



LCMB7002: Financial Management

Assessment component: Financial performance and management

CFO Briefing Report: Financial Performance, Restructuring Strategy and Investment Appraisal of BYD (FY2020–FY2024)

Student Name: Joy Deb

Student ID: 2505865

Lecturer: Patrick Yeboah

Module code: LCMB7002

Submission date: 23/03/26

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Executive summary

In this report, the financial trajectory of BYD is assessed and recommendations at the CFO level are formulated based on five-year financial statements and ratio analysis. The company revenue grew quickly, particularly because BYD increased production and expanded internationally, whereas profitability increased significantly in FY2022-FY2024, which is a sign of better operating leverage and better earnings quality. Liquidity was however constrained with current liabilities increasing at a faster rate than current assets such that most of the period the current and quick ratios were below 1.0. The performance of working capital increased a positive cash conversion cycle during the FY2020 to strongly negative conversion cycle during the FY2022-FY2024. This means that the supplier credit is well utilized and that the conversion of customer cash is quicker yet it makes it more sensitive to supplier terms, inventory shocks and export settlements. This financial analysis suggests a CFO agenda which assumes to (i) have resilient liquidity buffers (ii) have tighter working capital controls including supplier health protection and (iii) have disciplined capital deployment consistent to hurdle rates and cash generation. The second section of the report will develop a reorganising and financing package and compare the investment appraisal under capital rationing, relating suggestions to the financial limitation that have been identified in this section (Deloof, 2003).

1. Introduction and context

This report aims at evaluating the financial performance of BYD as an electric vehicle manufacturer in the past five financial years (FY2020-FY2024) and encapsulating the results in actions relevant to the CFO. The scope is based on the assessment requirements: a five-year financial analysis based on the income statement, balance sheet and cash flow statement, the complete ratio analysis based on profitability, liquidity, efficiency, gearing, investment and cash flow, and a cash operating cycle evaluation to find the working capital reforms. In the second section of the report, the restructuring options and the capital budgeting options will be discussed based on the appraisal methods that were identified in the brief (Deloof, 2003).

3.4 Short-term versus long-term financing options for working capital

The working-capital strategy should be combined with a financing structure that idles against liquidity by turn of cycle. Short term instruments are often cheaper and adaptable yet have the

advantage of increasing refinancing risk in a stressful market environment. Lasting tools enhance resilience and headroom to covenants at the expense of being additional costly and altering returns when directed towards temporary swings in working-capital. One method of financing a CFO is to finance the structural component of working capital of longer tenor capital and the seasonal component of working capital of short-term facilities without maintaining any committed liquidity buffers (Graham and Harvey, 2001) (Deloof, 2003).

Source: Author synthesis from corporate finance practice and working-capital literature (Brealey, Myers and Allen, 2020).

Financing option	Typical tenor	Best use-case for BYD	Key benefits	Key risks / CFO controls
Overdraft / revolving WC facility	3–12 months (renewable)	Seasonal swings; export settlement delays	Flexible drawdown; matches short-term needs	Rollover risk; margin step-ups. Control: committed lines and liquidity buffer.
Trade finance (LCs, SCF)	30–180 days	Cross-border procurement and exports	Improves supplier certainty; can shorten cash cycle	Counterparty and reputational risk. Control: supplier health KPIs and transparent terms.
Receivables financing / factoring	30–120 days	Receivable build-ups in low-visibility periods	Accelerates cash; can transfer credit risk	Costly in stress; relationship risk. Control: trigger-based use; customer protection.
Term loan /	2–7 years	Structural WC	Stability;	Higher fixed

medium-term notes		baseline and liquidity support	reduces refinancing risk	cost; covenants. Control: maturity ladder and covenant dashboard.
Convertible / hybrid financing	3–7 years	Strategic liquidity buffer and growth support	Preserves cash; lower cash interest	Dilution timing risk. Control: issue in strong windows; dilution caps.

EV markets have the attribute of high scale-up speed, high price competition, tech Churn (battery chemistry, software and power electronics), and policy and trade regime exposure of material. These characteristics shorten the decision periods and enhance the worth of high frequency liquidity management. In this connexion, the current report analysis considers liquidity, cash conversion, and capital discipline as the main determinants of resilience, rather than secondary indicators (Shin and Soenen, 1998).

Data source and comparability: BYD Annual Reports on FY2020-FY2024 (consolidated statements) on financial data are audited. All the monetary amounts in the tables are RMB'000 as reported. In the attached Excel model, ratios and cash conversion indicators are computed. Where there are differences in the annual report labels per year, the nearest comparable line item has been used and the methodology maintained constant between years (Shin and Soenen, 1998).

2. Five-year financial performance and ratio analysis

In this section, the five-year financial statements are synthesised into the performance drivers and risks. Ratios are not shown as separate measures in a CFO setting, but indicators of the decisions of operating policies, financing, and working capital mechanics. Section 2 results directly into working capital reforms in Section 3 and restructuring and capital budgeting decisions (Deloof, 2003).

2.0 Key financial figures (FY2020–FY2024)

Table 1. Five-year key financial figures for BYD (RMB'000).

Metric (RMB'000 unless stated)	2020	2021	2022	2023	2024
Revenue	153,469,184	216,142,395	424,060,635	602,315,354	777,102,455
Gross profit	27,243,591	28,144,706	72,244,955	121,757,004	151,055,839
Operating profit (EBIT proxy)	10,006,388	4,631,992	21,541,819	38,103,095	50,486,047
Net profit attributable to parent	4,234,267	3,045,188	16,622,448	30,040,811	40,254,346
Total assets (year-end)	201,017,321	295,780,147	493,860,646	679,547,670	783,355,855
Total liabilities (year-end)	136,563,409	191,535,938	372,470,809	529,085,557	584,667,646
Equity attributable to parent (year-end)	56,874,274	95,069,671	111,029,299	138,810,065	185,251,104
Net cash from operating activities (CFO)	45,392,668	65,466,682	140,837,657	169,725,025	133,453,873

Source: BYD annual reports FY2020–FY2024 (BYD, 2021; BYD, 2022; BYD, 2023; BYD, 2024; BYD, 2025).

