

Hindustan Aeronautics (HNAL IN)

Rating: BUY | CMP: Rs1,889 | TP: Rs2,266



Flying high to make India combat-ready

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Company Initiation

| Key Financials - Consolidated | | | | | | | | |
|-------------------------------|----------|----------|----------|----------|--|--|--|--|
| Y/e Mar | FY23 | FY24E | FY25E | FY26E | | | | |
| Sales (Rs. m) | 2,69,275 | 2,94,863 | 3,26,857 | 3,67,868 | | | | |
| EBITDA (Rs. m) | 66,792 | 71,695 | 81,151 | 92,336 | | | | |
| Margin (%) | 24.8 | 24.3 | 24.8 | 25.1 | | | | |
| PAT (Rs. m) | 46,262 | 53,031 | 60,776 | 68,944 | | | | |
| EPS (Rs.) | 69.2 | 79.3 | 90.9 | 103.1 | | | | |
| Gr. (%) | 17.8 | 14.6 | 14.6 | 13.4 | | | | |
| DPS (Rs.) | 27.5 | 23.8 | 27.3 | 30.9 | | | | |
| Yield (%) | 1.5 | 1.3 | 1.4 | 1.6 | | | | |
| RoE (%) | 21.6 | 20.9 | 20.7 | 20.3 | | | | |
| RoCE (%) | 14.0 | 14.3 | 14.3 | 14.4 | | | | |
| EV/Sales (x) | 3.9 | 3.4 | 3.0 | 2.5 | | | | |
| EV/EBITDA (x) | 15.9 | 14.2 | 12.0 | 10.1 | | | | |
| PE (x) | 27.3 | 23.8 | 20.8 | 18.3 | | | | |
| P/BV (x) | 5.4 | 4.6 | 4.0 | 3.5 | | | | |

| Key Data | HIAE.BO HNAL IN |
|---------------------|------------------------|
| 52-W High / Low | Rs. 2,090 / Rs. 1,121 |
| Sensex / Nifty | 65,508 / 19,524 |
| Market Cap | Rs. 632 bn/ \$ 7,593 m |
| Shares Outstanding | 334m |
| 3M Avg. Daily Value | Rs. 4065.78m |
| | |

| Shareholding Pattern (%) | |
|--------------------------|-------|
| Promoter's | 74.61 |
| Foreign | 3.84 |
| Domestic Institution | 9.04 |
| Public & Others | 12.51 |
| Promoter Pledge (Rs bn) | - |
| | |

| | 1M | 6M | 12M |
|----------|-------|------|------|
| Absolute | (3.5) | 43.7 | 65.0 |
| Relative | (4.3) | 26.4 | 42.5 |

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Rating: BUY| CMP: Rs1,889 | TP: Rs2,266

Flying high to make India combat-ready

We initiate coverage on Hindustan Aeronautics (HAL) with a 'BUY rating at a target price of R2,266 (weighted average of prices using DCF & PE multiple). HAL is a play on the growing strength & modernization of India's air defence given 1) its position as the primary supplier of India's military aircraft, 2) long-term sustainable demand opportunity, owing to the government's push on procurement of indigenous defence aircraft, 3) leap in HAL's technological capabilities due to development of more advanced platforms (Tejas, AMCA, etc.), 4) robust order book of Rs818bn with further 5-year pipeline of ~Rs2trn, and 5) improvement in profitability through scale and operating leverage. We estimate Revenue/Adj. PAT CAGR of 11.0%/14.2% over FY23-26E. The stock is currently trading at a P/E of 20.8x/18.3x on FY25/26E earnings. Initiate 'BUY.

Durable demand for modern indigenous military aircraft: India's strength of 31 fighter jet squadrons falls short of the sanctioned total of 42 required for a potential two-front war with China & Pakistan. This will be exacerbated by the phasing out of aging aircraft such as Mig-21, Mig-29, Jaguar, and Mirage. With HAL's monopoly-like position in India's defence aerospace sector coupled with the government's push to procure indigenously designed & developed defence aircraft, the company is in a sweet spot to benefit from a long-term demand opportunity. The company is involved in several major fighter jet projects (Tejas Mk2, AMCA, TEDBF) and helicopter projects (LUH, LCH, IMRH) which will replace the various outgoing fleets.

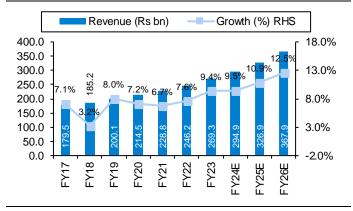
Manufacturing revenue to accelerate from FY25 onwards: The company's FY23 closing order book stood at ~Rs818bn. Manufacturing contracts account for ~Rs605bn, including the landmark ~Rs457bn order for 83 Tejas Mk 1As. There is also a highly visible ~Rs480bn order pipeline for FY24. Most of these projects will start in full swing from FY25 onwards. Tejas Mk 1A deliveries will be the major revenue driver over FY25-29, while RoH & Spares and Design & Development will steadily supplement the top line. Operating leverage from the growing manufacturing scale, coupled with normalizing provisions and higher interest income on cash advances will improve margins and net profitability.

Technology development to augment HAL's capabilities: With the responsibility of modernizing India's air defence, HAL has been scaling up its expenditure on R&D to ensure that the new platforms under development are stateof-the-art and comparable with global counterparts. Additionally, the MoU signed with GE Aerospace to co-produce GE-414 aeroengines will make HAL one of the few global companies to have the technological capability to build engines of such calibre. This, along with various other JVs and ToT licences enable HAL to gain access to advanced technologies and best practices to eventually design & develop cutting-edge platforms in-house for both domestic and export markets.

Exports offer an additional growth avenue: HAL is making proactive efforts to promote its international business with its indigenous range of LCA Tejas, ALH, LUH, and LCH. It recently signed an MoU to supply light & medium utility helicopters to Argentina's military, and also has advanced leads with Philippines and Egypt. It recently opened an office in Malaysia to facilitate engagement with South-East Asia.

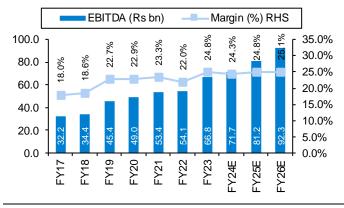
Story in Charts

Exhibit 1: Revenue CAGR of 11.0% over FY23-26E



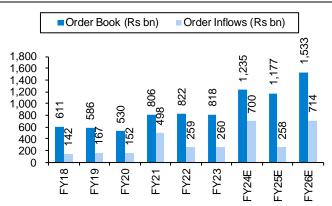
Source: Company, PL

Exhibit 3: EBITDA margin to remain steady around ~25%



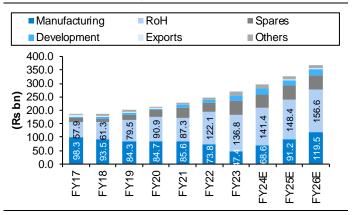
Source: Company, PL

Exhibit 5: Order Book to sustain above ~Rs1trn from FY24E



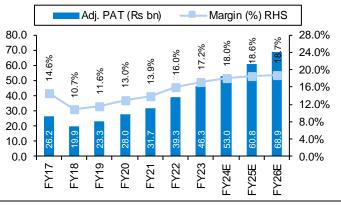
Source: Company, PL

Exhibit 2: Manufacturing revenue share to rise from FY24E



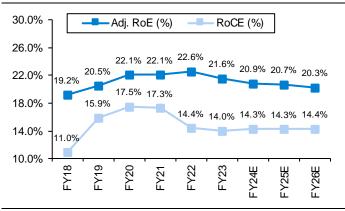
Source: Company, PL

Exhibit 4: Adj. PAT CAGR of 14.2% over FY23-26E



Source: Company, PL

Exhibit 6: RoE & RoCE to stay above 20% & 14% respectively



Source: Company, PL

Global Defence Industry

Global military spending reached a record ~\$2.24trn in 2022, accounting for ~2.2% of global GDP. The primary catalyst for increased expenditure was Russia's invasion of Ukraine, which triggered a ~13% rise in European military spending – the largest annual surge since the post-Cold War era. Growth was mainly attributed to significant augmentations in Russian and Ukrainian military investments, which grew 9.2% to \$86.4bn and 640% to \$44.0bn, respectively.

| Country | Spending (\$bn) | % of GDP | Global share % |
|------------------|-----------------|----------|----------------|
| United States | 877.0 | 3.5% | 39% |
| China | 292.0 | 1.6% | 13% |
| Russia | 86.4 | 4.1% | 4% |
| India | 81.4 | 2.4% | 4% |
| Saudi Arabia | 75.0 | 7.4% | 3% |
| United Kingdom | 68.5 | 2.2% | 3% |
| Germany | 55.8 | 1.4% | 2% |
| France | 53.6 | 1.9% | 2% |
| South Korea | 46.4 | 2.7% | 2% |
| Japan | 46.0 | 1.1% | 2% |
| Top 10 Sub Total | 1,682 | | 75% |
| World Total | 2,240 | 2.2% | |

