Criteria for rating automotive and automotive component companies

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Executive summary

The Indian automotive (auto) sector is a large employment driver and a key contributor to the economy. The auto supply chain is vast, complex and highly integrated, comprising original equipment manufacturers (OEMs) and component suppliers. The sector itself is cyclical and influenced by several factors, including retail demand, economic activity and export opportunities.

For rating auto OEMs and component suppliers, CRISIL Ratings evaluates their business, management and financial risk profiles. The key parameters considered for analysing business risk profile are market position and operating efficiency. Market position covers market share, customer profile, product mix, demand pattern and the level of competition in the industry. Analysis of operating efficiency covers cost position, capacity utilisation and working capital management.

For financial risk assessment, CRISIL Ratings follows the standard criteria used for all manufacturing companies, which assesses the sustainability and adequacy of an entity's cash flows with particular emphasis on debt servicing ability. It includes an assessment of how the business strengths of the rated company are translated into its current and future financial performance and its financial flexibility, with particular emphasis on its liquidity.

For management risk assessment, CRISIL Ratings follows the standard criteria used for all manufacturing companies, which includes evaluating an entity's management philosophies, strategies/policies and risk appetite.

These are also covered in detail in the CRISIL Ratings publications, 'Rating criteria for manufacturing and services sector companies' and 'CRISIL's approach to financial ratios'.

Scope

While the broader criteria for manufacturing companies[1] is applicable to the auto sector, this article[2] details the industry-specific factors impacting the business risk profiles of different segments in the auto sector.

It covers the following segments of the auto sector.

- Auto component suppliers
- Two-wheeler OEMs
- Commercial vehicle OEMs
- Tractor manufacturers

The criteria document highlights the parameters that are relevant for assessing the credit profile of issuers within the sector. These parameters serve as illustrative guidelines. The relevance of specific parameters varies based on the issuer's unique circumstances. For instance, if the liquidity of the company is weak, industry risk or other business-related factors may exert minimal influence on the final rating. Likewise, business parameters that hold substantial importance for one issuer may be less pertinent for another, potentially being encompassed within the broader category of industry risk.

[1] The detailed criteria 'Rating criteria for manufacturing and services sector companies' and 'CRISIL's approach to financial ratios'—are available on the CRISIL Ratings' website under the section, 'Criteria and Methodology'.

[2] For accessing the previous published document, kindly follow the link: https://www.crisilratings.com/content/dam/crisil/criteria_methodology/automotive-and-automotive-component-companies/archive/criteria-for-rating-automotive-and-automotive-component-companies-june2023.pdf

CRISIL Ratings criteria for auto component suppliers

Background

India's auto component industry is intensely competitive with a large unorganised sector. By global standards, the domestic industry is small despite steady growth in revenue and increasing production of automotives. Significant improvements in quality have helped meet the requirements of the increasingly quality-conscious Indian consumer. Global demand has also been on the rise.

Growing competition from China and Thailand has prompted domestic component suppliers to streamline cost structures to remain competitive. Pricing pressure and cyclicality in demand from the OEM market continue. While demand from the aftermarket has been steadier than from OEMs, competition from the unorganised sector and from imports persists. Increase in the prices of commodities and rising employee and power costs have also affected operating profitability. Some players have, however, offset cost pressure through growth in volume and passing on increasing input costs.

India's auto component exports have increased over the years and account for 18-20% of the component demand. Given the cost advantage and longstanding relationships with overseas customers, Indian suppliers should continue to benefit from the outsourcing initiatives of global OEMs. New product launches and steady aftermarket and global demand will also drive growth for component suppliers.

Business risk is evaluated using two crucial factors — operating efficiency and market position. The factors evaluated under market position are geographic presence, customer profile and diversity, the aftermarket and export potential, market share, product profile, and importance in the overall value chain. Operating efficiency is largely a function of the ability to manufacture at low cost, technological superiority of products, and efficiency in working capital management.

Business risk

Market position

Diversity in customer base

Diversity in customer base helps mitigate the impact of cyclicality, downturns in the fortunes of OEMs, or moderation in demand from a vehicle segment. It also strengthens bargaining power when negotiating supply contracts. Diversity may, however, be less of an issue for players with an especially strong market position and high share of business with key OEM, particularly if the products address high-growth areas and have better technological intensity.

Component suppliers with a preferred supplier status to several OEMs are viewed favourably as they are important to, and have greater negotiating power with, the principal. Longstanding relationships make it difficult for the principal to switch suppliers, and result in greater inter-dependence.

