



Ryobi (5851)

Global growth opportunities from auto industry transformation

6 January 2025

Initiating coverage

- Benefiting from the shift to environmentally friendly vehicles –**
 Ryobi is a leading Japanese manufacturer of die casts, predominantly serving the global auto industry, with an estimated top domestic share of about 20%. As the transition out of internal combustion engines (ICE) and into battery electric-powered vehicles (BEV) gathers pace, Ryobi is well placed to capitalize on the demand for lightweight aluminum auto parts, including chassis, e-axle, and battery cases, door frame hinges, and many more parts. Although meeting demand generated by this once-in-a-lifetime industrial transformation requires capital expenditures, the company is also focused on improving operating margins over the long term and enhancing shareholder returns, keen to raise its PBR to 1x.

Lightweight auto parts to fuel growth

- Short-term growth outlook reduced –** Ryobi's sales and OP were recovering well from the pandemic amid demand for lightweight aluminum parts. However, the company has revised down FY12/24 sales and OP due to a slowdown in the recovery of auto production and rising costs across its key markets.
- Company not impacted by slowdown in BEV demand –** Although there has been a slowdown in BEV demand so far in FY12/24, demand for HEV and PHEV parts provides a strong tailwind.
- Medium-term management targets –** The company does not have a medium-term management plan but is preparing one for release in February 2025.
- ESG –** We score the company as 'Amber' under our Astris-Sustainability model scorecard.
- Valuations –** The shares are trading on an estimated PER 12/25 of 8.0x (on +23.2% EPS growth YoY), and an FCF yield of 11.4%. FCF definition is cash flow from operating activities less expenditures for acquisitions of tangible and intangible fixed assets. We estimate a total shareholder yield of 3.8% in FY12/25.

Share price: ¥2,147 Market cap: ¥70.1bn



Source: Bloomberg

| Price Performance | | | | |
|-------------------|------|------|------|-------|
| | YTD | 1M | 3M | 12M |
| Abs (%) | -5.6 | +1.1 | +9.7 | -21.0 |
| Rel (%) | -4.6 | +0.0 | +7.2 | -31.4 |

| Company sector | |
|----------------------------|--|
| Non-ferrous metals (TOPIX) | |
| Industrial (GICS) | |

| Stock data | |
|---------------------------|-------------|
| Price (¥) | 2,147 |
| Mkt cap (¥bn) | 70.1 |
| Mkt cap (\$m) | 444.7 |
| 52-week range (¥) | 1,580-3,055 |
| Shares O/S (m) | 33 |
| Average daily value (\$m) | 2.4 |
| Free float (%) | 87.2 |
| Foreign shareholding (%) | 18.3 |
| Ticker | 5851 |
| Exchange | Tokyo Prime |
| Net Debt/Equity (x) | 0.3 |
| FFO leverage (x) | 2.7 |
| BBG BUY HOLD SELL | 2 0 0 |

Source: Bloomberg

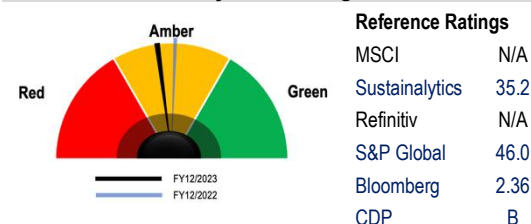
| Year-end | 12/22 | 12/23 | 12/24E | 12/25E | 12/26E |
|-----------------------------|--------|--------|--------|--------|--------|
| Sales (¥bn) | 249.52 | 282.69 | 292.61 | 304.57 | 322.73 |
| OP (¥bn) | 6.97 | 12.21 | 8.18 | 10.23 | 13.50 |
| NP (¥bn) | 4.78 | 10.12 | 7.09 | 8.74 | 11.43 |
| EPS (¥) | 147.80 | 312.51 | 219.13 | 269.88 | 353.05 |
| DPS (¥) | 45.00 | 80.00 | 65.74 | 80.97 | 105.91 |
| Sales growth YoY (%) | +26.0 | +13.3 | +3.5 | +4.1 | +6.0 |
| OP growth YoY (%) | N/A | +75.2 | -33.0 | +25.0 | +32.0 |
| NP growth YoY (%) | N/A | +111.4 | -29.9 | +23.2 | +30.8 |
| EPS growth YoY (%) | N/A | +111.4 | -29.9 | +23.2 | +30.8 |
| PER (x) | 14.5 | 6.9 | 9.8 | 8.0 | 6.1 |
| EV/EBITDA (x) | 4.4 | 3.6 | 4.1 | 3.7 | 3.2 |
| EV/Sales (x) | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 |
| PBR (x) | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |
| ROE (%) | 3.7 | 7.1 | 4.5 | 5.3 | 6.4 |
| ROCE (%) | 3.8 | 6.1 | 3.9 | 4.6 | 5.8 |
| FCF yield (%) | (0.1) | 13.8 | 16.5 | 11.4 | 14.8 |
| Dividend yield (%) | 2.1 | 3.7 | 3.1 | 3.8 | 4.9 |
| Total shareholder yield (%) | 2.1 | 3.7 | 3.1 | 3.8 | 4.9 |