Exhibit 7: Top 10 nations constituted ~75% of global military spending in 2022

Source: Stockholm International Peace Research Institute (SIPRI), PL

Exhibit 8: USA is the largest exporter of arms and has increased its market share; India continues to be the largest importer

| | Share of Global Arms | s Exports | Top 3 recipients and their share % | | | | |
|----------------------|----------------------|-----------|------------------------------------|-------------------|----------------|--|--|
| Top 5 Arms Exporters | 2018-22 | 2013-17 | 1st | 2nd | 3rd | | |
| United States | 40.0% | 33.0% | Saudi Arabia - 19% | Japan - 9% | Australia - 8% | | |
| Russia | 16.0% | 22.0% | India - 31% | China - 23% | Egypt - 9% | | |
| France | 11.0% | 7.1% | India - 30% | Qatar - 17% | Egypt - 8% | | |
| China | 5.2% | 6.3% | Pakistan - 54% | Bangladesh - 12% | Serbia - 5% | | |
| Germany | 4.2% | 6.1% | Egypt - 18% | South Korea - 17% | Israel - 10% | | |

| | Share of Global Arms Imports | | | Top 3 suppliers and their share % | | | | |
|----------------------|------------------------------|---------|--------------|-----------------------------------|------------------|--|--|--|
| Top 5 Arms Importers | 2018-22 | 2013-17 | 1st | 2nd | 3rd | | | |
| India | 11.0% | 12.0% | Russia - 45% | France - 29% | USA - 11% | | | |
| Saudi Arabia | 9.6% | 10.0% | USA - 78% | France - 6% | Spain - 5% | | | |
| Qatar | 6.4% | 1.5% | USA - 42% | France - 29% | Italy - 14% | | | |
| Australia | 4.7% | 3.6% | USA - 73% | Spain - 19% | Switzerland - 3% | | | |
| China | 4.6% | 4.2% | Russia - 83% | France - 8% | Ukraine - 6% | | | |

Source: PL, Industry

The Russia-Ukraine war underscored two major lessons:

- Need for nations to bolster their defence forces with combat-ready modernized equipment, given the precariousness associated with war.
- Importance of self-reliance in defence (given supply-chain disruptions caused by the war), as Russia is the 2nd largest arms exporter globally (~16% global share).

Paradigm shift in the Indian defence landscape

India had the 4th highest military expenditure in the world in 2022, estimated at \$81.4bn, up from ~\$76.6bn in 2021. Capital outlays on equipment upgrades and military infrastructure accounted for ~23% of India's military expenditure (v/s ~30% for U.S.).

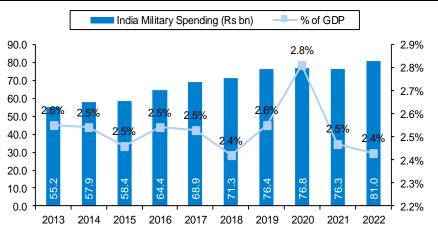


Exhibit 9: India's military spending as a % of GDP has been largely steady

India must be combat-ready to guard its long land borders

India shares land borders with 7 nations at a total length of over 15,000km, making it the world's 4th largest land border (behind China, Russia and Brazil). Thus, India requires an abundant inventory of modern combat-ready defence equipment at all times. Especially considering its tense relations with bordering nations of China and Pakistan, India must always remain prepared for a potential two-front war. It cannot afford to be overly reliant on imports for its defence requirements.

Healthy growth in India's defence capex in recent years

India's FY24 defence capital outlay budget stood at ~Rs1.7trn, accounting for ~17% of the nation's total capital expenditure budget. It has grown at a 9.4% CAGR over FY17-24E with a focus on modernization, domestic procurement, and R&D. Over FY19-23, 168 out of 239 capital acquisition contracts have been signed with Indian vendors (including MSMEs), accounting for ~68% of the total contract value.

| Annual To. An Toroc is consistently anotated the largest share in the defende capital budget | | | | | | | | |
|--|------|------|------|-------|-------|-------|---------|---------|
| Defence Capex by Department (Rs bn) | FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 RE | FY24 BE |
| Army | 282 | 271 | 274 | 290 | 263 | 251 | 326 | 372 |
| Navy | 200 | 201 | 215 | 274 | 417 | 450 | 477 | 528 |
| Air Force | 304 | 349 | 365 | 451 | 582 | 532 | 539 | 583 |
| R&D | 68 | 74 | 92 | 87 | 77 | 103 | 120 | 129 |
| Civil | 51 | 50 | 46 | 49 | 56 | 68 | 80 | 88 |
| Others | 9 | 8 | 6 | 8 | 4 | 43 | 38 | 14 |
| TOTAL | 915 | 954 | 998 | 1,160 | 1,399 | 1,448 | 1,580 | 1,714 |

Exhibit 10: Air Force is consistently allocated the largest share in the defence capital budget

Source: MoD, PL

Source: SIPRI, PL

| Defence Capex by Application (Rs bn) | FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 RE | FY24 BE |
|--------------------------------------|------|------|------|-------|-------|-------|---------|---------|
| Land & Construction Works | 87 | 83 | 81 | 92 | 64 | 85 | 97 | 132 |
| Aircraft & Aeroengines | 239 | 299 | 296 | 290 | 483 | 394 | 348 | 282 |
| Other Equipment | 298 | 284 | 300 | 403 | 452 | 422 | 557 | 670 |
| Naval Fleet & Dockyard | 120 | 116 | 142 | 203 | 236 | 290 | 287 | 309 |
| R&D | 68 | 74 | 92 | 87 | 77 | 103 | 120 | 129 |
| Others | 103 | 98 | 86 | 85 | 87 | 155 | 171 | 191 |
| TOTAL | 915 | 954 | 998 | 1,160 | 1,399 | 1,448 | 1,580 | 1,714 |

Exhibit 11: Aircraft & Aeroengines, Equipment, and Naval Fleet & Dockyard command the lion's share in defence capex

Source: MoD, PL

Given India's heavy dependence on imports for arms, the government wants to make the country self-reliant in defence by targeting Rs1.75trn in defence production by FY25 (including 20% share of exports)

Heavy reliance on Russia for ~45% of arms imports

India was the world's largest importer of arms over 2013-2017 and 2018-2022, accounting for ~11% of global arms imports. Despite efforts to diversify, India remains highly dependent on Russia, who contributed ~45% of India's arms imports over 2018-2022 (albeit down from ~64% over 2013-2017). This is highlighted by the fact that the country faced several issues in procuring key supplies from Russia during the Russia-Ukraine war, thereby disrupting local defence production.

Favourable policies to boost local defence manufacturing

In order to make India 'Aatmanirbhar' (self-reliant) in defence, the government set an ambitious target in 2020 to more than double defence production by FY25 to Rs1.75trn. This will reduce import dependency, while simultaneously scaling up exports to 20% of total production (~Rs350bn) to become a defence export hub.

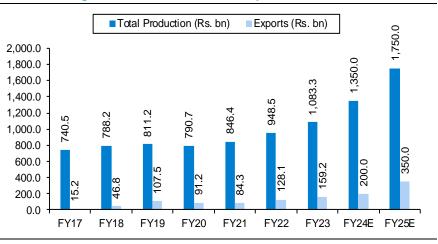


Exhibit 12: Target of 27.1% CAGR in defence production over FY23-25E

Source: Department of Defence Production, PL

The government has rolled out several policies to boost domestic production of major defence platforms and equipment, as well as to establish an indigenous vendor supply chain of key line replacement units (LRUs), sub-systems and components used in defence manufacturing.

An updated Defence Acquisition Procedure – DAP 2020 – that prioritizes domestic procurement of equipment for the armed forces and emphasizes greater indigenous content (IC) under each type of procurement method.

The government's policies to bolster domestic defence production include DAP 2020, positive indigenization lists, establishment of defence corridors, greater private sector participation in R&D, and higher domestic capital procurement

| No. | Category | DAP 2020 | DPP 2016 |
|-----|--|---|--------------------------------|
| (a) | Buy (Indian - IDDM) | Indigenous design and ≥ 50% IC | Indigenous Design and ≥ 40% IC |
| (b) | Buy (Indian) | Indigenous design and ≥ 50% IC; otherwise ≥ 60% IC | ≥ 40% IC |
| (c) | Buy and Make (Indian) | ≥ 50% IC of 'Make' portion | ≥ 50% IC of 'Make' portion |
| (d) | Buy and Make | ≥ 50% IC | n/a |
| (e) | Buy (Global – Manufacture in India) | ≥ 50% IC | n/a |
| (f) | Buy (Global) | Foreign Vendor - Nil; Indian Vendor ≥ 30% IC | n/a |

Exhibit 13: DAP 2020 focuses on more indigenization in defence procurement

Source: Ministry of Defence (MoD), PL

- 3 Positive indigenization lists (PILs) featuring 310 major platforms & equipment including trainer & fighter aircraft, light utility helicopters, warships, missile systems, and electronics that must be procured from Indian producers.
- 4 further PILs containing 4,666 strategically important LRUs, subsystems, spares & components that defence public sector undertakings (DPSUs) must source from Indian vendors. 2,866 of these items have already been indigenized.
- Establishment of two defence corridors in UP and Tamil Nadu to catalyse indigenous defence production. Rs65.3bn out of the Rs200bn target (by 2024) has been invested so far in these corridors.
- Fostering private participation in defence R&D, with 25% of the R&D budget earmarked for industry, start-ups and academia.
- Reservation of 75% of the defence capital acquisition/modernization budget for domestic procurement.

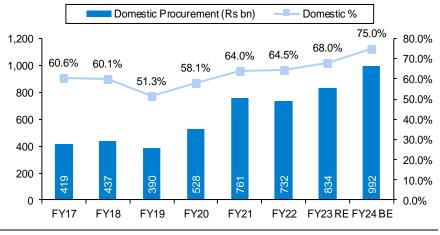


Exhibit 14: Growing impetus on domestic procurement of defence goods

Source: MoD, PL

329

254

FY22

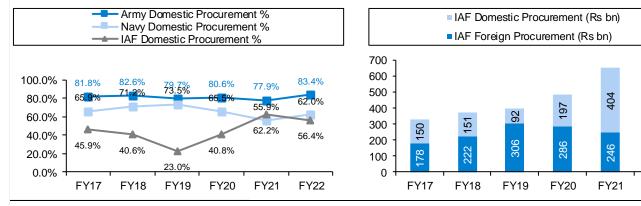


Exhibit 15: Domestic capital acquisition by the Indian Air Force has grown at a 16.9% CAGR over FY17-22

Source: MoD, PL

India has largely relied on ToT agreements, licensed production, and direct imports to fulfil its military aircraft needs

Indian defence aerospace sector heading for self-reliance

India's defence aerospace sector primarily caters to requirements of the Indian armed forces, particularly the Air Force (IAF). Over the past 60+ years, the country has largely relied on Transfer of Technology (ToT) agreements and licensed production from France, Russia, UK, and Germany, along with direct imports, to fulfil its military aircraft needs. Licensed aircrafts include Mirage, Jaguar, Su-30, Mig-21 & 29, Do-228, Hawk 132, and Chetaah/Chetak/Lancer helicopters.

