Lusaka City Decongestion Project, Zambia and Jammu-Udhampur Highway.

And the ongoing ones include: Tema to Mpakadan Railway Project, Ghana; Bangladesh







Road Project – WP-02 and Addu City Road Project (Maldives).

Urban Infrastructure: This covers elevated and underground metro works, bridges, flyovers and elevated corridors. Since 1979, Afcons has constructed several high-value projects, over 120 km of elevated and underground metro networks, over 150 bridges, viaducts and flyovers and 32 elevated and underground metro stations, across nine cities in India. It was the 12th largest international contractor in the bridges segment based on International Revenue for the FY23 and the only Indian company to feature in the top 25 in the 2023 ENR (Engineering News-Record, US) Top International Contractors' rankings, says Fitch Report). Chennai, Delhi and Nagpur (Phase III) metros, MG Setu Bridge over River Ganga, Patna and Chenab Bridge Project are among the company's completed urban infra projects, while the ongoing works include Mumbai-Ahmedabad High Speed Railway (MAHSR-C-2); Delhi Metro Phase IV (DC[1]05); NCRTC Underground
Project – Package 8; NCRTC Elevated Project –
Package 6; Bengaluru Elevated Metro Project;
Ahmedabad Metro Elevated Project – Package C1; Greater Male Connectivity Project; Mumbai – Pune Expressway Project and Kosi bridge.

Hydro and Underground: These cover dams and barrages, tunnels (including large road tunnels), underground works, water and irrigation, and related infrastructure. With more than a decade of experience in this business vertical, it has delivered projects in newer sub-segments, such as irrigation and water supply, in recent years. It has already executed 12 projects (in aggregate) in the tunnels, irrigation and hydro works sub-segments and constructed over 50 km of underground tunnels through the 'New Austrian Tunneling Method' (NATM), an innovative method in which the geological stress of the surrounding rock mass is used to stabilize the tunnel. Afcons was the 18th largest international contractor in the transmission and aqueducts segment as per the 2023 ENR (Engineering News-Record, US), according to the Fitch Report.

Afcons' completed projects include Maharashtra Samruddhi Mahamarg Package 14; Atal Tunnel, Rohtang; Annaram Barrage Project (Telangana); Katra-Laole section of the Udhampur-Baramulla Rail Link and the Extension of the Lake Victoria Pipeline Water Supply Project Package III Some of the ongoing projects are Rural Water Supply, Uttar Pradesh; Pandoh-Takoli Bypass Project (Himachal Pradesh); Basania Multipurpose Dam Project (Madhya Pradesh); J&K Rail Link Project Dharam-Qazigund Section (Package-T-49B); Jabalpur Multi Village Scheme, Madhya Pradesh and Tanzania WaterSupply Project - Package 06.

Oil and Gas: This business vertical covers onshore and offshore oil and gas projects. Since inception, Afcons has executed several large value offshore oil and gas projects, and have recorded over 52.8 million Safe Man Hours. In executing the ONGC Heera Redevelopment Process Platform, it became the first Indian EPC contractor to install an offshore process platform using float over technology on time, says Fitch Report. Afcons has delivered projects across the upstream, midstream and downstream oil and gas segments and its completed ones include: ICP-R Process Platform (ONGC); ONGC Heera Redevelopment Process Platform and Onshore terminal in Kakinada (AP). Some of the ongoing projects are Kakinada Offshore Process Platform and Crude Oil Terminal at Mundra (Gujarat)

management personnel responsible for analysing and evaluating all proposed new bids and investments. The assessment includes a review of various aspects, including credit risk, market risk, and operational risk associated with such bids or capital expenditures.

Afcons' risk management processes span the entire project lifecycle. At the pre-tendering stage, the risks evaluated include country risk, client risk, project risk, and joint venture risk. The teams involved in analysing these risks include business development executives, the tendering team, and the strategy team. At the tendering stage, immediately after receipt of the tender, Afcons prepares a 'bid or no-bid' analysis based on the scope of work, construction methods, and estimates of construction materials and equipment. "This analysis is prepared by the proposal manager's team, along with the risk management team, and shared with the business unit head along with a risk pricing plan and a risk mitigation plan," explains Paramasivan.

According to Fitch Solutions, the Indian construction industry's value stood at ₹19,90,400 crore as of FY22, having grown at a CAGR of 10.1 per cent from ₹13,52,120 crore in FY18. India's construction industry is expected to grow at strong rates, driven by stable government support for infrastructure development and expanded private involvement in key sectors and public-private partnerships.