Source: Company data, Astris Advisory (estimates)
 Note: Valuations are based on the latest market prices

Business Overview

Ryobi is a manufacturer of die casts predominantly serving the automobile industry. It also manufactures and sells builders' hardware and printing equipment.

Astris-Sustainability ESG rating



Next events

Q1-4 FY12/24 results: February 2025

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 This report has been commissioned and paid for by the company

Contents

| | |
|--|----|
| Contents..... | 2 |
| Summary..... | 3 |
| Company description | 5 |
| Business breakdown | 7 |
| Our commentary on regional markets | 15 |
| Our commentary on Builders' Hardware and Printing Equipment Businesses..... | 18 |
| Business model..... | 21 |
| Peer group analysis | 27 |
| Balance sheet | 31 |
| Capital allocation..... | 32 |
| Recent results | 34 |
| Medium-term targets | 37 |
| Astris earnings estimates and key assumptions | 39 |
| Company information | 41 |
| Astris Quant Sheet | 45 |
| Astris-Sustainability ESG assessment | 47 |
| Areas of discussion..... | 49 |



Summary

Ryobi's main business is die cast manufacturing and sales. But it also produces and sells door closers and offset printing presses.

Ryobi is a leading Japanese die casting manufacturer, serving the global auto industry. Customers include Toyota Motor, Honda Motor, Ford Motor, and General Motors. The company is well-placed to benefit from the once-in-a-lifetime transformation out of ICE (Internal Combustion Engine) vehicles and into battery electric vehicles (BEVs); and to accommodate CASE (Connected, Automated, Shared, and Electric) technological advances.

The combination of heavy battery and electrical equipment used in Battery EVs (BEV) means lighter parts elsewhere are required to reduce power consumption and improve driving range. Ryobi estimates that BEVs will account for 67% of new car sales in its major markets (Japan, US, Europe, China, and India) by 2040, a significant increase from a forecast of 14% for 2024, according to EV Volumes (J.D. Power). To meet this anticipated demand, **the company aims to increase the percentage of its sales from strategic products, such as lightweight body parts and electrification parts**, from 17.4% in FY12/23 to 43% in FY12/27.

The Die Castings segment accounted for 88.5% of Q1-3 FY12/24 sales. There are two other segments. Through its Builders' Hardware (3.7% of sales) segment, Ryobi produces and sells door closers, commanding a 75% domestic share, according to company estimates. Its Printing Equipment (7.7% of sales) segment manufactures and sells sheet-fed printing presses and related services.

The company does not have a medium-term management plan. However, it is preparing to disclose one in February 2025. **The company is keenly aware of the importance of taking measures to raise its PBR closer to 1x.** Ryobi is aiming to achieve the following existing financial targets:

- To improve operating margins. Its OPM was 4.3% in FY12/23 and is forecast to fall to about 3% in FY12/24. However, the company aims to recover to the 4% range within the earliest timeframe possible and then targets further improvement.
- To review its annual dividend payout ratio (which currently stands at 30%), conduct flexible share buybacks, and reconsider other shareholder return forecasts.

Astris Advisory estimates Ryobi will drive medium-term growth via the following:

- **Die Castings -**
 - Increase sales of strategic product auto parts through overseas demand from both Japanese and foreign customers.
 - Start a prototype service of large-scale lightweight structural gigacast parts, planned for FY12/25.
 - Making incremental productivity improvements in factories to help improve margins.
- **Builders' Hardware -** Steady sales expansion of door closers overseas and new value-added products in Japan.

- **Printing Equipment** - Expanding sales of offset printing presses for product packaging and new models and forging new alliances.

The shares are trading on our estimated PER FY12/25 of 8.0x (on +23.2% EPS growth YoY) and an FCF yield of 11.4%.