Exhibit 16: India's Active Military Aircraft & Helicopter Fleet*

| | IAF | Navy | Army | Coast Guard | Total |
|-------------------------|-------|------|------|-------------|-------|
| Aircraft | | | | | |
| Fighters | 622 | 36 | - | - | 658 |
| Trainers | 422 | 54 | - | - | 476 |
| Transport | 261 | 36 | - | - | 297 |
| Recon & Maritime Patrol | 7 | 20 | - | 36 | 63 |
| AEW&C and EW | 9 | - | - | - | 9 |
| Tanker | 6 | - | - | - | 6 |
| Helicopters | | | | | |
| Utility | 164 | 91 | 194 | 37 | 486 |
| Transport | 237 | - | - | - | 237 |
| Attack | 63 | - | 80 | - | 143 |
| ASW | - | 19 | - | - | 19 |
| AEW&C | - | - | 14 | - | 14 |
| TOTAL | 1,791 | 256 | 288 | 73 | 2,408 |

Source: Industry, PL; *Figures are estimates

Going forward, indigenously designed & developed aircraft will constitute a major share of India's defence fleets India has a limited history of indigenously designed & developed military aircraft. Such aircraft account for only ~20% of the current fleet, including the ALH variants, LCH Prachand, LCA Tejas Mk 1, and HJT-16 Kiran. However, the government's growing focus on self-reliance and Make-In-India has given a strong impetus to indigenous design & development of military aircraft in India. PILs include import embargos on various combat, transport and trainer aircraft. Furthermore, a slate of old fighter aircraft will be phased out over the next decade, and will be replaced by Tejas Mk 1A, LCH, ALH, and LUH, along with a pipeline of indigenous aircraft under development such as Tejas Mk 2, AMCA, and IMRH.

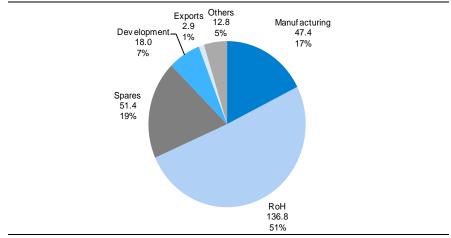
HAL – Primary supplier of Indian military aircraft

Hindustan Aeronautics (HAL) was formed in 1964 following the merger between Hindustan Aircrafts and Aeronautics India. It India's largest DPSU and sole indigenous producer of India's fighter aircraft.

HAL caters to India's defence aerospace requirements through design, development, manufacture, repair & overhaul (RoH), upgrade and servicing of aircraft, helicopters, aero-engines, avionics, accessories and aerospace structures. The company mainly supplies its products and services to the Indian Armed Forces, with exports and civil business contributing a minute share to the business.

Since inception, HAL has manufactured 4200+ aircraft and 5300+ engines and overhauled 11,700+ aircraft and 35000+ engines. Its business is segmented into i) Manufacturing, ii) RoH, iii) Spares, iv) Design & Development, and v) Exports.





Source: Company, PL

HAL's operations are split into 4 production complexes divided into 20 manufacturing divisions and 1 design complex comprising of 10 R&D centers co-located within the manufacturing divisions. These are spread across 9 locations in 7 states in India:

- Bangalore Complex (BC): Production and RoH of Fixed-wing Aircrafts and Engines, Spacecraft Structures, Castings, Forgings & Rolled Rings
- MiG Complex (MC): Production and RoH of Fixed-wing Aircrafts and Engines (mainly Russian origin), Civil Maintenance, MRO, and UAV Projects
- Helicopter Complex (HC): Production and RoH of Helicopters (both Indian and Western origin)
- Accessories Complex (AC): Production and RoH of Transport Aircraft, Accessories & Avionics for Fixed-wing and Rotary-wing platforms (Indian, Russian and Western origin). Depot Level Maintenance of UAVs
- Design Complex (DC): R&D of Fixed-wing and Rotary-wing Aircraft, Unmanned Aerial Vehicles (UAV), Aero-engines, Avionics and Accessories.



HJT-36 Sitara

CATS Warrior

Exhibit 18: HAL's extensive portfolio of aircraft, helicopters and engines

P

Source: Company, PL

TEDBF

Durable demand for modern indigenous military aircraft

India's faces a deficit in its fighter aircraft resources – Given the delicate status of India's relations with neighbours China & Pakistan, there is a pressing need to strengthen its combat-ready military aircraft fleet in order to be ready for a potential two-front war. Furthermore, the Russia-Ukraine conflict reinforced the importance for major nations to ensure that their defence forces are prepared for combat. The deficit India faces is in terms of both quantity and technology of its fighter aircraft:

- India's strength of 31 fighter aircraft squadrons falls well short of the sanctioned strength of 42. In fact, not all squadrons are combat-ready at all times, as some are undergoing maintenance, repair, or overhaul. Additionally, IAF will begin phasing out its last 3 Mig-21 squadrons from 2025 onwards. The shortfall will be exacerbated by the impending phasing out of the ageing fleets of ~100 Mig-29s, 40+ Mirage 2000s, and ~130 Jaguars by 2035.
- India lacks 5th generation fighters: India's active fighters are predominantly 4th and 4th+ generation jets, including the Mirage, Jaguar, Mig-29, Su-30, Tejas Mk 1, and Rafale. Majority of these have been in service for over 30 years and now require upgradation or replacement. Meanwhile, US, China and Russia are operating more advanced 5th generation fighters such as F-22 & F-35 (US), Chengdu J-20 (China), and Sukhoi Su-57 (Russia). These nations are already preparing to introduce 6th gen. fighters in the next decade, making India's need for developing a 5th gen. fighter (the AMCA) all the more urgent.

Thus, there is a substantial need for MoD to sanction a slate of aircraft acquisitions over the next 10-15 years. Given its monopoly-like position in India's defence aerospace sector, coupled with the government's aggressive stance on procuring indigenously designed & developed defence aircraft, HAL is in a sweet spot to significantly benefit from this long-term demand opportunity.

| Exhibit 15. India 5 neet of fighter all craft, all the replac | Exhibit 19. India 5 neet of righter andrait, an the replacements will be made by TAE | | | | | | | | | |
|---|--|-------------|------------------|--|--|--|--|--|--|--|
| Fighter Aircraft | Qty* | Phasing Out | Replacement | | | | | | | |
| LCA Tejas Mk 1 | 32 | | | | | | | | | |
| Sukhoi Su-30MKI | 260 | | AMCA | | | | | | | |
| Dassault Mirage 2000 H/I | 45 | 2035 | LCA Tejas Mk2 | | | | | | | |
| Dassault Rafale EH/DH | 36 | | | | | | | | | |
| Mig-21 Bison | 54 | 2025 | LCA Tejas Mk1/1A | | | | | | | |
| Mig-29K (Navy) | 36 | 2035 | TEDBF | | | | | | | |
| Mig-29UPG | 65 | 2035 | | | | | | | | |
| Sepecat Jaguar IM/IS | 130 | 2035 | LCA Tejas Mk2 | | | | | | | |
| TOTAL | 658 | | | | | | | | | |
| | | | | | | | | | | |

Exhibit 19: India's fleet of fighter aircraft; all the replacements will be made by HAL

Source: Industry, PL; *Figures are estimates

Cumulative orders for 500+ Tejas Mk1A & Mk2, AMCA, TEDBF, and MRFA fighter jets are likely to be placed by MoD with HAL in the coming decade, in order to increase India's fleet strength and replace outgoing fighters

Advanced fighter aircraft projects to propel long-term demand

HAL has several big ticket fighter aircraft projects under development in collaboration with ADA (Aeronautical Development Agency), including the LCA Tejas Mk 2, Advanced Medium Combat Aircraft (AMCA), and Twin Engine Deck Based Fighter (TEDBF). In order to make up for several old fleets going out of commission over the next decade and also to increase India's overall fighter aircraft strength, MoD is looking to procure 100 additional Tejas Mk 1As, 108 Tejas Mk 2 (6 squadrons), 126 AMCAs (7 squadrons), and ~100 TEDBFs – all to be made by HAL – as well as 114 Multi-Role Fighter Aircrafts (majority of which are expected to be manufactured by HAL in India under a ToT agreement).

HAL has also been developing the <u>Combat Air Teaming System (CATS) Warrior</u> for the Air Force and Navy – an advanced system which consists of autonomous drones supporting a mothership in the form of an existing fighter such as Tejas or Su-30. HAL approved a Rs3.9bn investment in 2021 to develop the CATS, and the first flight is expected in 2025.

These platforms will likely enter mass production and begin contributing significantly to the topline in the early 2030s, while also generating healthy design & development revenue for HAL in the interim.

