



A Study on Financial Planning and Cash Flow Management: Evidence from Armoured Vehicles Nigam Limited (AVNL), Avadi

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Abstract

This study examines the financial planning framework and cash flow dynamics of Armoured Vehicles Nigam Limited (AVNL), a wholly-owned Government of India defence public sector undertaking headquartered at Avadi, Chennai, Tamil Nadu. AVNL is the sole manufacturer and supplier of armoured vehicles, including battle tanks (T-72, T-90) and Infantry Combat Vehicles (BMP-II), to the Indian Armed Forces. Drawing on the company's 4th Annual Report (FY 2024-25) and ICRA's credit rating rationale (March 2025), this paper analyses revenue trends, profitability, liquidity, capital structure, cash flow patterns, and strategic financial planning. Key findings reveal that AVNL maintains a nil-debt balance sheet, cash reserves of ₹7,000–₹7,500 crore, a robust order book of approximately ₹35,553 crore (~7x annual revenue), and a credit rating of AA+ (Stable) from both ICRA and CARE. The company's financial model is uniquely anchored by government equity infusion, advance-based customer receipts, and fixed-price defence contracts. The study identifies margin volatility due to long manufacturing cycles (18–24 months) and input cost exposure as the primary financial planning challenge, and recommends enhanced internal controls and ERP-driven operational visibility.

Keywords: Financial Planning, Cash Flow, AVNL, Defence PSU, Armoured Vehicles, Liquidity, Capital Structure, India

I. INTRODUCTION

Financial planning is the cornerstone of sustainable organisational performance, particularly in capital-intensive and long-cycle manufacturing industries. In the context of Indian defence public sector undertakings (DPSUs), financial planning assumes heightened importance owing to the strategic nature of operations, fixed-price government contracts, and the requirement for long-term capital commitment.

Armoured Vehicles Nigam Limited (AVNL), incorporated on August 14, 2021 and operational from October 1, 2021, is one of seven DPSUs carved out of the erstwhile Ordnance Factory Board. Headquartered at Avadi, Chennai, AVNL operates five manufacturing units across Tamil Nadu, Telangana, Madhya Pradesh, and Maharashtra, with an installed capacity of 140 vehicles per annum and a workforce of 10,358 employees (as on 31.03.2025).

This paper aims to: (i) analyse AVNL's revenue and profitability trends over FY 2023–2025; (ii) examine

its cash flow management and liquidity framework; (iii) assess its capital structure and financial planning strategy; and (iv) evaluate key financial ratios and risk factors. The study is based entirely on publicly available data from AVNL's 4th Annual Report (2024-25) and ICRA's credit rating report (March 2025).

II. REVIEW OF LITERATURE

Financial planning in public sector enterprises has been extensively studied. Ghosh and Maji (2004) highlight that working capital management is critical to operational efficiency in Indian manufacturing PSUs. Bose (2012) argues that advance-based payment mechanisms in defence procurement create unique cash flow dynamics not comparable to commercial enterprises.

Dinesh Kumar and Srivastava (2018) studied the financial performance of Indian DPSUs and found that government equity support significantly shields these entities from debt-related financial distress. Rajeswari and Moorthy (2020) noted that fixed-price contract structures in Indian defence manufacturing expose firms to margin compression risk during raw material price cycles.

Existing literature, however, lacks specific case studies on newly constituted DPSUs like AVNL. This paper addresses that gap by examining AVNL's financial planning framework in its formative years of operation.

III. OBJECTIVES OF THE STUDY

The specific objectives of this study are:

1. To analyse revenue growth, profitability, and EBITDA trends of AVNL from FY 2023 to FY 2025.
2. To examine the cash flow management model including liquidity reserves, advance receipts, and working capital dynamics.
3. To assess AVNL's capital structure, equity infusion pattern, and debt-free financial planning model.
4. To evaluate key financial ratios and identify financial risks and mitigation strategies.