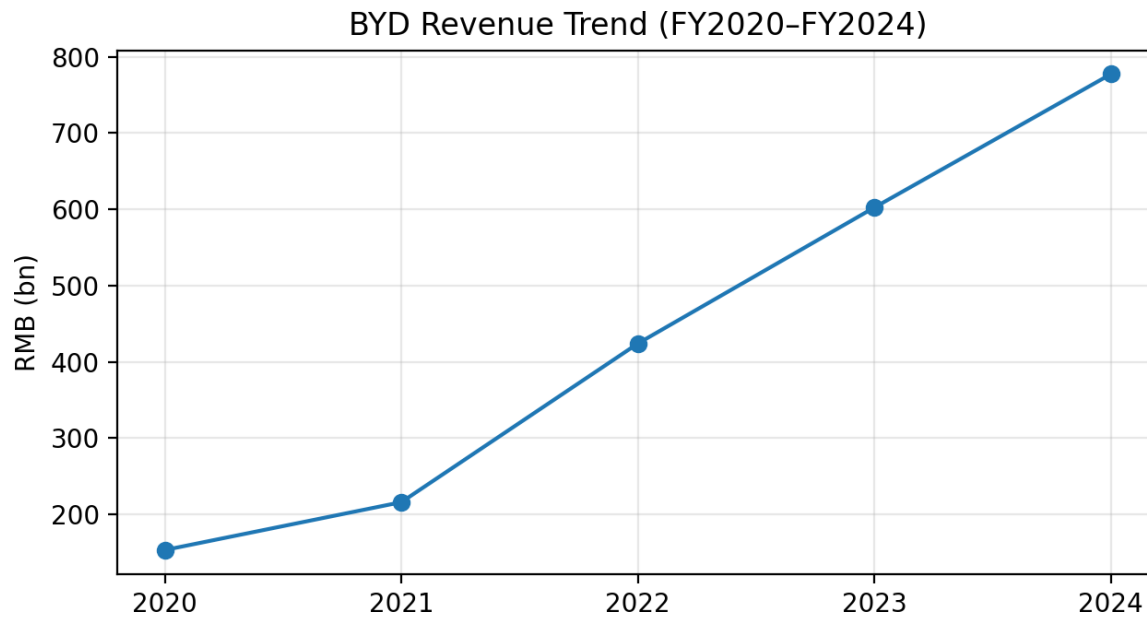


Figure 1. Revenue trend (FY2020–FY2024).

2.1 Profitability and operating performance

The growth in revenue of BYD during FY2020-FY2024 can be attributed to the fast-paced scale growth and penetration, accompanied by the corresponding growth in profitability in FY2022. The gross margin has bounced back on a low base in FY2021 and stabilised within the range of 19-20 percent in FY2023-FY2024. The operating margin was better since the business recovered fixed cost in a higher volume base which showed greater operating leverage. Net margin that can be attributed to parent also steadily increased, to over 5 percent in FY2024. As a CFO standpoint, this trend in profitability enhances internal financing ability but ought to be assessed in conjunction with liquidity and working capital strain in order to convert earnings into cash (Deloof, 2003).

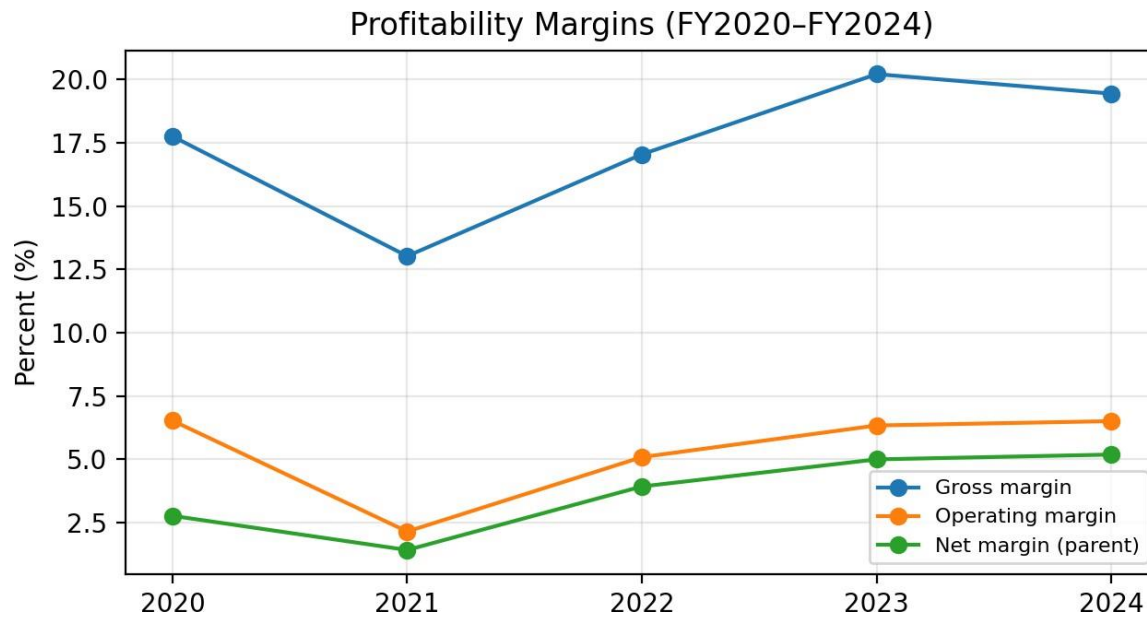


Figure 2. Profitability margins (FY2020–FY2024).

Table 2. Core profitability ratios.