Exhibit 20: All the replacement aircraft will be made by HAL

| Fighter Aircraft | Qty* |
|--|------|
| LCA Tejas Mk 1A | 173 |
| Sukhoi Su-30MKI | 12 |
| LCA Tejas Mk 2 | 108 |
| Advanced Medium Combat Aircraft (AMCA) | 126 |
| Twin Engine Deck Based Fighter (TEDBF) | 100 |
| Multi Role Fighter Aircraft (MRFA) | 114 |
| TOTAL | 633 |

Source: Industry, PL; *Figures are estimates

Outgoing helicopters to be replaced by HAL's indigenous offerings

There is also a significant opportunity for HAL to serve the Armed Forces' helicopter requirements, as 200+ Cheetah and Chetak helicopters begin to phase out this decade. These are expected to be replaced by HAL's indigenously developed Light Utility Helicopter, for which there is likely demand of 175 units. The Indian Multi Role Helicopter (IMRH) and its Naval variant, the Deck Based Multi Role Helicopter (DBMRH), are also currently under development at HAL. <u>MoD is likely to require</u> ~550 of these helicopters to increase its fleet strength and replace the outgoing 220+ Russian Mil Mi-17V-5 helicopters.

Exhibit 21: LUH and IMRH to replace Cheetah, Chetak and Mil Mi-17V-5



Source: Company, PL

HAL is set to win multiple orders for

and DBMRH in order to replace

Cheetah, Chetak, Mi-17V-5, etc.

helicopters such as LCH, LUH, IMRH

In order to cater to these requirements, HAL has set up a new helicopter facility at <u>Tumakuru</u>, which has the capacity to initially produce 30 helicopters per annum. This capacity will gradually rise to 60 and eventually 90 helicopters per year, in anticipation of manufacturing over 1,000 helicopters until 2040.

Visibility of ~Rs1.5trn potential order inflows over the next 2-5 years

HAL is poised to secure significant orders in the near future with high degree of certainty, for contracts valued at ~Rs1.5trn over the next 2-5 years. <u>Notably, there</u> is a strong assurance of securing contracts worth ~Rs360bn within the next 3 years as Acceptance of Necessity (AoN) has already been accorded for these orders. These include the supply of 9 Advanced Light Helicopters (ALH) to the Coast Guard and 60 Navy Utility Helicopters (UHM) along with performance-based logistics (PBL) support.

Furthermore, <u>HAL is optimistic about finalizing additional contracts in the next 2-5</u> years, valued at ~Rs1.1trn, for which AoNs have not yet been accorded. These potential orders include 145 Light Combat Helicopters (LCH), 175 LUH, 60 Dornier Do-228 for the Navy and IAF, and an additional 36 HTT-40 trainers. The prospect of securing these contracts provides a major boost to HAL's growth outlook.

Exhibit 22: ~Rs1.5trn visible order pipeline over the next 5 years

| Platform | Quantity | Potential Order Value (Rs bn) |
|-----------------------------------|----------|-------------------------------|
| AON Approved (2-3 years) | | |
| ALH Dhruv for Coast Guard | 9 | 30 |
| Naval Utility Helicopter (UHM) | 60 | 200 |
| PBL contract for UHM | | 130 |
| AON not yet Approved (2-5 years) | | |
| LCH - Series Production | 145 | 450 |
| LUH - Series Production | 175 | 460 |
| Navy Do-228 & IAF Upgraded Do-228 | 60 | 170 |
| HTT-40 Trainers | 36 | 44 |

Source: Company, PL

Manufacturing revenue to accelerate from FY25 onwards

HAL witnessed a slowdown in manufacturing revenue in FY22 (-13.9% to Rs73.8bn) and FY23 (-35.7% to Rs47.4bn), due to completion of many large manufacturing contracts by the end of FY21. However, given the long-gestation nature of HAL's projects, where delivery usually begins ~2 years after the contract is awarded, there is often a gap between contract awards and revenue realization.

~Rs605bn manufacturing order book provides strong visibility

The company's FY23 closing order book stood at ~Rs818bn (3.0x FY23 revenue). The manufacturing order backlog accounts for ~Rs605bn, including the landmark ~Rs457bn order for 83 Tejas Mk 1As, as well as the ~Rs68bn order for 70 HTT-40 trainers. A further ~Rs480bn order pipeline almost certain to be awarded in FY24, given that price negotiations for these contracts are complete. Deliveries for many of these projects will begin in FY24, but kick into in top gear from FY25 onwards.

HAL has visibility of orders worth ~Rs1.5trn over the next 2-5 years, for platforms such as ALH, UHM, LCH, LUH, Do-228, and HTT-40 trainers

After a slowdown in FY22 & FY23, manufacturing execution will pick up in FY24 and lift off from FY25 onwards, driving strong growth in HAL's revenue

| Platform | Quantity | Est. Order Value (Rs bn) |
|------------------------------------|----------|--------------------------|
| LCA Tejas Mk 1A | 83 | 457 |
| HTT-40 Trainers | 70 | 68 |
| PSLV-XL Satellite Launch Vehicles | 5 | 4 |
| Dornier Do-228 for India Air Force | 6 | 6 |
| Upgraded Do-228 for Indian Navy | 2 | 4 |
| Others | | 66 |

Exhibit 23: Current manufacturing order book of ~Rs605bn

Source: Company, PL

Tejas Mk 1A deliveries to be a major revenue driver over FY25-29E

In February 2021, the Cabinet Committee for Security (CCS) awarded HAL with the largest ever defence contract for indigenous production till date – 83 LCA Tejas Mk 1A aircrafts – worth ~Rs480bn (including ~Rs23bn for design & development and infrastructure costs). This includes 73 fighter variants and 10 trainer variants. HAL has capacity to produce 16 Tejas Mk1As per year, and has begun setting up a 3rd production line in Nashik to increase capacity to 24 per year by FY26. Delivery is set to commence in February 2024 with 3 aircrafts, followed by ~16 aircrafts a year for 5 years, with scope to expedite delivery once the new capacity is set up.

Exhibit 24: HAL Tejas is India's flagship indigenous fighter aircraft program



LCA Tejas is a 4.5 generation, all weather and multi-role fighter aircraft, capable of taking up offensive air support, close combat and ground attack role at ease.

Mk1A is the most advanced version of the LCA Tejas. It is equipped with AESA Radar, EW suite consisting of radar warning and selfprotection jamming, Digital Map Generator, Smart Multi-function Displays, Combined Interrogator and Transponder, Advanced Radio Altimeter, Beyond Visual Range (BVR) Missile and various maintainability improvements.

Source: Company, PL

~Rs480bn worth of fresh order inflows expected in FY24

HAL has a sizeable pipeline of ~Rs480bn worth of manufacturing orders for aircraft, helicopters and engines expected to be awarded in FY24. The company has already commenced production for some of these platforms. Few deliveries are expected to begin in FY24 itself, but execution will scale up from FY25 onwards, further bolstering HAL's growth outlook.

Exhibit 25: Rs480bn expected order pipeline for FY24

| Platform | Quantity | Est. Order Value (Rs bn) |
|---------------------------------|----------|--------------------------|
| Sukhoi Su-30 Aircrafts | 12 | 110 |
| ALH Mk III Dhruv | 25 | 35 |
| LUH (Limited Series Production) | 12 | 25 |
| AL-31FP Engines | 240 | 260 |
| RD-33 Engines | 80 | 45 |
| Sourso: Company DI | | |

Source: Company, PL

The landmark order for 83 Tejas Mk1As is set to be completed by FY29, and will be HAL's biggest revenue driver during this period

Strong pipeline of orders worth ~Rs480bn are expected to be awarded in FY24, for platforms such as Su-30, ALH, LUH, AL-31FP engines, and RD-33 engines

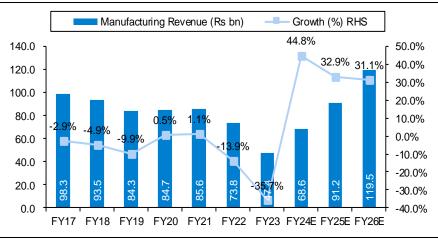


Exhibit 26: Manufacturing revenue to grow at a 36.1% CAGR over FY23-26E

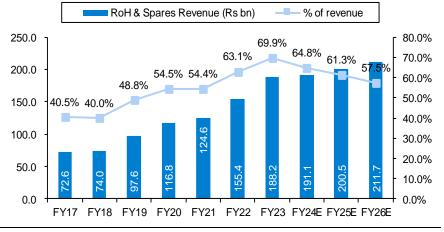
Source: Company, PL

RoH & Spares to supplement revenue growth

Revenue from RoH & Spares made up for the manufacturing shortfall in FY22 & FY23 and is expected to continue this momentum in FY24. This highlights the robustness of HAL's business model, as it was able to maintain its steady growth trajectory over the past couple of years. Once manufacturing ramps up from FY25 onwards, this segment will continue to steadily supplement the top line.

Management is highly confident of 5-6% long-term growth in RoH & Spares. The main platforms contributing to RoH include Su-30MKI fighters, its AL-31FP engines, ALH, and various other rotable platforms. HAL is hopeful of adding 2-3 more Su-30s and 20-30 more AL-31FP engines to the RoH board next year. As platform deliveries scale up, so will their requirement for maintenance, repairs, and spares, which will add to the company's RoH & Spares business. Furthermore, there is a significant \$4bn opportunity in the pipeline to upgrade 150 Su-30MKIs, which will be a major boost to the business incase it fructifies.





Source: Company, PL

HAL's RoH & Spares revenue is expected to grow steadily at 5-6% over the long term

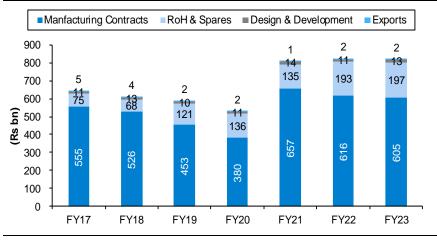


Exhibit 28: HAL's closing order book breakdown over FY17-23

Source: Company, PL

Growing manufacturing scale and lower provisions to aid profitability

As HAL's revenue scales up on the back of burgeoning manufacturing execution, it will likely see a dip in gross margin, which had jumped in the past two years due to a higher share of RoH & Spares business. However, the company will also benefit from operating leverage as employee cost growth will not need to keep pace with revenue growth, thus aiding improvement in EBITDA margin. Meanwhile, HAL booked significantly higher provisions in FY22 at Rs37.3bn (15.1% of sales) and FY23 at Rs37.2bn (13.8% of sales) v/s the previous 5-year average of Rs12.2bn (6.1% of sales). In the long-term, this is expected to normalize to ~7% of sales. As a result, we expect better operating profitability going forward.