Company description

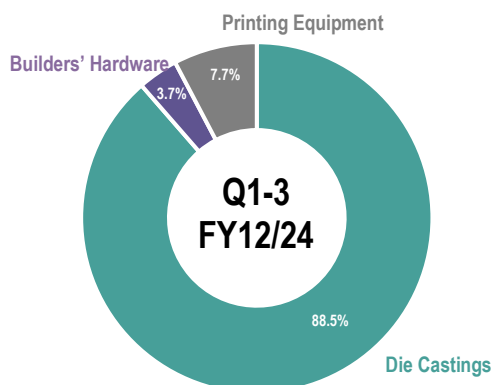
Overview

Ryobi was established in 1943 as a die casting manufacturer

Ryobi was founded in 1943 in Hiroshima prefecture as a die-casting manufacturer. Subsequently, the company developed an integrated production system incorporating die design, die fabrication, casting, machining and assembly. While the company used its die-casting expertise to expand into various other industries from fishing tackle to offset printing press production, die casting has remained the company's core business, accounting for 88.5% of total sales as of Q1-3 FY12/24. The bursting of the economic bubble in Japan in the 1990s, and the subsequent economic downturn prompted Ryobi to refocus its business, resulting in the sale or closure of most of its non-core businesses of golfing goods, fishing tackle and power tools. It retains a golf course management business. Ryobi has three reporting segments: Die Castings, Builders' Hardware and Printing Equipment.

The die castings business accounts for 88.5% of sales

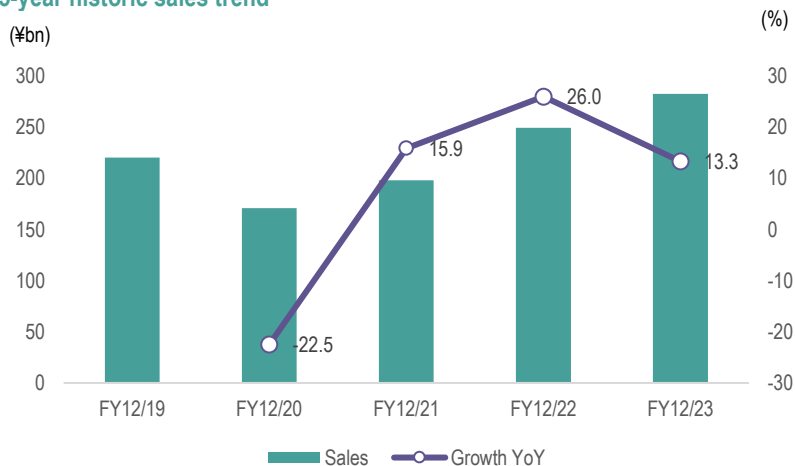
Sales split for Q1-3 FY12/24



Source: Company data

Sales showed strong growth post-pandemic until FY12/23

5-year historic sales trend



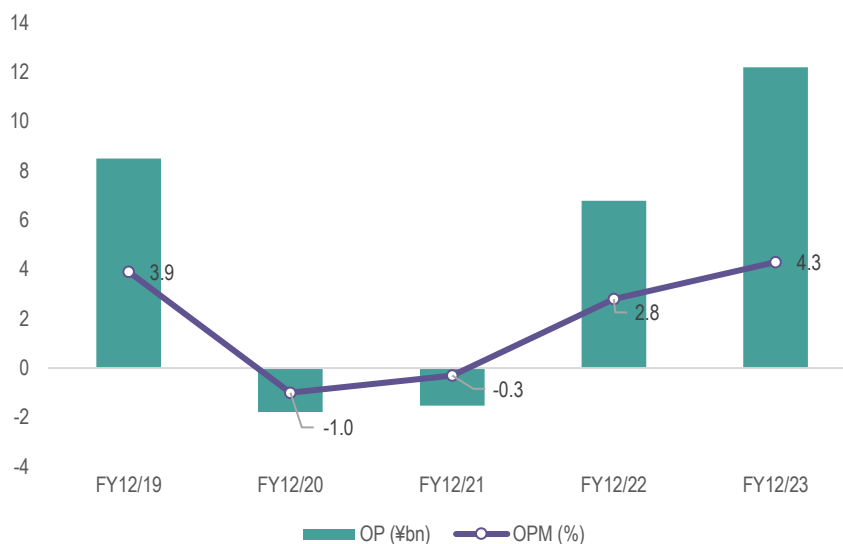
Source: Company data



Ryobi's sales and operating profit were hit by the pandemic across all segments, but predominantly at its most important Die Castings business, due to the fall in auto production, swiftly followed by semiconductor supply chain issues. This impacted operating profit, resulting in two years in the red. Since then, OP has improved, amid a recovery in production and as demand for lightweight die cast products for autos grows.