Ratio	2020	2021	2022	2023	2024
Gross margin	17.8%	13.0%	17.0%	20.2%	19.4%
Operating margin	6.5%	2.1%	5.1%	6.3%	6.5%
Net margin (parent)	2.8%	1.4%	3.9%	5.0%	5.2%

Source: calculated from consolidated statements in BYD annual reports (BYD, 2021; BYD, 2022; BYD, 2023; BYD, 2024; BYD, 2025).

Interpretation: stable gross margin of approximately 19-20 percent in FY2023-FY2024 indicates that BYD was able to preserve unit economics despite the growth of the competitive environment. The improvement of operating margins means better scale effects and control of costs. The main question to CFO decision-making would be whether the margin can be maintained in case of additional price pressure and input volatility. Maintaining margin resilience is usually performed by having strict management of product mix, strict warranty provisioning and procurement strategies that lessen the cost exposure of inputs.

2.2 Liquidity and short-term solvency

The liquidity ratios deteriorated significantly following FY2021. The current ratio was less than 1.0 and was less than 1.0, but the quick ratio was less consistently below 1.0, which indicates dependence on inventory as a current asset. The cash ratio rose randomly and continued to be comparatively low which elevates it to be sensitive to short-term financing conditions and supplier term shocks. Low liquidity ratios can be tolerable with a high-growth manufacturer when the operating cash conversion is good and access to financing is good, but because the growth is rapid and the quick ratios are low, refinancing and operational disruption risks are high (Shin and Soenen, 1998).

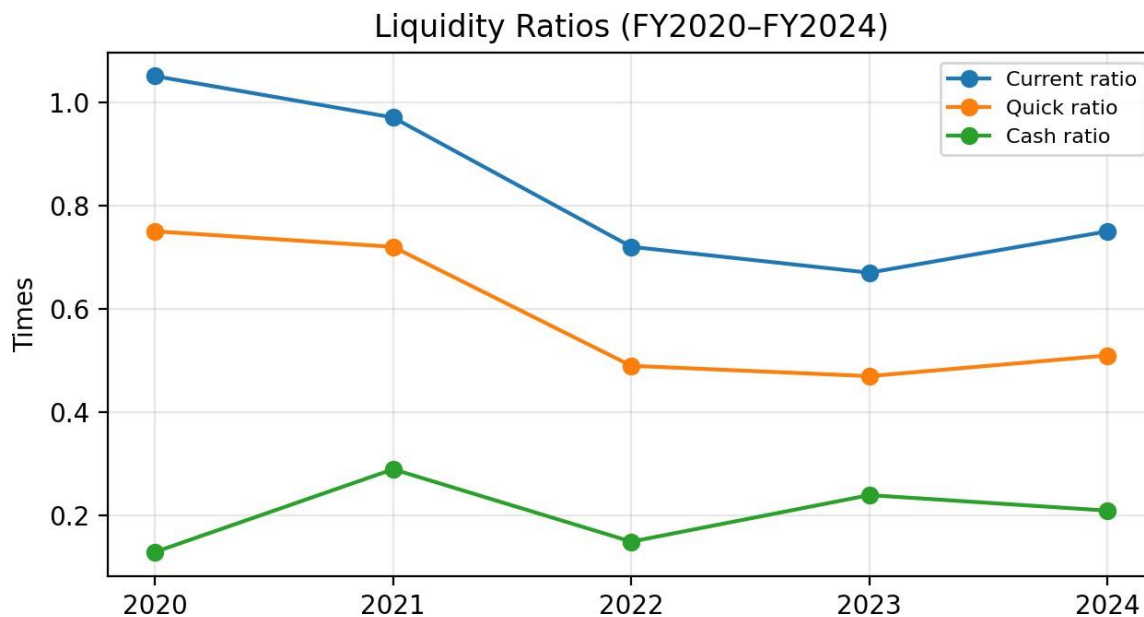


Figure 3. Liquidity ratios (FY2020–FY2024).

CFO implication: liquidity management should be addressed as a dynamic risk-controlling procedure and not a position at the end of the year. This involves rolling cash forecasting, committed lines of credit and stressing against events like late settlement of exports, tightening of supplier's terms or sudden stock build up. Section 3 of the working capital analysis shows that BYD has experienced negative cash conversion cycle over the past few years, which partially can offset poor liquidity ratios, but the advantage requires the company to retain supplier trust and consistent procurement activities (Deloof, 2003).

2.3 Efficiency and asset utilisation

The utilisation of assets should be interpreted as that of a growing manufacturer. With increased capacity and distribution of BYD, total assets grew significantly. CFO indicators like asset turnover help in showing whether the growth of the assets is being converted into revenue at an acceptable rate. An increasing or constant turnover ratio in the case of expansion is in favour of the argument that capital is being utilised productively, a decreasing turnover may be associated with over-investment, stocking, or under-utilised capacity.

The case of BYD indicates that the growth of its revenues has been very fast implying that asset growth has been quite productive, however, the balance sheet also shows an increase in inventories. This establishes a connexion with the cash conversion and operational planning. The CFO emphasis should be on capacity investment, procurement commitments and production planning to demand signal so as to avoid value leakage through the excess stock, discounting, or obsolescence (Shin and Soenen, 1998).

2.4 Gearing and capital structure

The leverage indicators have been on the rise during the period since growth in liabilities has been at a higher rate than the growth in equity. The debt ratio (total liabilities/ total assets) was transferred to approximately three-quarters by FY2022-FY2024. Debt-to-equity also rose as compared to FY2020-FY2021. This is not necessarily a disadvantage to a fast growing company but makes the company less flexible in unfavourable circumstances and that more value of stable cash conversion. The capital structure should be compared with capex intensity and current capital requirement, market access and refinancing ability (Deloof, 2003).