Furthermore, as the company continues to witness strong order booking and execution, customer advances and healthy cash flow generation will lead to a higher cash position. A large chunk of these funds will be deployed in bank deposits and other liquid investments until required, generating significant interest income in the interim. This will directly flow through to PAT, leading to higher overall profitability. We expect a 25.9% CAGR in other income over FY23-26E.

Exhibit 29: Employee costs as % of sales to fall by 174bps

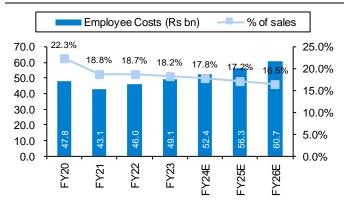
HAL will benefit from operating

manufacturing, along with lower

leverage owing to a higher scale of

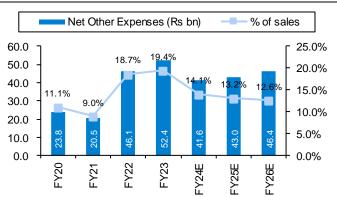
provision expenses, and higher other

income (due to increased customer advances on a growing order book)



Source: Company, PL

Exhibit 30: Other expenses as a % of sales to fall by 684bps



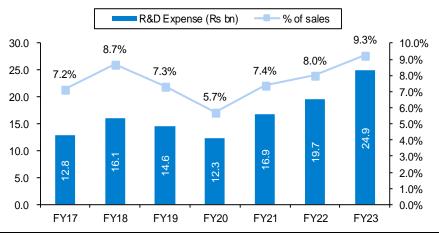
Source: Company, PL

Technology development to augment HAL's capabilities

Increasing impetus given to Research & Development

HAL has been given the opportunity to modernize India's air defence with indigenously developed military aircraft & helicopters. It has several projects under development, such as Tejas Mk 2, AMCA, IMRH & DBMRH, CATS Warrior, UHM, and TEDBF. In light of this, it has been scaling up R&D expenditure to produce state-of-the-art platforms that are comparable with global counterparts and at a more reasonable cost. This will also discourage MoD to look for direct import alternatives (such as Rafale), while also improving HAL's export competitiveness. HAL maintains a Research & Development reserve with annual contributions of 10% of its operating PAT. However, in FY23, HAL transferred 15% to the fund instead of 10%, signalling its intent to bring technological superiority to its products.

Exhibit 31: HAL ramped up its R&D expenditure in FY23 to 9.3% of sales



Source: Company, PL

Technology tie-ups bring new core competencies to the company

HAL has a healthy track record of building, maintaining and overhauling aircraft & aero engines via licensed manufacturing agreements. Partnering with renowned international defence OEMs such as Safran, GE Aerospace, Dassault Aviation and Sukhoi through ToT agreements provides HAL with access to best practices and advanced technologies, thereby enhancing HAL's capabilities and enabling it to make cutting-edge indigenous platforms, both for domestic and export markets.

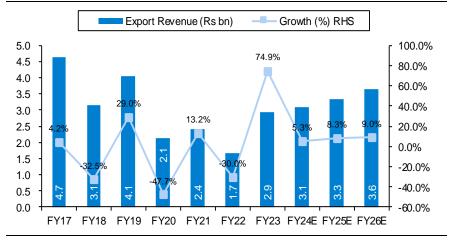
- Landmark MoU to co-produce GE-414 engines in India: HAL signed an MoU with GE Aerospace for joint production of GE-414 aeroengines to power the Tejas Mk 2 program via an 80% ToT agreement. This is a landmark opportunity as it will make HAL one of the select few global companies to have the capability to build engines of the superior calibre of the GE-414. In the future, HAL will be able to indigenously produce such engines for other fighter jet programs and for export markets. This will make HAL less reliant on foreign supply of engines, thereby enabling quicker turnaround of aircraft production.
- JV with Safran for helicopter engines: HAL and Safran will be setting up a JV for design, development, and production of helicopter engines (starting with the IMRH & DBMRH projects), further enhancing HAL's technical know-how.

HAL's focus on R&D coupled with strong tie-ups for engine manufacturing with GE and Safran will provide it with a robust technological edge to become competitive on a global scale HAL's potential to expand its indigenous offerings to South America and South East Asia augurs well for the company's global prospects and export order book

Exports offer an additional growth avenue

Exports contributed 1.1% of HAL's revenue in FY23, while the export order book stood at Rs2.4bn, a mere 0.3% of the total order book. The government has set a goal of Rs1.75trn of defence production in India by FY25 (from ~R1.1trn in FY23) with a 20% export contribution target (from ~14% in FY23). In-line with these goals, HAL too is actively looking to grow its exports business.

Exhibit 32: Export revenue to grow at a steady 7.5% CAGR over FY23-26E



Source: Company, PL

- The company is proactively undertaking significant efforts to promote its international business. It is promoting its indigenous range of LCA Tejas Mk 1A, ALH, LUH, and LCH in the export markets. ALH particularly has demonstrated promising order potential, with a projected initial order value of \$150mn.
- HAL recently signed an MoU with Argentina's army for "productive cooperation and acquisition of Light and Medium Utility Helicopters". It has also submitted proposals to various other countries, including Philippines, Egypt, Sri Lanka, Maldives, Botswana, Thailand, and Nigeria. In fact, leads with Philippines and Egypt are at an advanced stage.
- The company also opened a regional office in Malaysia in July 2023 to facilitate industrial collaboration on defence between India and Malaysia. Although HAL just lost out on the Royal Malaysian Air Force's (RMAF) tender for 18 fighter jets, there is potential for the company to offer RoH services to their Su-30 MKM and Hawk fleets, as well as to supply aircraft such as HTT-40, Do-228, ALH and LCH. The office will also serve as a hub for HAL's engagement with the wider South-East Asian region.

As HAL continues to engage with prospective customers and advance negotiations, the company's expanding global footprint underscores its transition from being solely an Indian licensed manufacturer to emerging as a leading defence aircraft manufacturer on the global stage. These efforts not only reflect India's determination to achieve self-sufficiency in defence, but also its aspirations to assume a significant role in global defence exports.

Financial Analysis

Revenue CAGR of 11.0% over FY23-26E

We expect the manufacturing segment to drive revenue growth going forward, with an expected CAGR of 36.1% of FY23-26E (on a low base). The Rs457bn LCA Mk1A order will be the primary contributor to manufacturing sales over FY25-29. Deliveries of the Rs68bn order for 70 HTT-40 trainers will begin to contribute in FY26 and will run through to FY30. HAL also has visibility of receiving ~Rs480bn worth of orders in FY24, for which execution will kick into full gear in FY25.

We expected HAL's other segments to supplement revenue growth over FY23-26E with steady CAGR of 4.0% in RoH & Spares, 8.8% in Development (owing to various new programs such as Tejas Mk2, AMCA and IMRH), and 7.5% in Exports.

| Revenue by Segment | FY22 | FY23 | FY24E | FY25E | FY26E |
|--------------------|----------|----------|----------|----------|----------|
| Manufacturing | 73,751 | 47,404 | 68,623 | 91,175 | 1,19,490 |
| Repair & Overhaul | 1,22,062 | 1,36,753 | 1,41,431 | 1,48,376 | 1,56,631 |
| Spares | 33,297 | 51,421 | 49,692 | 52,132 | 55,033 |
| Development | 9,153 | 17,965 | 19,743 | 21,387 | 23,147 |
| Exports | 1,680 | 2,937 | 3,092 | 3,347 | 3,649 |
| Others | 6,258 | 12,795 | 12,283 | 10,441 | 9,919 |
| Total | 2,46,200 | 2,69,275 | 2,94,863 | 3,26,857 | 3,67,868 |

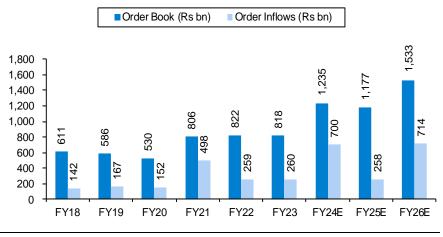
Exhibit 33: Manufacturing revenue to revive from FY24 onwards

Source: Company, PL

Order book to sustain above ~Rs1trn over FY24E-26E

With the impending order inflows of ~Rs480bn in FY24 along with the company's visible pipeline of ~Rs1.5trn over the next 2-5 years, we expected HAL's order book to swell to over Rs1trn this year and remain above this level for a few years. Execution of the existing backlog will be replaced with orders for ALH, LUH, LCH, UHM, Su-30MKI, additional HTT-40 trainers and Mk1A fighters, and AL 31-FP and RD-33 engines. Meanwhile, order inflows for RoH & Spares are expected to grow steadily at 5.7%.

Exhibit 34: Healthy order book position of ~Rs1.5trn expected by FY26E



Source: Company, PL

EBITDA CAGR of 11.4% over FY23-26E

HAL saw strong improvement in gross margin to 59.4% in FY22 and 62.5% in FY23 (versus previous 5-year average of 52.9%) as the mix shifted towards higher margin RoH & Spares business. Going forward, as the share of manufacturing revenue rises in the overall mix, we can expect some normalization in the gross margin. However, EBITDA margin is expected to remain steady over FY23-FY26E due to:

- Normalization of provision expenses to 8.3% of sales by FY26E; and
- Operating leverage benefits as revenue scales up, with employee costs as a % of sales expected to drop to 16.5% in FY26E from 18.2% in FY23.