IV. RESEARCH METHODOLOGY

This study adopts a descriptive and analytical research design. Secondary data were exclusively used, sourced from:

- (i) AVNL's 4th Annual Report (FY 2024-25), published at avnl.co.in; and
- (ii) ICRA Limited's Credit Rating Rationale for AVNL (March 12, 2025), awarding [ICRA]AA+ (Stable) / [ICRA]A1+.

Data were analysed using ratio analysis, trend analysis, and comparative financial analysis. The study period covers FY 2022-23 to FY 2024-25 for quantitative data and extends to the medium-term strategic outlook through FY 2027-28 for qualitative assessment.

V. RESULTS AND DISCUSSION

A. Revenue and Profitability Analysis

AVNL recorded its highest-ever revenue from operations of ₹4,984.29 crore in FY 2024-25, a year-on-year growth of 6.9% over ₹4,663.16 crore in FY 2023-24. Gross income grew from ₹5,267.90 crore to ₹5,561.96

crore over the same period. Table I presents the summarised financial performance.

TABLE I. Financial Performance Summary (₹ Crore)

Particulars	FY 2024-25	FY 2023-24
Gross Income (₹ Cr.)	5,561.96	5,267.90
Revenue from Operations	4,984.29	4,663.16
EBITDA	696.06	1,026.35
Profit Before Tax	457.40	817.13
Profit After Tax	334.93	605.07

While revenue showed consistent growth, EBITDA declined from ₹1,026.35 crore to ₹696.06 crore, and PAT fell from ₹605.07 crore to ₹334.93 crore. This margin compression is primarily attributable to the fixed-price nature of defence contracts combined with input cost escalations during the 18–24 month manufacturing cycle. ICRA noted that the H1 FY2025 OPBDIT margin was -7.3%, reflecting a high-cost manufacturing phase that is expected to normalise as order executions progress.

B. Cash Flow and Liquidity Management

AVNL's liquidity profile is exceptionally strong. The company maintains cash and bank balances of ₹7,000–₹7,500 crore against nil long-term debt, providing a near-impregnable liquidity buffer. Table II presents the key liquidity metrics.

TABLE II. Cash Flow and Liquidity Profile

Liquidity Metric	Value
Cash & Bank Balance	₹7,000–7,500 Cr.
Long-Term Debt	NIL
Working Capital Limit	₹2,000 Cr.
WC Utilisation	Largely Unutilised
Annual CapEx Plan	₹130–150 Cr.
CapEx Funding	GoI Equity Infusion

A key feature of AVNL's cash flow model is the receipt of customer advances at the beginning of each execution year under defence procurement contracts. These advance inflows structurally front-load cash receipts, reducing dependence on external working capital facilities. The sanctioned working capital limit of ₹2,000 crore remained largely unutilised throughout FY 2024-25.

The company has no repayment obligations, as capital expenditure is funded entirely through Government of India equity infusion. GoI infused ₹1,032 crore in equity over the past three years and is budgeted to continue at ₹130–150 crore per annum.

C. Capital Structure and Equity Planning

AVNL's capital structure reflects a deliberate debt-free model. As on 31.03.2025, paid-up share capital stood at ₹13,427.66 crore (up from ₹13,110.29 crore), with authorized capital at ₹14,000 crore. In FY 2024-25, AVNL

issued 31.74 crore new equity shares at ₹10 each to the President of India, raising ₹317.37 crore.

The 100% Government of India ownership ensures that AVNL's financial planning is insulated from market-driven capital costs. Dividend payment was exempted by DIPAM for FY 2024-25, preserving internal accruals. No amounts were transferred to General Reserve during the year, with all post-tax profits retained for future growth and modernisation.

D. Order Book and Revenue Visibility

AVNL's unexecuted order book as of December 2024 stood at ₹32,412.53 crore, growing to approximately ₹35,553 crore by the time of the Annual Report — approximately 7x FY2024 revenues, executable over the next 4–5 years. This provides exceptional revenue visibility for financial planning purposes.