Location

Major OEMs are located in clusters, prominent being Chennai, the National Capital Region (NCR), Pune and Karnataka. Proximity of the component suppliers to these clusters is viewed favourably as it facilitates early turnaround.

Presence in the aftermarket and export markets

Presence in the aftermarket and export markets adds stability to revenue streams and cash flows. Demand from the aftermarket segment tends to be steady, offsetting occasional decline in domestic OEM offtake. The aftermarket segment is also more profitable as it is less susceptible to pricing pressure compared with supplies to OEMs. Exports enhance diversity and stability in revenue profile because this revenue is not linked with the fortunes of the domestic auto industry. On the flipside, exports expose the component supplier to volatility in foreign exchange (forex) rates and extended receivable cycles.

Market share

Business share in the OEM and aftermarket segments reflects strongly on market position. A healthy market position, in turn, helps withstand pricing pressure from the OEMs and command a premium in the aftermarket segment. It also strengthens relationships with customers and hence, ability to win orders. A strong market share generally translates into larger business volume, thus helping players benefit from economies of scale (through better coverage of overheads) and compete better on prices.

Product complexity

Auto OEMs have significantly pruned the number of component suppliers they source from, in line with the global trends. Tier 1 suppliers, on account of their direct interface with OEMs and larger number of value-added offerings, have better bargaining power and operating margins than other suppliers. Tier 2 and 3 suppliers, on the other hand, typically supply the required components and sub-assemblies to Tier 1 players.

The complexity in manufacturing the component and its criticality determine the importance of the component supplier in the supply chain and, consequently, its credit risk profile. Product complexity is measured by the extent of research and development involved, product validation, precision in shape forming and machining operations, and component assembly. Product complexity also limits the risk of price erosion and discourages new entrants, thus strengthening the supplier’s market position. Diesel fuel injection systems, for instance, have a high degree of design and manufacturing complexity, thus strengthening the market position and pricing power of manufacturers.

Component suppliers concentrating on engine and related parts face higher risk of obsolescence. This may become increasingly important as electric vehicles (EVs) become more prevalent and the auto-component ecosystem changes considerably.

Operating efficiency

Cost structure

The fortunes of auto component suppliers are linked to those of the auto OEM industry. This constrains a supplier’s bargaining and pricing power. The key to improving profitability is, therefore, cost efficiency, which is attained through process control, low defect rate, automation and sourcing efficiency. Operational efficiency helps sustain market position in a competitive environment. It is measured in terms of labour productivity, capacity utilisation and cost structure, which together influence the overall cost of production. Operationally efficient suppliers have cost-effective production practices that help attract cost-focused OEMs, and are better placed to withstand pricing pressure. Operational efficiency is, therefore, a key driver of credit quality.

Technology

The technology gap between Indian and foreign automotives has narrowed in recent years mainly due to strategic tie-ups with technology partners. The fuel consumption, emission and safety norms introduced by the Government of India as part of BS VI norms have compelled domestic component suppliers to adapt to the latest technology, in line with their counterparts elsewhere.

Companies with strong in-house component development teams or quick access to technology from collaborators or technology partners are better placed to procure orders and survive in a competitive market. Technology partners have greatly influenced OEM decisions in finalising auto component vendors, especially when the former are suppliers to the concerned OEMs. Consequently, companies with access to component technology, including from overseas partners, stand to benefit. Moreover, companies focusing on technology-intensive products with indigenous manufacturing, which act as substitutes for imports, may have the added advantage of various fiscal incentives from the government, including the Production Linked Incentive (PLI) Scheme.

Working capital management

Typically, component suppliers predominantly dependent on OEMs for revenue have smaller working capital requirements. This is because the OEMs follow just-in-time practices in procurement, and make prompt payments. Component suppliers selling largely to the aftermarket and export segments, on the other hand, have larger working capital requirements, given the longer payment cycles involved. Efficient working capital management and adequate working capital limits are, therefore, critical for auto component suppliers.

CRISIL Ratings criteria for two-wheeler OEMs

Background

The Indian two-wheeler industry — comprising motorcycles, scooters and mopeds — is fairly developed, with a large network of manufacturers, vendors, ancillaries, dealers, retailers and spare parts dealers. The market for two-wheelers is under-penetrated at 30-40% in India, indicating long-term potential. It is expected to clock steady growth in the coming years.