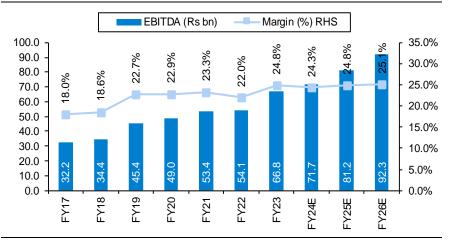


Exhibit 35: EBITDA margin expected to rise to 25.1% by FY26E

Source: Company, PL

Operating leverage via rising value-added per employee

As HAL's revenue scales up through greater manufacturing activity, we expect value-added (gross profit less other operating revenue) per employee to also grow, as the company can increase sales without a commensurate increase in manpower to replace retiring employees. This is a strong indication of the operating leverage benefits that will flow to the company, which will aid long-term margin improvement.

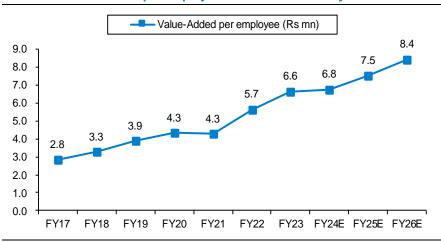
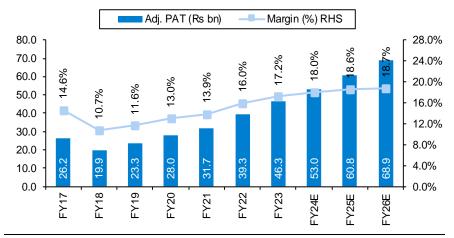


Exhibit 36: Value-added per employee to rise to Rs8.4mn by FY26E

Source: Company, PL

Adjusted PAT CAGR of 14.2% over FY23-26E

HAL's profit after tax (adjusted for extraordinary items and tax refunds received) has grown steadily at a 10.1% CAGR over FY17-23. Going forward, we expect Adj. PAT to grow at a 14.2% CAGR over FY23-26E due to the fast scale up in revenue and improving operating margins. This will be supplemented by strong growth in interest income earned on robust cash generation coupled with healthy cash advances received on a burgeoning order book.





Source: Company, PL

Interest Income (Rs bn) Cash & Bank Balance (Rs bn) 18.6 350.0 20.0 17.1 18.0 300.0 14.5 16.0 250.0 14.0 12.0 200.0 8.9 10.0 150.0 6.4 8.0 71.8 2 6.0 100.0 3.2 26 4.0 LC. 50.0 0. 2.0 0.0 0.0 FY18 FY19 FY20 FY21 FY22 FY23 FY24E FY25E FY26E FY17



Source: Company, PL

Valuation & Outlook

We expect HAL to report Revenue CAGR of 11.0% over FY23-26E on the back of 1) robust order book and healthy expected inflows, 2) acceleration in manufacturing revenue driven by execution of Tejas Mk 1A order, coupled with commencement of deliveries of HTT-40 trainers and AL-31FP engines 3) steady growth in RoH, Spares and Exports, and 4) healthy design & development revenue generation from projects such as Tejas Mk 2.

We estimate EBITDA/Adj. PAT CAGR of 11.4%/13.7% over FY23-26E given 1) operating leverage achieved from scale in revenues versus employee costs 2) normalization of provision expenses 3) strong growth in interest income owing to a healthy cash balance, and 4) cost efficiencies originating from a localized supply chain.

HAL is in a sweet-spot to capitalize on opportunities arising from the government's push on domestic procurement of defence equipment, indigenization of defence manufacturing, and modernization & strengthening of India's armed forces, especially to establish a robust combat-ready air force. We expect sustainable long-term demand for indigenously developed modern military aircraft & helicopters. Given HAL's position as the sole Indian manufacturer of such aircraft, coupled with its focus on enhancing technological capabilities via R&D expenditure and tie-ups with global defence players, we are very optimistic about the company's long-term prospects. We initiate coverage with a 'BUY' rating, at a TP of Rs2,266.

We arrive at our target, taking an equal-weighted average of 1) DCF-derived price of Rs2,300 and 2) multiple-derived price of Rs2,231 based on 23x Sep-25 EPS. The DCF-derived price factors in HAL's long execution cycle, thus capturing its sustained healthy long-term performance. The multiple-derived price captures the relative valuation compared to HAL's peers.

Exhibit 39: DCF Valuation

| DCF (Rs mn) | | FY22 | FY23 | FY24E | FY25E | FY26E | FY27E | FY28E | FY29E | FY30E | FY31E | FY32E |
|----------------------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|------------|------------|
| Revenue from Operations | | 2,46,200 | 2,69,275 | 2,94,863 | 3,26,857 | 3,67,868 | 4,14,555 | 4,71,322 | 5,40,118 | 6,19,734 | 6,89,635 | 7,66,549 |
| EBIT | | 42,980 | 48,945 | 55,901 | 63,615 | 73,071 | 85,926 | 1,00,931 | 1,17,990 | 1,40,525 | 1,57,726 | 1,76,849 |
| Less: Adjusted Taxes | | (41,790) | (43,819) | (41,367) | (47,075) | (54,073) | (63,585) | (74,689) | (87,312) | (1,03,988) | (1,16,718) | (1,30,868) |
| Add: Depreciation & Amortization | | 11,105 | 17,847 | 15,794 | 17,536 | 19,265 | 21,133 | 23,145 | 25,340 | 27,722 | 30,160 | 32,618 |
| NOPAT | | 12,295 | 22,973 | 30,328 | 34,076 | 38,264 | 43,474 | 49,387 | 56,017 | 64,259 | 71,169 | 78,599 |
| Change in Working Capital | | 12,654 | 4,515 | 10,682 | (171) | (2,085) | (15,703) | (16,724) | (3,042) | 34,035 | 28,074 | 49,863 |
| Less: Capex | | (15,006) | (17,812) | (20,169) | (20,571) | (21,463) | (24,201) | (25,269) | (29,070) | (30,276) | (30,372) | (30,670) |
| Free Cash Flow | | 9,943 | 9,676 | 20,841 | 13,333 | 14,716 | 3,570 | 7,394 | 23,905 | 68,018 | 68,871 | 97,792 |
| PV of Free Cash Flow | | | | 20,006 | 11,793 | 11,993 | 2,681 | 5,117 | 15,242 | 39,961 | 37,283 | 48,781 |
| | | | | | | | | | | | | |
| WACC | 8.5% | | | | | | | | | | | |
| Terminal Growth | 4.0% | | | | | | | | | | | |
| NPV of FCF (Sep-23) | 1,313,604 | | | | | | | | | | | |
| Net Debt/(Cash) | (224,912) | | | | | | | | | | | |
| Net Equity Value | 1,538,516 | | | | | | | | | | | |
| Value per share | 2,300 | | | | | | | | | | | |
| Implied Sep-25E PE | 23.7 | | | | | | | | | | | |
| Source: Company, PL | | | | | | | | | | | | |

Peer Comparison

Exhibit 40: HAL has the strongest margin among its global and domestic peers

| Compony | | Sales (\$ mn) | | | | EBITDA (\$ mn) | | | EBITDA Margin | | | PAT (\$ mn) | | | | PAT CAGR (%) | | |
|-------------------|--------|---------------|--------|----------|--------|----------------|--------|--------|---------------|-------|-------|-------------|--------|--------|-------|--------------|---------|----------|
| Company | FY23 | FY24E | FY25E | FY26E | FY23 | FY24E | FY25E | FY26E | FY23 | FY24E | FY25E | FY26E | FY23 | FY24E | FY25E | FY26E | FY20-23 | FY23-26E |
| Boeing | 66,608 | 78,652 | 92,057 | 1,00,229 | -1,222 | 2,909 | 8,448 | 11,154 | -1.8% | 3.7% | 9.2% | 11.1% | -4,935 | -1,460 | 3,798 | 6,073 | 98.0% | n/a |
| Airbus | 61,894 | 67,741 | 75,707 | 86,286 | 8,328 | 9,166 | 10,714 | 13,065 | 13.5% | 13.5% | 14.2% | 15.1% | 4,473 | 4,783 | 5,751 | 7,131 | n/a | 16.8% |
| Lockheed Martin | 65,984 | 66,632 | 68,591 | 71,107 | 10,027 | 9,946 | 10,114 | 10,404 | 15.2% | 14.9% | 14.7% | 14.6% | 5,732 | 6,844 | 6,880 | 7,016 | -2.7% | 7.0% |
| Safran | 20,563 | 24,541 | 27,836 | 31,053 | 3,521 | 4,640 | 5,571 | 6,464 | 17.1% | 18.9% | 20.0% | 20.8% | -2,590 | 2,361 | 3,002 | 3,629 | n/a | n/a |
| BAE Systems | 26,283 | 30,042 | 31,791 | 33,966 | 3,896 | 3,982 | 4,277 | 4,576 | 14.8% | 13.3% | 13.5% | 13.5% | 1,967 | 2,321 | 2,455 | 2,659 | 1.4% | 10.6% |
| Dassault Aviation | 7,320 | 13,893 | 14,759 | 15,313 | 813 | 1,636 | 1,758 | 1,883 | 11.1% | 11.8% | 11.9% | 12.3% | 754 | 1,014 | 1,093 | 1,175 | -1.9% | 15.9% |
| Textron Inc | 12,869 | 5,800 | 6,315 | 7,743 | 1,349 | 650 | 755 | 970 | 10.5% | 11.2% | 12.0% | 12.5% | 861 | 922 | 1,048 | 1,249 | 1.8% | 13.2% |
| Embraer | 4,551 | 5,495 | 6,171 | 6,434 | 95 | 555 | 677 | 748 | 2.1% | 10.1% | 11.0% | 11.6% | -185 | 106 | 188 | 235 | n/a | n/a |
| BEL | 2,121 | 2,484 | 2,833 | 3,166 | 486 | 564 | 652 | 744 | 22.9% | 22.7% | 23.0% | 23.5% | 361 | 413 | 476 | 549 | 18.8% | 15.0% |
| HAL | 3,237 | 3,544 | 3,929 | 4,422 | 803 | 862 | 975 | 1,110 | 24.8% | 24.3% | 24.8% | 25.1% | 556 | 637 | 731 | 829 | 18.3% | 14.2% |