Fitch forecasts India's construction industry will grow at a CAGR of 9.5-10 per cent from ₹21,82,550 crore in FY23 to ₹34,37,690 crore in FY28. Near-term growth will be supported by a strong government push in the form of infrastructure development projects such as the National Infrastructure Pipeline, Smart Cities Mission, Gati Shakti, UDAN, Bharatmala Pariyojana, Sagarmala, and the Atal Mission for Reiuvenation and Urban Transformation (AMRUT). These government programmes aim to enhance connectivity, upgrade urban infrastructure, develop transportation networks, and foster overall growth in India's construction sector.

India continues to be a relatively attractive destination for infrastructure investment, and its project pipeline has expanded in recent years, which will support growth forecasts going forward. The Indian construction industry is poised for growth, driven by the government's sustained thrust on capital expenditure ahead of the general elections, a sector-specific rebound in private capex, and accelerated project execution supported by the likely reduced raw material price volatility.

The Union Budget for FY24 includes an increase in capital investment with a primary focus on improving transport and logistics infrastructure. Rail and road transport development are key focus areas, with the Ministry of Railways (₹2.4 lakh crore) and the Ministry of Road Transport and Highways (₹2.6 lakh crore) being allocated. Exceeding estimates for the previous financial year by 50.8 per cent and 25.4 per cent, respectively, these allocations continue the government's prioritisation of these sectors over the past few years.

According to Fitch Solutions, the global construction industry's valueadd, which comprises transport, power, water, telecom, oil and gas, mining, and construction, stood at \$5.5 trillion at the end of the Calendar Year 2022, having grown from \$4 trillion in Calendar Year 2013. The construction data is derived from national accounts from each market's national statistics office (or equivalent) or from international organisations that compile national account data, most notably the UN. Specifically, it measures the gross value added (GVA) of the construction industry over the reported 12-month period in nominal values.

Global construction growth will largely be driven by expanding construction investment in emerging markets, with emerging market construction industry value expected to grow by an annual average of 4.13 per cent vear-on-vear over the next decade. This represents a modest increase in growth compared to the average annual growth of 4.10 per cent year-on-year between the Calendar Year 2013 and the Calendar Year 2022. The strong growth of construction in emerging markets will be driven in large part by Asian markets, given their large size and relatively high growth rates. FSIAPL forecasts



that Asia's construction industry will grow by 4.9 per cent year-on-year and 4.2 per cent year-on-year in the Calendar Years 2023 and 2024, respectively, and by an annual average of 4 per cent year-on-year between the Calendar Year 2023 and the Calendar Year 2032.

Emerging markets in the region will lead growth, with India, Indonesia, Vietnam, the Philippines, and Bangladesh among the markets that will see the highest growth rates in the region over the coming decade. Mainland China's construction growth will also continue to play a strong role in shaping growth trends in the region, given the large size of Mainland China's construction industry, which accounted for about 23 per cent of global construction industry value in US dollar terms in the Calendar Year 2022.

IPO in the works

Afcons is going public, having obtained the final observations from the markets regulator, the Securities and Exchange Board of India (SEBI), the IPO, which will open between October 25 and 29, 2024, is a mix of fresh issue of up to ₹1,250 crore and an offer of sale up to ₹4,180 crore and the company has fixed the price band of ₹440-₹463 per equity share of face value ₹10 each.

Afcons Infrastructure raised ₹2,967 crore from the company's management, individual and institutional investors in a pre-IPO placement. The pre-IPO book included names like GIC Singapore, Enam Holdings (Akash Bhanshali), Synergy Capital, 360 One, M&G Investments, Think Investments, Discovery Capital

Management, Artian Investment from ArcelorMittal, Madhusudan Kela, White Oak and so on.

Investors can bid for a minimum of 32 equity shares and in multiples of 32 equity shares thereafter. A discount of ₹44 per equity share is being offered to eligible employees bidding in the employee reservation portion. The proceeds from its fresh issuance will be utilised to the extent of ₹80 crore for capital expenditure towards purchase of construction equipment; ₹320 crore for funding long-term working capital requirements; ₹600 crore for prepayment or scheduled repayment of a portion of certain outstanding borrowings and acceptances availed by the company; and general corporate purposes.

ICICI Securities Limited, DAM Capital Advisors Limited, Jefferies India Private Limited, Nomura Financial Advisory and Securities (India) Private Limited, Nuvama Wealth Management Limited, and SBI Capital Markets Limited are book running lead managers, and Link Intime India Private Limited is the registrar of the issue.

In the backdrop of unlimited opportunities, Afcons aims to expand its client base in East and West Africa, South Asia and Southeast Asia, Eastern Europe and Eurasia, and Saudi Arabia. "We plan to gradually diversify our portfolio to safeguard against risks arising from specific areas or projects and to protect ourselves from the impact of concentrated business activities in limited geographical regions," concludes Paramasivan.

 ${\tt LANCELOT\ JOSEPH}$ lancelot.joseph@businessindiagroup.com