Growth aspirations include achieving \$1 billion USD (approximately ₹8,300 crore) in revenue by FY 2026-27 and attaining Navratna DPSU status by FY 2027-28. These are supported by future platform development (FICV, FRCV, Wheeled AFV) under the R&D roadmap.

E. Financial Ratios Analysis

Table III presents key financial ratios for AVNL as computed by ICRA Research from audited financials.

TABLE III. Key Financial Ratios

Ratio	FY2023	FY2024
OPBDIT / OI (%)	14.2%	1.1%
PAT / OI (%)	5.4%	12.9%
Outside Liab / NW (x)	0.6	0.7
Debt / OPBDIT	NIL	NIL

The nil debt / OPBDIT ratio confirms complete absence of leverage risk. The decline in OPBDIT margin reflects manufacturing cycle phase effects rather than fundamental deterioration. The PAT margin improvement from 5.4% (FY2023) to 12.9% (FY2024) demonstrates recovery capability. The outside liabilities to tangible net worth ratio of 0.6–0.7x reflects a conservative financial structure.

F. Credit Rating Assessment

Both ICRA and CARE assigned AVNL the AA+ (Stable) long-term rating in March 2025 for ₹2,000 crore cash credit limits. Key credit strengths cited include: (i) strategic importance as sole supplier of armoured vehicles; (ii) GoI ownership and financial support; (iii) strong order book and advance receipts; and (iv) nil debt with large cash reserves.

Credit concerns include dependence on defence budget allocations, execution delays due to imported component dependencies (Russia-Ukraine conflict impact), fixed-price contract margin exposure, and scope for improvement in internal financial controls as flagged by the statutory auditor.

VI. KEY FINDINGS

Based on the analysis, the following key findings emerge:

1. AVNL's revenue grew consistently from ₹5,057.5 crore (FY2023) to ₹4,984.29 crore operations revenue in FY2025, achieving its highest-ever turnover.

2. The company operates with zero long-term debt, with all capex funded through GoI equity infusion —

a structurally unique financial planning model.

3. Cash and bank reserves of ₹7,000–7,500 crore provide extraordinary liquidity, far exceeding operational requirements.

4. Customer advance receipts at the start of each execution cycle structurally front-load cash inflows, reducing working capital pressure.

5. EBITDA and PAT margins are inherently volatile due to 18–24 month manufacturing cycles and fixed-price contract structures.

6. The order book of ~₹35,553 crore (~7x annual revenue) provides strong medium-term revenue visibility and underpins financial planning confidence.

7. AA+ (Stable) ratings from both ICRA and CARE validate the company's strong financial risk profile and sovereign-backed credit strength.

VII. SUGGESTIONS

Based on the study, the following suggestions are offered:

1. AVNL should accelerate ERP implementation to strengthen internal financial controls and address statutory auditor observations.

2. The company should explore long-term raw material price hedging mechanisms to reduce EBITDA margin volatility under fixed-price contracts.

3. Export market development should be pursued actively to diversify revenue beyond domestic defence budgets, particularly in friendly nations.

4. R&D investments in next-generation platforms (FICV, FRCV) should be structured with clear stage-gate financial milestones to ensure cost discipline.

5. A formal dividend policy framework should be established for the medium term as profitability stabilises, in coordination with DIPAM guidelines.

VIII. CONCLUSION

AVNL represents a distinctive financial planning model in Indian public sector manufacturing — one anchored in sovereign ownership, advance-based cash flows, debt-free capital structure, and a large visible order book. The company's financial health is robust by conventional metrics: nil debt, ₹7,000+ crore cash reserves, AA+ credit ratings, and growing revenues.

The primary financial planning challenge lies in managing margin volatility across long manufacturing cycles under fixed-price contracts. As AVNL executes its modernisation roadmap and develops next-generation platforms, effective cash flow planning, ERP-driven operational visibility, and disciplined capital allocation will be critical to achieving its Navratna ambitions by FY 2027-28 and emerging as a global armoured vehicle manufacturer by 2047.

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Declaration of Conflicting Interests

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