CFO implication: the liquidity ratios are lower than 1.0 and with a balance sheet that is heavy on liabilities, the focus of the financing strategy should be on resiliency. This comprises a clear structure in (i) minimum cash and liquidity buffer, (ii) maturity management and (iii) funding instruments which mitigate refinancing risk without compromising shareholder value (Brealey, Myers and Allen, 2020).

2.5 Investment returns and value creation

The Return measurements had ameliorated in FY2022-FY 2024. ROA indicates profitability as compared to the asset base whereas ROE indicates returns to the equity holders. The rising

ROA in a growing manufacturer is a sign that scale is bringing about economic returns as opposed to merely raising invested capital. ROE is to be read in combination with leverage: an increase in ROE may either indicate an improvement in operating performance or increased leverage or both.

In the case of CFO decision-making, it is the primary test that the incremental investments will be more than the cost of capital of the firm. This is directly associated with the decisions of the investment appraisals and supports the idea of disciplined capital allocation.

2.6 Cash flow and cash quality of earnings

Cash flow (CFO) operating grew significantly by FY2023, which shows that the business generated a lot of cash as it grew. FY2024 CFO decreased compared to FY2023, which should be thoroughly explained in the end report narrative with annual report disclosures and notes thereof. The connexion between accounting profit and CFO is vital in a CFO lens: in a scenario where CFO is following profit across time, the quality of earnings is higher; in a scenario where CFO is moving in different directions, working capital flows or non-cashes could be concealing pressure (Deloof, 2003).

The cash flows of investments always were negative, which is in line with capex and expansion. An easy free cash flow proxy (CFO and CFI) is up in every year, although the difference using this metric becomes very low in FY2024, indicating that growth is likely consuming a more significant portion of operating cash. This enhances the argument of the working capital changes in Section 3, and, in the case of a financing and restructuring package that hedges against liquidity and funds strategic growth (Deloof, 2003).

Interim conclusion: BYD has a strong financial performance in FY2020-FY2024, as it is evidenced by growth and increasing profitability, though with narrowing liquidity ratios and a balance sheet that is progressively burdened by liabilities. This risk is partially mitigated by the better cash conversion cycle of the company though it results in a dependency on supplier credit and stable operations. The following section codes these findings into an agenda of a working capital reform (Deloof, 2003).

2.7 Peer and market-context lens: why the ratios moved in FY2022–FY2024

The interpretation of CFO is better as the internal ratios are interpreted within the operating environment of the global EV industry. Since FY2022, the scale growth of BYD was accompanied by a faster increase in the penetration of EVs, the rise in competition, and sporadic changes in prices in key markets. The phenomena of gross margin stability in that environment does not merely entail some accounting result; rather, the concept expresses the facet that the firm can support unit economics when it is boosting its volumes, regard price volatility on battery inputs, and implement product mix changes. One beneficial method to position the FY2022-FY2024 enhancement is that BYD seems to have turned scale and vertical integration into operating leverage, and also internalized the operating-capital effect of quicker deliveries and a wider worldwide presence (International Energy Agency, 2024).

This peer lens is also used to explain the liquidity profile. High working-capital intensity that may exist during ramp periods is common on the side of EV manufacturers because of inventory canners, tooling changes, and supporting service levels, which are necessary when new models are introduced. The declining quick ratio of BYD can thus not be interpreted alone. The question that the relevant CFO should answer is whether the liquidity position is a managed by-product of growth or a precursor of funding pressure. During the FY2022- FY2024 period, the high operating cash flow indicates that BYD is also partially relieved of liquidity pressure by cash generation, although the company depends on current liabilities, and any tightening of trade credit will impact the company. The trade credit theory shows that supplier financing can promote growth and is weak when counterparties re-evaluate a credit risk, or there is a change in bargaining power (Petersen and Rajan, 1997).

2.8 Return drivers and CFO value levers: a simplified DuPont-style view

In order to connect performance with shareholder value, returns may be broken into three CFO controllable levers, which are margin, asset intensity and leverage. The increase in ROE at BYD between FY2022-FY2024 is aligned with an increase in both the net margin and more effective asset utilisation as the revenues increased at a greater rate than the assets. But leverage is also significant since greater liabilities as compared to equity may mechanically raise ROE and raise downside risk. That is why the leverage measures of Section 2.4 are to be interpreted as a

trade-off: capital structure facilitates growth, but decreases resilience, in case of cash conversion weakening or increasing refinancing costs (Brealey, Myers and Allen, 2020).

The value sources of CFOs that cannot be decomposed in this manner are tangible and quantifiable. Protect contribution margin First, the control of pricing with discipline and through cost-down programmes in batteries and manufacturing. Second, enhance asset intensity by minimising inventory ageing and increasing receivables discipline in export markets, which increases asset turnover without increasing growth. Third, maintain financial flexibility, including through a policy of liquidity buffer and maturity ladder, which does not allow excessive concentration of refinancing in a particular year. There is evidence that flexibility is an important attribute to managers since it mitigates the risk of underinvestment when external finance is costly (Graham and Harvey, 2001; Myers, 1977).

2.9 CFO dashboard: metrics, targets and triggers

To be able to transition the analysis to the control, the following dashboard transforms the five-year trends into operating targets and trigger points. Bands are established as targets which are not to be crossed over to perverse incentives, and triggers bring a specified response like tightening of credit, slackness of inventory build, and drawing committed liquidity.

Area	Metric	Target band (12 months)	Trigger / action
Liquidity	Cash ratio	≥ 0.20	< 0.15 : freeze discretionary spend; draw committed lines
Liquidity	Quick ratio	≥ 0.55	< 0.45 : tighten receivable terms; reduce slow-moving inventory
Working capital	DSO (days)	≤ 35	> 45 : credit review; strengthen collections; selective factoring
Working capital	DIO (days)	≤ 65	> 75 : inventory ageing review; S&OP reset; supplier scheduling
Working capital	DPO (days)	Maintain supplier-health band	Sharp decline: negotiate term protection; diversify supply
Cash quality	CFO margin	$\geq 20\%$	$< 15\%$: investigate absorption;

			pause expansion spend
Resilience	Debt-to-equity	Stabilise or reduce	Uptrend + weak cash: evaluate hybrid financing / asset monetisation

Source: Derived from the FY2020–FY2024 dataset and working-capital literature (Deloof, 2003).