Business risk

Market position

Product profile and sales break-up

Each product category in the two-wheeler industry (motorcycles, scooters and mopeds) has a different growth rate. Furthermore, the growth rate has varied based on engine type. For instance, electric two-wheeler growth has been far better than that of its internal combustion engine (ICE) counterparts with rising EV penetration. Increasing competition has resulted in proliferation of products with differing features and aesthetic qualities, and forced manufacturers to introduce products at various price points, particularly in the motorcycle market, and to focus on exports. The CRISIL Ratings analysis of the market position of a company in the two-wheeler industry takes into account its presence across product categories and price points, and track record of product launches. Export initiatives and sales trends are studied to understand the extent of risk diversification and potential for revenue growth.

Demand-supply dynamics

The domestic demand-supply dynamics constitute an important part of the CRISIL Ratings analysis. The fortunes of the two-wheeler industry are driven by 'right products' in terms of utility, price (capital), and operating cost to meet the demand from middle-class consumers in urban, semi-urban and rural areas. Steady growth has resulted in many players increasing their capacities. As part of its analysis, CRISIL Ratings arrives at future demand-supply scenarios to better understand the business pressures each company and its competitors will face at various times.

Competition

Competitor analysis and positioning is an important constituent of market analysis. CRISIL Ratings identifies the various market segments the company is present in and its current and future market positions compared with rivals. The ability of the company and its competitors to regularly introduce products/variants is taken into account, given the decreasing life cycles of models and increasing demand for replacement. This helps CRISIL Ratings form a view of the company's present and expected competitive position.

Distribution network

An effective service network is an important requisite for the two-wheeler industry. CRISIL Ratings analyses how effective the network is in terms of reach, availability of spare parts, support extended by the company, exclusivity, service provided and credit period extended. CRISIL Ratings also takes into account the performance of the distribution networks of competitors on each of these parameters.

Price trends

To estimate the extent of a company's pricing flexibility, CRISIL Ratings analyses its pricing strategy. The company's market position assessment also factors in its pricing power.

Operating efficiency

Location

CRISIL Ratings considers locational importance from the standpoint of proximity to major vendors, ancillaries and customer markets. Each of these factors has implications for the financial viability of the business and incidence of freight costs on an ongoing basis.

Level of integration

CRISIL Ratings also assesses the extent of integration in manufacturing operations. This provides a better view of the cost structure and return on investment. It also helps estimate and assess capital expenditure decisions. The fixed cost in operations will also have an important implication for break-even analysis. CRISIL Ratings analyses the company's cost competitiveness by studying profitability margins at the operating level across entities and years.

Capacity utilisation and flexibility in manufacturing

CRISIL Ratings assesses capacity utilisation as a means of evaluating the efficiency of operations. It also assesses the versatility of operations by analysing flexibility to switch between various range of products.

Ancillary and vendor network

In conjunction with the extent of integration, CRISIL Ratings analyses and assesses ancillary and vendor network. These are examined from the point of view of available capacity, and ability to deliver on time, maintain quality and upgrade with changes in the basic models. For small players, CRISIL Ratings also analyses the level of indigenisation and vendor rationalisation. For big players, benefits accruing from global sourcing of components and economies of scale are considered.

Raw material

For a better view of a company's cost structure, CRISIL Ratings analyses its raw material requirement from the perspective of price movement and availability. It also assesses the import content, both of the company and its major vendors. The geographical spread of vendors and import content may have a bearing on the company's inventory and stocking policy. Working capital requirement will directly follow from any such policy decision.

Channel inventory

This helps assess the actual retail demand and any possible impact of carrying costs on the manufacturer.

Technology

CRISIL Ratings analyses the company's product development ability in terms of technological capability and styling skills. Technological capability is assessed on the basis of ability to launch models with different performance characteristics (such as power and fuel efficiency), while styling skills are judged by market response to the aesthetic features incorporated in models introduced in the past. Access to a parent's technology or in-house research and development capability, and ability to comply with regulations are also taken into account.

This becomes especially critical as emission norms have evolved from BS[3]-IV to BS-VI from April 2020 and require a significant upgrade in the manufacturing ecosystem.

Productivity and quality issues

Productivity and labour relations are integral to the operations of a company. Poor labour relations can lead to stalling of operations and consequently, loss of productivity. CRISIL Ratings also analyses factors such as consistency and improvement in quality in terms of usability and costing.

The CRISIL Ratings analysis, therefore, captures a mix of factors that are important from the business risk perspective in determining the ability to generate cash flow from core operations. The focus is on analysing the basic factors that contribute to such cash flow and its sustainability.