Source: Company, PL, Consensus Estimates (except HAL)

Note: HAL & BEL's FY ends on Mar-31, while all other peers' FY ends on Dec-31; Exchange rate: \$1 = Rs83.19

Exhibit 41: HAL has one of the strongest return profiles among its similar sized peers

| Compony | Market Data | ı (\$ mn) | | Mark | et P/E | | Targe | t P/E | | EV/EB | ITDA | | | Ro | E | |
|-------------------|-------------|-----------|--------|--------|--------|-------|-------|-------|---------|-------|-------|-------|--------|-------|--------|--------|
| Company - | МСар | EV | FY23 | FY24E | FY25E | FY26E | FY25E | FY26E | FY23 | FY24E | FY25E | FY26E | FY23 | FY24E | FY25E | FY26E |
| Boeing | 1,17,902 | 1,56,432 | -23.5x | -68.8x | 36.0x | 21.1x | 47.1x | 27.6x | -128.0x | 53.8x | 18.5x | 14.0x | N/A | 6.4% | -19.4% | -46.3% |
| Airbus | 1,02,939 | 95,491 | 22.9x | 21.9x | 17.9x | 14.1x | 21.2x | 16.7x | 11.5x | 10.4x | 8.9x | 7.3x | 37.9% | 30.4% | 30.5% | 31.5% |
| Lockheed Martin | 1,02,936 | 1,16,808 | 18.8x | 15.1x | 14.5x | 14.0x | 17.9x | 17.3x | 11.6x | 11.7x | 11.5x | 11.2x | 56.7% | 75.4% | 77.0% | 75.4% |
| Safran | 67,079 | 67,505 | -25.9x | 28.6x | 22.4x | 18.6x | 25.9x | 21.4x | 19.2x | 14.5x | 12.1x | 10.4x | -21.2% | 20.5% | 23.0% | 24.9% |
| BAE Systems | 37,400 | 41,731 | 19.5x | 16.2x | 15.0x | 13.8x | 16.6x | 15.3x | 10.7x | 10.5x | 9.8x | 9.1x | 17.1% | 16.2% | 16.7% | 17.6% |
| Dassault Aviation | 15,636 | 17,178 | 8.7x | 14.8x | 13.5x | 12.2x | 14.9x | 13.4x | 21.1x | 10.5x | 9.8x | 9.1x | 12.7% | 14.6% | 14.9% | 15.4% |
| Textron Inc | 15,310 | 7,088 | 46.8x | 16.9x | 14.8x | 12.4x | 17.2x | 14.5x | 5.3x | 10.9x | 9.4x | 7.3x | 12.4% | 13.7% | 14.4% | 15.5% |
| Embraer | 2,464 | 3,903 | -13.3x | 9.2x | 6.2x | 5.0x | 8.7x | 7.0x | 41.2x | 7.0x | 5.8x | 5.2x | -6.7% | 3.3% | 6.7% | 8.0% |
| BEL | 12,002 | 11,040 | 33.2x | 29.1x | 24.8x | 21.7x | 26.7x | 23.3x | 22.7x | 19.6x | 16.9x | 14.8x | 23.5% | 23.0% | 23.8% | 24.8% |
| HAL | 15,425 | 12,984 | 22.0x | 24.2x | 21.1x | 18.6x | 24.9x | 22.0x | 16.2x | 15.1x | 13.3x | 11.7x | 21.6% | 20.9% | 20.7% | 20.3% |

Source: Company, PL, Consensus Estimates (except HAL)

Note: HAL & BEL's FY ends on Mar-31, while all other peers' FY ends on Dec-31; Exchange rate: \$1 = Rs83.19

Key Risks

- Delays in execution of manufacturing platforms may affect revenue recognition and also increase costs.
- HAL's sales & cash flows heavily depend on the quantum and timing of budgetary allocations by MoD. Any changes to government regime can impact allocation to defence, domestic procurement policies, HAL's position as the sole fighter aircraft producer, etc.
- Disruptions in supply chain for critical materials and LRUs from foreign OEMs (like seen in the Russia-Ukraine war) may adversely impact the business.
- Potential competition from foreign OEMs in the Indian market either directly or via the Strategic Partnership model can impact HAL's order prospects.
- Delays or reduction in customer advances or contract payments can impact cash flows and increase debt financing of HAL's large working capital requirements.
- Significant competition in export markets from large global OEMs such as Dassault Aviation, Lockheed Martin, Airbus Helicopters, Boeing, BAE Systems, Safran Helicopter Engines, Pratt and Whitney, Rolls Royce, Honeywell and certain Russian manufacturers.
- Delays or reduction in customer advances or contract payments can impact cash flows and increase debt financing of HAL's large working capital requirements
- Accidents in HAL-made aircraft & helicopters can lead to potential liabilities and reputational damage.

Financials

Income Statement (Rs m)

| Y/e Mar | FY23 | FY24E | FY25E | FY26E |
|-------------------------------|----------|----------|----------|----------|
| Net Revenues | 2,69,275 | 2,94,863 | 3,26,857 | 3,67,868 |
| YoY gr. (%) | 9.4 | 9.5 | 10.9 | 12.5 |
| Cost of Goods Sold | 1,01,021 | 1,29,150 | 1,46,432 | 1,68,484 |
| Gross Profit | 1,68,254 | 1,65,713 | 1,80,425 | 1,99,384 |
| Margin (%) | 62.5 | 56.2 | 55.2 | 54.2 |
| Employee Cost | 49,104 | 52,424 | 56,257 | 60,677 |
| Other Expenses | 52,358 | 41,594 | 43,017 | 46,371 |
| EBITDA | 66,792 | 71,695 | 81,151 | 92,336 |
| YoY gr. (%) | 23.5 | 7.3 | 13.2 | 13.8 |
| Margin (%) | 24.8 | 24.3 | 24.8 | 25.1 |
| Depreciation and Amortization | 17,847 | 15,794 | 17,536 | 19,265 |
| EBIT | 48,945 | 55,901 | 63,615 | 73,071 |
| Margin (%) | 18.2 | 19.0 | 19.5 | 19.9 |
| Net Interest | 580 | 590 | 654 | 736 |
| Other Income | 11,007 | 16,352 | 19,168 | 20,832 |
| Profit Before Tax | 74,801 | 71,663 | 82,129 | 93,168 |
| Margin (%) | 27.8 | 24.3 | 25.1 | 25.3 |
| Total Tax | 16,552 | 18,632 | 21,354 | 24,224 |
| Effective tax rate (%) | 22.1 | 26.0 | 26.0 | 26.0 |
| Profit after tax | 58,249 | 53,031 | 60,776 | 68,944 |
| Minority interest | 0 | - | - | - |
| Share Profit from Associate | 29 | - | - | |
| Adjusted PAT | 46,262 | 53,031 | 60,776 | 68,944 |
| YoY gr. (%) | 17.8 | 14.6 | 14.6 | 13.4 |
| Margin (%) | 16.5 | 17.0 | 17.6 | 17.7 |
| Extra Ord. Income / (Exp) | 12,015 | - | - | - |
| Reported PAT | 58,277 | 53,031 | 60,776 | 68,944 |
| YoY gr. (%) | 14.7 | (9.0) | 14.6 | 13.4 |
| Margin (%) | 21.6 | 18.0 | 18.6 | 18.7 |
| Other Comprehensive Income | - | - | - | - |
| Total Comprehensive Income | 58,277 | 53,031 | 60,776 | 68,944 |
| Equity Shares O/s (m) | 669 | 669 | 669 | 669 |
| EPS (Rs) | 69.2 | 79.3 | 90.9 | 103.1 |

| Y/e Mar | FY23 | FY24E | FY25E | FY26E |
|-------------------------|----------|----------|----------|----------|
| Non-Current Assets | | | | |
| Gross Block | 1,58,570 | 1,74,051 | 1,91,211 | 2,08,914 |
| Tangibles | 1,17,904 | 1,28,519 | 1,40,285 | 1,52,425 |
| Intangibles | 40,667 | 45,532 | 50,925 | 56,489 |
| Acc: Dep / Amortization | 90,226 | 1,05,317 | 1,22,070 | 1,40,467 |
| Tangibles | 59,917 | 69,404 | 79,888 | 91,303 |
| Intangibles | 30,309 | 35,912 | 42,182 | 49,164 |
| Net fixed assets | 68,344 | 68,734 | 69,141 | 68,447 |
| Tangibles | 57,987 | 59,114 | 60,398 | 61,122 |
| Intangibles | 10.358 | 9,620 | 8,743 | 7,325 |