3. Cash operating cycle analysis and working capital reform plan

A major CFO lever used in fast-growing manufacturing is working capital since it can be used to release cash without compromising strategic investment. This part analyses the cash conversion cycle (CCC) of BYD based on receivables days (DSO), inventory days (DIO) and payables days (DPO) and suggests the changes that would enhance the cash resilience and preserve the operational continuity (Deloof, 2003).

3.1 Cash conversion cycle results (FY2020–FY2024)

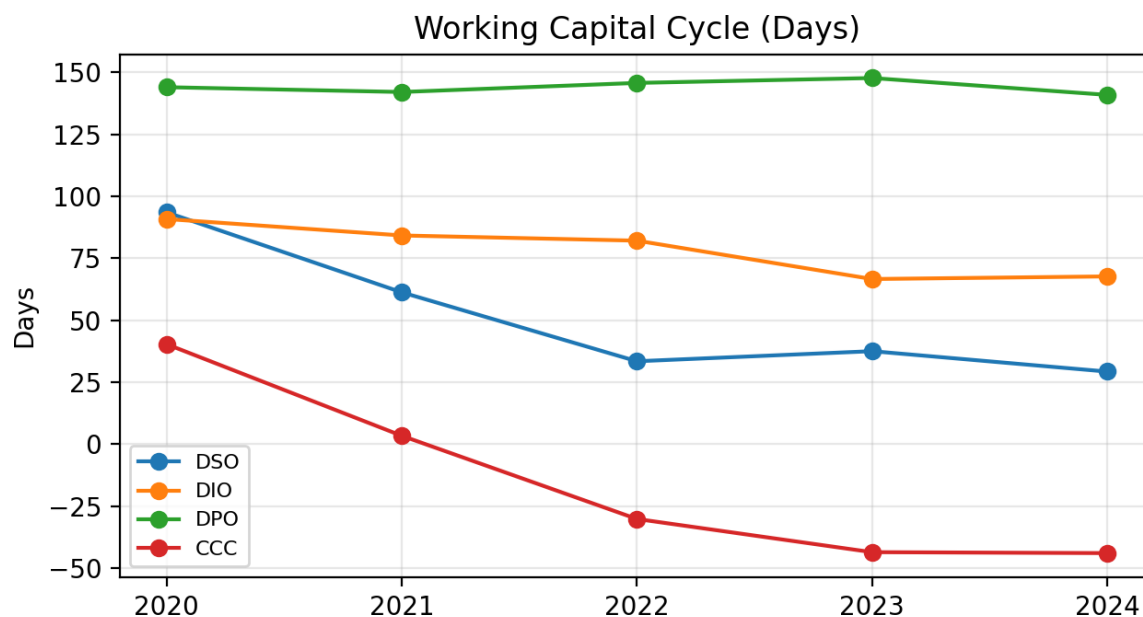


Figure 4. Working capital cycle metrics (days).

Table 3. Working capital cycle (days).

Metric (days)	2020	2021	2022	2023	2024
DSO	93.5	61.2	33.4	37.5	29.3
DIO	90.8	84.2	82.1	66.6	67.7
DPO	144.0	142.0	145.7	147.7	140.9
CCC	40.3	3.4	-30.2	-43.6	-44.0

Source: calculated from consolidated statements in BYD annual reports (BYD, 2021; BYD, 2022; BYD, 2023; BYD, 2024; BYD, 2025).

The CCC of BYD has shifted to the negative cycle in FY2022-FY2024 compared to a positive cycle in FY2020. When the CCC is negative, then it usually means that the company collects cash at a higher rate than it pays out to their suppliers, which facilitates self-financed expansion. The CFO however has to adopt a negative CCC as a two-sided stance: they have to uphold the trust of suppliers, consistent procurement, and controlled inventory. Cash pressure may increase rapidly in case of tightening of supplier terms or unexpected increase in inventory.

3.2 Likely drivers and risks

Receivables: DSO decreased significantly during the period, which means that there is an increase in collection speed or a transition to the payment arrangements in which the cash is collected at a faster rate. This can be indicative of the increase in channel discipline, customer mix alterations, and possibly the utilisation of financing arrangements. The CFO risk is the concentration of receivables in some markets or counterparties and cross-border trade delays in settlements.

Inventory: DIO was large, typical in automotive manufacturing because of the complexity of the supply chain, and because buffer stock is required with a scale-up. The FY2023-FY2024 levels of DIO indicate that inventory management is one of the cash levers. The risk of obsolescence and discounting increases with a high rate of models and price war.

Payables: DPO was also high and stable, the first cause of the negative CCC. It means that it has good supplier credit and may have favourable procurement conditions. The CFO needs to make sure that payable extensions would not harm supplier relationships, introduce concealed expenditures, or cast ethical questions on the supply chain. Supplier financial health monitoring is thus a control that is needed.

3.3 Working capital reform package (CFO actions)

The reforms below will aim at making the liquidity more resilient and safeguard the continuity of suppliers and operational throughput.

Receivables management and credit policy: Introduce customer type and geographic segmented credit limits, introduce ageing requirements, and introduce escalation

requirements. Establish a target DSO channel and base sales incentives on the quality of cash collected rather than the revenue collected only.

Export settlement risk controls: Introduce FX and settlement monitoring of the cross-border receivables, such as strict documentation control and backup contingency plan to hold-up payment failures. Apply letters of credit or credit insurance to the risky markets.