[3] Bharat Stage

CRISIL Ratings criteria for the commercial vehicles industry

Background

The commercial vehicles (CV) industry was responsible for the transportation of over 70% of the total freight in the country in fiscal 2023.

As demand for transportation comes from all sectors, the performance of the CV industry mirrors the overall economic performance. In India, the CV industry is characterised by significant entry barriers, oligopolistic competitors and focus on volume. With improving road conditions, particularly inter-city roads, the average vehicle tonnage has increased to about 28 tonne currently from 20 tonne in early 2000s and 16 tonne in the late 90s.

Correspondingly, the intra-city average vehicle tonnage has reduced, thereby establishing a hub-and-spoke model for goods transportation. The shift implies that manufacturers with a wide range of products and the ability to develop new models based on customer needs are bound to gain volume share.

The parameters that are considered for evaluation of a CV manufacturer’s business risk profile include the company’s market position and operating efficiency. Market position assessment focuses on the company’s ability to maintain high volumes in a wide variety of market segments. While analysing operating efficiency, CRISIL Ratings assesses ability to manufacture technologically superior vehicles at low costs. Given the high fixed-cost of operations, well-engineered products and significant volumes are key factors.

Business risk

Market position

Product range

A diverse and broad product mix enables manufacturers to provide a wide variety of transportation solutions across different load levels, and helps build strong brand loyalty with the customer. On the other hand, a manufacturer with presence in one segment would be more susceptible to volume shocks and limitations related to overall volume and growth prospects within that segment. Furthermore, within the CV space, presence in the passenger transportation segment provides additional volume.

Sales and distribution networks

Traditional CVs are commonly used across the country. Hence, it is crucial that companies have widespread distribution and service networks as this enables them to develop a geographically diversified customer base, which is crucial for volume expansion. The CV is also a productive asset for the freight business and hence, to maximise the revenue potential of the asset, the spread of service networks and quality of service provided are crucial. Companies with wholly owned captive finance subsidiaries may benefit as this ensures easy access to funds for CV buyers and supports the business growth of the manufacturer. Also, exports would protect companies from domestic cyclicality.

Realisations and volume growth

Annual movements in a company's selling prices indicate its ability to increase prices and pass on input price hikes to customers. These figures, used in conjunction with volume growth, indicate the relative strength of the competitors and their overall market position. An analysis of the expected volume trends over the short-to-medium term and the sensitivity of the company's performance to these trends provide insights on the expected financial performance.

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Competitor analysis

The CV market remains oligopolistic in India, but competition is expected to intensify in the long term. In its analysis, CRISIL Ratings focuses on products, volumes, regional market shares and realisations. These parameters provide valuable inputs on the strengths and weaknesses of companies operating in the industry.

Operating efficiency

Product design and development capabilities

The company's ability to develop new products to serve emerging needs or enter new markets is crucial to the CRISIL Ratings analysis. The time to market a new product can be minimised only if there are in-house product development capabilities. It is imperative that companies are able to re-engineer their products, be it in pricing, design or product specifications, to meet the changing needs of the consumer.

Technological capabilities, access to new technologies

Vehicle emission norms are getting increasingly stringent. Introduction of BS[5]-IV norms in fiscal 2018, BS-VI in 2020 and BSVI Phase II in 2023 is a case in point. Therefore, ability of manufacturers to introduce more technologically advanced engines to survive in the face of changing regulations and intense competition is key. Companies with access to international technologies are better placed to maintain their market positions. The extent of technological capabilities and availability of suitable technologies are, therefore, key inputs in the analysis of CV manufacturers.

Flexible manufacturing facilities

The CV market is becoming highly segmented and each segment responds differently to the overall economic performance. It is, therefore, important that manufacturers have presence in every segment or several segments to reduce their susceptibility to industry cyclicality and to maintain volume. Ability to manufacture a variety of models using the same manufacturing facilities enhances competitive edge, ensures better utilisation of resources, reduces capital costs, and helps improve asset turnover. In contrast, a company with dedicated manufacturing facilities for each of its products would be more asset- and fixed-cost-intensive, which would erode profitability and competitive position due to loss of flexibility in a dynamic market.

Indigenisation

CV manufacturers with higher use of imported components are susceptible to volatility in forex rates. Limited flexibility to pass on increasing costs in a competitive market may erode profitability severely. It is, therefore, imperative that companies maintain high indigenisation and commit resources appropriately.