21,342

22,301

23,333

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|-------------------------------|----------|----------|----------|----------|
| Goodwill | - | - | - | - |
| Non-Current Investments | 18,771 | 19,464 | 21,393 | 23,866 |
| Net Deferred tax assets | 11,257 | 11,257 | 11,257 | 11,257 |
| Other Non-Current Assets | 35,965 | 20,640 | 17,977 | 14,715 |
| | | | | |
| Current Assets | | | | |
| Investments | - | - | - | - |
| Inventories | 1,21,487 | 1,45,412 | 1,74,622 | 2,11,650 |
| Trade receivables | 47,191 | 52,510 | 60,894 | 74,581 |
| Cash & Bank Balance | 2,03,166 | 2,46,711 | 2,87,281 | 3,32,276 |
| Other Current Assets | 41,891 | 35,384 | 37,262 | 39,730 |
| Total Assets | 6,72,038 | 7,38,013 | 8,31,334 | 9,45,273 |
| | | | | |
| Equity | | | | |
| Equity Share Capital | 3,344 | 3,344 | 3,344 | 3,344 |
| Other Equity | 2,32,378 | 2,68,496 | 3,12,042 | 3,61,306 |
| Total Networth | 2,35,722 | 2,71,840 | 3,15,386 | 3,64,650 |
| Non-Current Liabilities | | | | |
| Long Term borrowings | 25 | 25 | 25 | 25 |
| Provisions | 13,471 | 14,417 | 15,471 | 16,686 |
| Other non current liabilities | 1,09,260 | 1,23,843 | 1,37,280 | 1,54,505 |
| | | | | |
| Current Liabilities | | | | |
| ST Debt / Current of LT Debt | 1 | 1 | 1 | 1 |
| Trade payables | 31,350 | 34,737 | 38,506 | 44,346 |
| Other current liabilities | 2,76,922 | 2,87,216 | 3,18,090 | 3,57,665 |
| Total Equity & Liabilities | 6,72,038 | 7,38,013 | 8,31,334 | 9,45,273 |

18,850

Source: Company Data, PL Research

Source: Company Data, PL Research

Capital Work In Progress

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Hindustan Aeronautics

| Cash Flow (Rs m) | | | | |
|--------------------------------|----------|----------|----------|----------|
| Y/e Mar | FY23 | FY24E | FY25E | FY26E |
| PBT | 65,095 | 71,663 | 82,129 | 93,168 |
| Add. Depreciation | 23,821 | 17,286 | 19,206 | 21,124 |
| Add. Interest | 258 | 590 | 654 | 736 |
| Less Financial Other Income | 11,007 | 16,352 | 19,168 | 20,832 |
| Add. Other | 22,165 | (14,536) | (17,139) | (18,552) |
| Op. profit before WC changes | 1,11,339 | 75,003 | 84,849 | 96,476 |
| Net Changes-WC | 4,515 | 10,682 | (171) | (2,085) |
| Direct tax | (27,557) | (18,632) | (21,354) | (24,224) |
| Net cash from Op. activities | 88,297 | 67,053 | 63,324 | 70,167 |
| Capital expenditures | (17,762) | (20,169) | (20,571) | (21,463) |
| Interest / Dividend Income | 7,413 | 14,536 | 17,139 | 18,552 |
| Others | (46,932) | (61,615) | (41,440) | (41,845) |
| Net Cash from Invt. activities | (57,280) | (67,247) | (44,872) | (44,756) |
| Issue of share cap. / premium | - | - | - | - |
| Debt changes | - | - | - | - |
| Dividend paid | (16,719) | (16,912) | (17,230) | (19,680) |
| Interest paid | (557) | (590) | (654) | (736) |
| Others | (37) | - | - | - |
| Net cash from Fin. activities | (17,313) | (17,502) | (17,883) | (20,416) |
| Net change in cash | 13,704 | (17,697) | 570 | 4,995 |
| Free Cash Flow | 70,485 | 46,884 | 42,753 | 48,704 |

| Key Financial Metrics | | | | |
|-----------------------------------|-------|-------|-------|-------|
| Y/e Mar | FY23 | FY24E | FY25E | FY26E |
| Per Share(Rs) | | | | |
| EPS | 69.2 | 79.3 | 90.9 | 103.1 |
| CEPS | 95.9 | 102.9 | 117.1 | 131.9 |
| BVPS | 352.5 | 406.5 | 471.6 | 545.3 |
| FCF | 105.4 | 70.1 | 63.9 | 72.8 |
| DPS | 27.5 | 23.8 | 27.3 | 30.9 |
| Return Ratio(%) | | | | |
| RoCE | 14.0 | 14.3 | 14.3 | 14.4 |
| ROIC | 26.2 | 28.9 | 29.8 | 30.6 |
| RoE | 21.6 | 20.9 | 20.7 | 20.3 |
| Balance Sheet | | | | |
| Net Debt : Equity (x) | (0.9) | (0.9) | (0.9) | (0.9) |
| Net Working Capital (Days) | 186 | 202 | 220 | 240 |
| Valuation(x) | | | | |
| PER | 27.3 | 23.8 | 20.8 | 18.3 |
| P/B | 5.4 | 4.6 | 4.0 | 3.5 |
| P/CEPS | 19.7 | 18.4 | 16.1 | 14.3 |
| EV/EBITDA | 15.9 | 14.2 | 12.0 | 10.1 |
| EV/Sales | 3.9 | 3.4 | 3.0 | 2.5 |
| Dividend Yield (%) | 1.5 | 1.3 | 1.4 | 1.6 |
| Source: Company Data, PL Research | | | | |

Source: Company Data, PL Research

Quarterly Financials (Rs m)

| Y/e Mar | Q2FY23 | Q3FY23 | Q4FY23 | Q1FY24 |
|------------------------------|--------|--------|----------|--------|
| Net Revenue | 51,448 | 56,655 | 1,24,947 | 39,154 |
| YoY gr. (%) | (7.3) | (3.9) | 8.1 | 8.1 |
| Raw Material Expenses | 18,410 | 24,897 | 47,561 | 10,242 |
| Gross Profit | 33,038 | 31,758 | 77,385 | 28,912 |
| Margin (%) | 64.2 | 56.1 | 61.9 | 73.8 |
| EBITDA | 16,216 | 9,854 | 32,458 | 8,768 |
| YoY gr. (%) | 30.7 | (31.0) | 30.0 | 6.1 |
| Margin (%) | 31.5 | 17.4 | 26.0 | 22.4 |
| Depreciation / Depletion | 2,520 | 2,689 | 10,556 | 2,014 |
| EBIT | 13,697 | 7,166 | 21,902 | 6,755 |
| Margin (%) | 26.6 | 12.6 | 17.5 | 17.3 |
| Net Interest | 4 | 21 | 553 | - |
| Other Income | 2,591 | 4,972 | 7,222 | 4,099 |
| Profit before Tax | 16,284 | 12,117 | 44,000 | 10,854 |
| Margin (%) | 31.7 | 21.4 | 35.2 | 27.7 |
| Total Tax | 4,094 | 578 | 125 | 2,749 |
| Effective tax rate (%) | 25.1 | 4.8 | 0.3 | 25.3 |
| Profit after Tax | 12,189 | 11,539 | 43,876 | 8,104 |
| Minority interest | - | - | - | (2) |
| Share Profit from Associates | 23 | 13 | (135) | 37 |
| Adjusted PAT | 12,212 | 11,552 | 28,356 | 8,142 |
| YoY gr. (%) | 44.2 | 23.8 | (8.7) | 31.3 |
| Margin (%) | 23.7 | 20.4 | 22.7 | 20.8 |
| Extra Ord. Income / (Exp) | - | - | 15,386 | - |
| Reported PAT | 12,212 | 11,552 | 43,741 | 8,142 |
| YoY gr. (%) | 44.2 | 23.8 | 40.9 | 31.3 |
| Margin (%) | 23.7 | 20.4 | 35.0 | 20.8 |
| Other Comprehensive Income | - | - | - | - |
| Total Comprehensive Income | 12,212 | 11,552 | 43,741 | 8,142 |
| Avg. Shares O/s (m) | 334 | 334 | 334 | 334 |
| EPS (Rs) | 36.5 | 34.5 | 84.8 | 24.4 |

September 29, 2023

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Hindustan Aeronautics



Recommendation History

| No. | Date | Rating | TP (Rs.) Share Price (Rs.) |
|-----|------|--------|----------------------------|
| | | | |

Analyst Coverage Universe

| Sr. No. | Company Name | Rating | TP (Rs) | Share Price (Rs) |
|---------|----------------------------------|------------|---------|------------------|
| 1 | ABB India | Accumulate | 5,013 | 4,511 |
| 2 | Apar Industries | Accumulate | 5,418 | 5,486 |
| 3 | Bharat Electronics | Accumulate | 140 | 130 |
| 4 | BHEL | Reduce | 67 | 93 |
| 5 | Carborundum Universal | BUY | 1,482 | 1,259 |
| 6 | Cummins India | Hold | 1,788 | 1,727 |
| 7 | Engineers India | Accumulate | 165 | 155 |
| 8 | GE T&D India | Hold | 260 | 273 |
| 9 | Grindwell Norton | BUY | 2,604 | 2,215 |
| 10 | Harsha Engineers International | Accumulate | 474 | 432 |
| 11 | Kalpataru Projects International | BUY | 732 | 635 |
| 12 | KEC International | Hold | 645 | 658 |
| 13 | Larsen & Toubro | BUY | 3,302 | 2,944 |
| 14 | Praj Industries | Accumulate | 618 | 581 |
| 15 | Siemens | Accumulate | 4,241 | 3,779 |
| 16 | Thermax | Hold | 2,613 | 2,721 |
| 17 | Triveni Turbine | Accumulate | 419 | 398 |
| 18 | Voltamp Transformers | Hold | 4,611 | 4,802 |

PL's Recommendation Nomenclature

| Buy | : | >15% |
|-------------------|---|---------------------------------|
| Accumulate | : | 5% to 15% |
| Hold | : | +5% to -5% |
| Reduce | : | -5% to -15% |
| Sell | : | < -15% |
| Not Rated (NR) | : | No specific call on the stock |
| Under Review (UR) | : | Rating likely to change shortly |
| | | |

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