S&OP discipline Inventory optimisation: reinforce sales and operations planning by use of monthly demand refresh cycles, SKU rationalisation and safety stock optimisation. Establish KPIs of inventory that differentiate strategic buffer inventory to slow-moving inventory and trigger disposal.

Supplier term strategy plus supplier health protection: Rebate terms with a balanced scorecard that incorporates supplier financial capability and continuity risk. Extend the term overly and place additional pressure on the smaller suppliers, as well as exposing downstream risks.

Cash forecasting and liquidity buffers: Use a 13-week rolling cash forecast topped off by a scenario stress test (price reductions, inventory slaughters, export delays). Establish minimum liquidity reserves and make sure that dedicated credit facilities address the downside (Brealey, Myers and Allen, 2020).

Working capital dashboard and accountability: Design a CFO dashboard which incorporates DSO, DIO, DPO, CCC, ageing receivables, ageing inventory and supplier concentration. Give the finance, procurement and operations leaders a definite ownership with monthly governance reviews (Deloof, 2003).

Anticipated effect: The proposed reforms will safeguard the advantages of the negative CCC at BYD and minimise vulnerability. In particular, the tighter control of the receivables and inventory optimization enhance the predictability of the cash, and the supplier health protection minimises the risk of creating operational issues by the payables management. This working capital package also facilitates the restructuring and financing recommendations that are made in the stabilisation of internal cash generation (Deloof, 2003).

4. Restructuring strategy and financing options

4.1 Taxation, inflation and real-cash preservation controls

International scaling necessitates a design of finance, which is effective in managing real cash flows in inflation and effective tax rate volatility. Its goal should be predictability: documentation during transfer pricing, alignment of internal rules of conduct in operating countries, as well as Treasury selectivity, which minimizes conflicts and cash constraints. The reason why inflation and input-cost volatility are important is that the growth of the nominal revenues can conceal the compressions of the margins and working-capital consumption. Some of the practical controls are to stress-test restructuring economics in real life, assume inflation-linked key cost drivers, and insure liquidity where possible through pricing pass-through mechanisms and hedging policies (Brealey, Myers and Allen, 2020).

The 2nd and 3rd sections point to a growth trend with rising profitability and cash conversion, poor liquidity ratios and a liability-weighted balance sheet. It is a restructuring goal thus is not a turnaround in the limited use of the term, but an upgrade to its resilience, safeguarding its liquidity but maintaining strategic growth, minimizing refinancing exposure, and enhancing shareholder value performance in downside scenarios. The financial analyst test is in CFO terms, the financing mix, asset structure and operating cash conversion is strong enough to absorb price competition, policy shocks and foreign trade friction without compelling the value-destructive actions (Jensen, 1986).

4.2 CFO objectives and constraints

According to the 5 year financial analysis, the CFO goals of BYD can be listed as follows: (i) keep the liquidity buffers at a good level without compromising on investment capacity; (ii) stabilise the cash generation by minimising the volatility in the working capital and capital equipment timing; (iii) control leverage and maturity profile to minimise refinancing risk; and (iv) secure shareholder value by choosing the funding instruments and portfolio decisions that balance dilution, control and cost of capital (Jensen, 1986).

The main limitations are the apparent sub-1.0 current and quick ratios in the majority of years, the high reliance of the recent cash conversion on the payables discipline and the structural capex requirements that come with manufacturing scale, technology change and international

expansion. These limitations mean that the restructuring package should be plausible when there is stress, not just when the growth is on base case assumptions.

4.3 Option set and evaluation

Three CFO-relevant options are evaluated and then combined into an integrated package.

Option 1: Hybrid financing to strengthen liquidity without excessive refinancing risk

Mechanism: issue hybrid instruments as appropriate e.g. convertible bonds or perpetual-style notes where applicable and accompanied by committed credit facilities. Hybrids have the capacity to lower the cash interest burden in the short run compared to a straight debt, and to increase the resistance of the balance sheet by providing equity-like loss-absorbing capacity and to reduce the immediate dilution as a straight debt issue (Myers and Majluf, 1984; Brealey, Myers and Allen, 2020).

Value logic: this alternative enhances both liquidity runway and chances of avoiding distress which safeguards the shareholder value since the costs of distress are normally convex and value destructive (Altman, 1968). It also helps to maintain continuity in capex which is essential in an EV competitive technology environment (Jensen, 1986).

Key risks: timing and pricing risk in the market, possible dilution in case of conversion is triggered and complexity of covenants. It should have governance controls such as use-of-proceeds disclosure, leverage guardrails and maturity ladder policy.

Option 2: Portfolio focus and selective monetisation of non-core assets

Mechanism: sell off non-core assets, capital tied up in any activity that yields low returns and think about minority stake sell off in any mature business where strategic control will be held. Asset rationalisation is able to release cash and enhance the turn on capital by redistributing the resources to the most valued segments (Penman, 2013).

Value logic: BYD can increase asset turnover and decrease the complexity of working capital by decreasing the capital intensity and making the portfolio simpler. This aids in a better quality of earnings profile and increases investor confidence which may reduce the cost of capital of the firm (Fama and French, 1993).

Risks: execution risk, risk of loss of strategic optionality and risk of valuation in case the assets are sold under pressure. The monetisation actions should be ordered by the CFO in order to prevent distress pricing as well as to ensure continuity in operations.

Option 3: International expansion through risk-sharing structures (JVs, localisation partnerships)

Mechanism: deploy joint venture, contract manufacturing, or localisation alliances in target market to off load the main capex outlay, tariff and trade policy risk. The risk-sharing structures may enhance capital efficiency and minimise the chances of international expansion being a liquidity sink in unfavourable circumstances.

Value logic: this alternative is consistent with a real-options conception of international expansion, in which the company retains upside but minimises downside by making gradual commitments (Myers, 1977). It also eliminates the risk of concentration in any given regulatory regime.