Integration and fixed-cost intensity of operations

Unlike traditional commodity businesses where cyclicality in price is higher than that in volume, the CV industry faces high volume cyclicality. This makes fixed-cost intensity and in-house integration important considerations. The industry is extremely fixed cost-intensive, and high integration constrains the cost structure. Companies may perform extremely well during the growth phase with superior profitability. On the other hand, pressure on volume could lead to a sharp decline in profitability. Internationally, ancillarisation is the key to ensuring stability in earnings. It is, therefore, important that companies maintain the right balance between ancillarisation and internal integration.

CRISIL Ratings criteria for the tractor industry

Background

India’s tractor industry is concentrated in the 10-50 horse power (HP) range, which is distinct from tractors and farm equipment worldwide. The Indian tractor industry is dominated by domestic players which are price competitive. Sales are largely driven by bank credit. Factors such as government policy on agriculture, National Bank for Agriculture and Rural Development (NABARD) policies to promote farm mechanisation and bank credit extended towards the agricultural sector (primarily for tractor financing) are important influencers of demand for tractors. Use of tractors for haulage activities has also been increasing.

The key parameters in analysing business risk profile include the company’s market position and operating efficiency. Market position assessment focuses on the company’s product profile, its geographical reach, the demand pattern and level of competition. While evaluating operating efficiency, the company’s cost structure is examined.

Business risk

Market position

Product profile

There are broadly four product categories in the tractor industry based on power delivered by HP: tractors delivering below 30 HP, those delivering 30-40 HP and 40-50 HP, and those delivering above 50 HP. The bulk volumes are in the 30-50 HP range. Each product category has varying growth rate and prospects. CRISIL Ratings assesses the product profile of the company to estimate its likely growth rates.

Geographical coverage

Assessing the company's geographical reach is vital because each region in the country has its own sales pattern (in terms of volume) and growth potential depending on product requirement and soil patterns. CRISIL Ratings also takes into account geographical diversity or concentration to a particular region while assessing the market position.

The company's export initiatives and its success and growth prospects in the international market are also studied.

Level of monsoon

Rainfall, both country-wide and region-wise, is vital as it has a direct impact on sales volume in the tractor industry.

Demand-supply equations

The demand for tractors is influenced by government policies pertaining to duties (mainly excise duties) and changes in diesel prices; other factors include government policy on agriculture, NABARD policies to promote farm mechanisation and bank credit extended towards tractors. CRISIL Ratings also evaluates the product categories within which the players have expanded capacities, and their future competitive positions.

Competition

Studying the market segments that the company is present in, its position in each, the inherent competition, and likely changes in the market position help analyse the company's present and expected competitive status.

Distribution network

The reach of the distribution network, the support it extends to the company, exclusivity of the services provided, and the credit periods involved are important factors that contribute to healthy sales.

Operating efficiency

Location

Proximity to major vendors, ancillaries and important markets lends a competitive edge to players.

Capacity utilisation and flexibility in manufacturing

The flexibility of a company to switch between different product profiles, along with optimum capacity utilisation, help determine the versatility in operations.

Level of integration

Fully integrated operations ensure sustainability of supplies at various stages of the production chain and provide reasonable control over cost structure and product quality.

Ancillary and vendor network

The network's strength can be understood from the available capacities, ability to deliver high-quality products on time, and the ability to upgrade/change with the changing basic models.

Raw material

Raw material requirement is examined from the perspective of availability and price movements to understand the cost structure. CRISIL Ratings also assesses the import content and vendors of the company.

Channel inventory

This helps assess the actual retail demand and the impact of carrying costs on the manufacturer.

Technology and product development

Ability to launch new models/upgrades with varying performance characteristics (for power and fuel efficiency) is an important constituent in the analysis. As most tractor manufacturers do not have foreign collaborations, they tend to outsource manufacturing of both components and aggregates. The company's product development efforts are calculated to evaluate the new features, market segments addressed, and price-cost issues involved.

Productivity and quality issues

Productivity and labour relations are integral to the business as they determine steady revenue flow and uninterrupted supply. Consistency and improvement in quality are also assessed from both the usability and costing angles.

Conclusion

For rating companies operating in the auto sector, CRISIL Ratings evaluates their business, management and financial risk profiles. The key parameters considered for analysing business risk profile are market position and operating efficiency. Market position covers market share, customer profile, product mix, demand pattern and the level of competition in the industry. Analysis of operating efficiency involves the company’s cost position, capacity utilisations and working capital management.

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