The most critical risks include the complexity of governance, risk of partners and risk of intellectual property. Some of the controls are strong partner selection, well defined IP protection and performance-based staging of investment.

4.4 International and ethical considerations

Foreign factors: EV production and exports face tariffs, domesticisation, and the foreign exchange risk. The CFO-based strategy must incorporate country risk measurement in the capital allocation, uplift hurdle rates in higher risk jurisdictions, and have policies on hedging which incorporate timing of cash flows. The risks of settlement and repatriation must also be taken into account in the receivables and treasury planning.

Ethical implications: Aggressive working capital policies that drive payables hard may put financial strains on the suppliers, particularly smaller businesses. Positive cash conversion cycle can also improve value, but they need to be handled with due responsibility by monitoring suppliers' health, reasonable payment procedures, and open procurement management (Freeman, 1984). Besides this, the supply chain requirements of the EV industry demand plausible environmental and labour criteria to safeguard the markets and reputations.

4.5 Recommended restructuring package and roadmap

Recommended package: Consider a hybrid approach with Option 1 -hybrid Financing plus committed liquidity and Option 3 -risk sharing international expansion and a directed variant of Option 2 -selective monetisation non-core assets. This package aligns with the financial constraints identified: it enhances the liquidity buffers, minimises the refinancing risk, and enhances the capital efficiency but does not fund strategic growth.

Implementation roadmap:

- **0-6 months:** set up liquidity policy, validate committed facilities, deploy working capital dashboards and supplier health, design funding plan and prepare market documentation.
- **6-18 months:** implement hybrid issues under market conditions; create priority international partnerships through staged capital commitments; implement portfolio review and find out monetisation candidates.
- **18+ months:** embed capital allocation governance using hurdle-rate discipline and post-investment reviews; rebalance maturity ladder and optimise funding mix.

4.6 Taxation, inflation and real-cash preservation controls

An international scaling needs a design of finance that deals with the effective rate of volatility of taxes and maintains real cash flows through inflation. The aim is predictability: transfer pricing records, location consistency in a place of operation and treasury policies that cut conflict and cash traps. The inflation and input-cost volatility is important since the increase in nominal revenues can cover up margin compression and working-capital consumption. One control that can be put into practise is to stress-test real-world restructuring economics, assume key cost drivers using inflation-linked assumptions and insure liquidity where possible through pricing pass-through and hedging policy (Brealey, Myers and Allen, 2020).

4.7 Scenario-based financing capacity and covenant headroom

A restructuring plan is only believable when it can be maintained under the downside circumstances. In the case of BYD, five year profile has a rapid growth rate and increase in margins, yet liquidity ratios are poor and cash flow is vulnerable to working-capital fluctuations. A CFO solution is to use this into a financing-capacity framework: establish some

minimum liquidity buffer (cash plus committed undrawn facilities), and determine whether the business can maintain this buffer in the event that (i) competition to raise EV prices becomes more intense, (ii) export terms lengthen, and (iii) supplier terms tighten. This is not to predict one thing or the other, but to make sure that it is covenanted and refinanced in a way that BYD does not need to raise capital when it is not favourable to do so (Graham and Harvey, 2001).

This would operationally require combining treasury and operations into a single rolling 13-week cash forecast and a quarterly stress cash bridge which breaks the movements into profitability, working capital, capex and financing. When the stress scenario in question demonstrates that liquidity is going to be lower than the buffer, the reaction must be specified: suspend discretionary capex, tighten receivables management, slack inventory building, and invoke contingent financing like committed revolvers or pre-established hybrid issuance. This is consistent with evidence that companies appreciate financial flexibility and handle leverage targets to prevent underinvestment in the event that external finance is costly (Myers, 1977; Kaplan and Zingales, 1997).

4.8 CFO risk register and control plan for international scaling

In order to make the restructuring package operationally based, Table 4 presents the major risks that tie the financial analysis and the execution controls. This risk-register format endorses a CFO-type narrative since every suggestion is combined with a quantifiable control and a decision trigger (International Energy Agency, 2024).

Risk	Financial transmission	Control / KPI	Trigger / CFO action
Price competition and demand volatility	Margin compression; slower cash generation	Contribution margin floor; weekly pricing governance	If margin below floor for 2 months: revise volume targets; pause discretionary capex
Export settlement and FX risk	Longer DSO; cash trapped; FX losses	DSO by region; FX policy and limits	If DSO +10 days: tighten terms; increase trade

			finance; hedge exposures
Supplier-term tightening	DPO falls; liquidity squeeze	Supplier health KPI; overdue payables ratio	If DPO drops 10%: renegotiate; diversify; activate liquidity buffer
Regulatory/tariff changes	Capex rework; inventory write-down risk	Localisation readiness index; compliance monitoring	If policy shifts: switch to JV/local assembly; stop-at-risk shipments
CSR and supply chain due diligence	Disruption, legal and reputational cost	Audit coverage; traceability for key inputs	If audit gap: suspend high-risk sourcing; implement remediation plan

Table 4 source: Author synthesis.

5. Investment appraisal and capital rationing

5.1 Non-financial risk overlay and decision gates

In addition to the spreadsheet results, the CFO decision must consider political and market risks which are capable of reforming cash flows. In the case of BYD, the material external risks are trade policy changes (tariffs, local-content requirements, import licencing), currency convertibility and settlement risk in new markets, and the increase of price competition that may undermine the customer loyalty and residual values. Such risks are the reasons to invest gradually in tranches: invest capital, need to have evidence of demand and regulatory stability at each gate, and do not invest in projects that may establish irreversible capacity and do not have a credible offtake. Project KPIs are hence to integrate financial targets with non-financial triggers like regulatory approvals, localisation preparedness, supply security and quality measures (International Energy Agency, 2024).

This section compares Projects A, B and C based on NPV, IRR, profitability index (PI), payback and ARR based on the assumptions outlined in the assessment. The analysis is subsequently connected with the financial limitations of BYD that were previously identified, namely liquidity management and the necessity to have a disciplined allocation of capital (Brealey, Myers and Allen, 2020).

5.2 Methods and assumptions

Discount rate is charged at 10 percent. The projects have an initial investment of PS50m in Year 0 and last five years. The brief contains annual cash flows. Depreciation will be taken as straight-line to zero in five years. The NPV is calculated by taking the present value of cash inflows less the initial investment. IRR is the rate at which NPV is equal to zero. PI is the present value of inflows/ absolute initial investment. Payback will be done on undiscounted basis. ARR is measured on the basis of average accounting profit compared to average investment (Ross, Westerfield and Jordan, 2022) (Brealey, Myers and Allen, 2020).

5.3 Results

Table 4. Investment appraisal results at 10 percent discount rate

Project	NPV (£m)	PI	Payback	ARR	IRR
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			(years)		
A	-8.68	0.826	4.50	3.2%	2.72%
B	-8.30	0.834	4.55	4.0%	3.26%
C	-1.98	0.960	3.60	12.0%	8.59%

Source: calculated from project cash flows provided in the assessment brief.

Interpretation: The NPVs of the three projects are negative at the discount rate of 10 percent required. It implies that each project will destroy value against the hurdle rate and must be eliminated based on pure financial grounds (Brealey, Myers and Allen, 2020). Project C is, however, the least value-destructive project, which has the highest NPV (the nearest to zero), the highest PI, the shortest payback, and the highest IRR.

The difference between the payback and NPV is significant to the decisions made by the CFO. Payback does not take the time value of money and post-payback cash flows hence it may favour a project that yields cash early yet fails to cover the cost of capital. NPV is the main value measurement tool of maximising shareholder wealth as it directly measures value generated at present (Damodaran, 2015) (Brealey, Myers and Allen, 2020).

5.4 Capital rationing decision (budget £100m)

The combinations that are feasible under the PS100m capital rationing constraint and PS50m per project cost are A+B, A+C and B+C or a project-selection of a single project. Value wise, investment in only Project C would be the best decision as inclusion of either A or B would reduce the total NPV significantly. Assuming that the decision-maker has to use the entire budget no matter how much value it affects, the pair with the minimal negative effect is B+C (Brealey, Myers and Allen, 2020).

CFO connexion to BYD: The adverse NPV results support the necessity of extreme discipline in hurdle rates in the cases of poor liquidity ratios and cash-eating expansion. Practically, where the strategic considerations necessitate an undertaking of a project that does not pass the hurdle rate, the CFO must clearly capture the strategic reasons and inject risk management provisions like staged investment, co-investment by partners or flexibility in scope in order to enhance the option value of the project (Myers, 1977; Graham and Harvey, 2001) (Brealey, Myers and Allen, 2020).

5.5 Non-financial risk overlay and decision gates

In addition to spreadsheet outputs, the CFO decision ought to take into consideration political and market risks that have the potential to redefine the cash flows. In the case of BYD, material external risks are trade policy changes (tariffs, local-content requirements, import licencing), currency convertibility and settlement risk in new markets, and price competition that may increase, to the detriment of customer loyalty and residual values. Such risks warrant taking of steps: invest capital in tranches, demand have demonstration of demand and regulatory stability at every gate, and not to undertake projects that entails creation of irreversible capacity, without demonstration of offtake. The project KPIs should thus involve a mix of the financial goals with non-financial triggering like regulatory approvals, localisation preparedness, supply security and quality indicators (International Energy Agency, 2024).

5.6 Sensitivity levers and value-realisation plan

The negative NPVs of the projects at 10 percent discount rate means that the value creation is contingent on the timing of the cash flows, lifting the sustainable annual inflows, or lowering the risk so that the effective cost of capital decreases. CFO sensitivity discussion does not require complex modelling: to be high-impact, it is necessary to consider three levers. First, timing: previous cash inflows disproportionately affect NPV in a positive way, therefore operational plans that increase the pace of ramp-up are value levers. Second, persistence: small increases in annual inflows maintained throughout the entire lifetime can have a significant impact on NPV and hence the business case should include structures to ensure persistence such as contracted offtake, service attach, or cost-down roadmap. Third, working-capital load: projects may have non-observable inventory and receivables commitments, and therefore must be approved with an explicit working-capital schedule and a project cash-conversion KPI (Brealey, Myers and Allen, 2020).

In order to relate appraisal and execution, the CFO ought to introduce a value-realisation plan with stage gates, the Gate 1 (0-6 months) must be a demonstration of demand and operational feasibility the Gate 2 (6-18 months) unit economics and cash conversion operation is stabilised the Gate 3 (18-plus months) must be scale up only with the NPV trajectory improving towards breakeven under base-case or mild downside assumptions. This field is consistent with the capital rationing outcome: it is not necessary to use the entire budget because it is available; it

is better to use the one with the most favourable value path and maintain some flexibility to respond to shocks (Graham and Harvey, 2001).

6. Conclusion and CFO priorities

Financial results of BYD indicate a high growth rate and increased profitability in the period of FY2020-FY2024, which is backed by transitioning towards negative cash conversion cycle in FY2022-FY2024. The main risks are tightness in liquidity, dependence on supplier credit, and leverage in the balance sheet that decreases the flexibility in unfavourable situations. Liquidity resilience, disciplined working capital governance, and capital allocation rigour are the CFO agenda priorities it must have as such.

Priority actions: (1) formalise liquidity buffers and a rolling cash forecast with stress testing; (2) protect the negative CCC benefits with supplier health safeguards and inventory discipline; (3) strengthen the funding mix using hybrids and committed facilities to reduce refinancing risk; (4) pursue international growth through risk-sharing structures; and (5) apply NPV-led capital discipline, proceeding only where returns clear hurdle rates or where strategic value is explicitly justified and controlled (Brealey, Myers and Allen, 2020).

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