OP and OPM have been recovering from the pandemic

5-year historic OP and OPM trend



Source: Company data

Timeline summary

| Key dates | Details |
|-----------|---|
| 1943-1944 | Ryobi Ltd. is founded (original name: Ryobi Seisakusho Co., Ltd) and starts manufacturing and selling die cast products |
| 1954 | Starts manufacturing plastic die cast products |
| 1961 | Lists on the Tokyo Stock Exchange and starts manufacturing offset printing presses |
| 1963 | Starts manufacturing and selling door closer products |
| 1966 | Starts producing and selling fishing tackle (business transferred in September 2000) |
| 1968 | Expands into production of power tools |
| 1973 | Founds Ryobi Land Development Ltd. for golf course management |
| 1983 | Starts golfing goods production and sales (sporting goods business terminated in May 2002) |
| 1985 | Founds Sheller-Ryobi Corp. [presently called Ryobi Die Casting (USA), Inc.] in U.S.A. |
| 1990 | Founds Ryobi Aluminium Casting (UK), Limited in Northern Ireland |
| 2000-2002 | Transfers North America, Europe and Oceania power-tools business |
| 2005 | Founds Ryobi Die Casting Dalian Co., Ltd. in China |
| 2007 | Establishes Mexico manufacturing subsidiary RDCM, S. DE R.L. DE C.V. |
| 2010 | Establishes Ryobi Die Casting Changzhou Co., Ltd. In China |
| 2011 | Founds Ryobi Die Casting (Thailand) Co., Ltd. in Thailand |
| 2014 | Founds joint venture RYOBI MHI Graphic Technology Ltd. |
| 2018 | Sells power tools business to the Kyocera Group |

Source: Company data

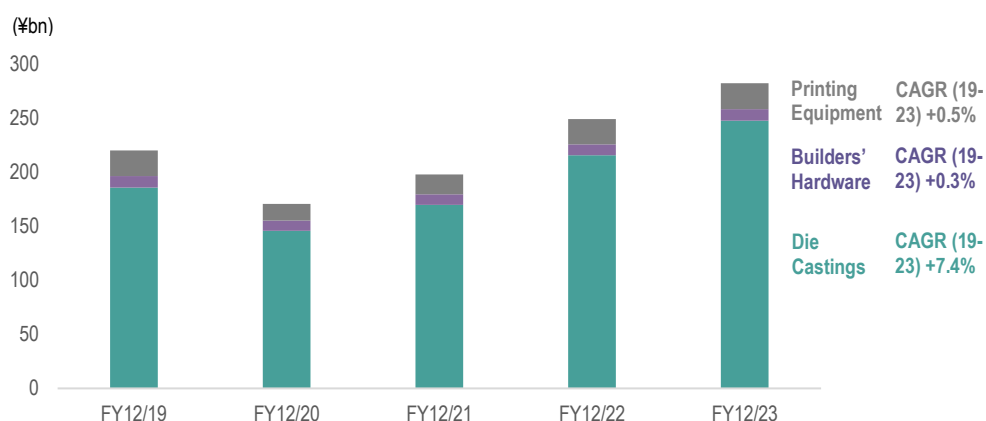
Business breakdown

There are three business segments:

- Die Castings** - The manufacture and sale of high-precision complex die-cast products predominantly for the auto industry, such as body and chassis parts, engine parts, and transmission parts. The company has been increasing the sales of lightweight high-precision products it manufactures for its auto industry clients amid the shift away from ICE vehicles to more environmentally friendly BEVs, HEVs, and PHEVs. Die casting is a production process whereby the manufacturer designs a mold to a customer's specification, injecting molten metal at high speed and pressure to create a high-precision product. The product is then processed, assembled, inspected for accuracy, and shipped to the customer to be assembled into the vehicle.
- Builders' Hardware** - The manufacture and sale of door closers, which shut doors safely, quietly, and slowly, for homes, offices, and commercial properties. It has also introduced value-added products such as automated door-opening functions. The company estimates that it has the top 75% market share of door closers in Japan.
- Printing Equipment** - High-precision, multi-functional and increasingly automated offset printing presses for printing catalogs, posters, packaging and magazines. The company operates this business via a JV with Mitsubishi Heavy Industries Machinery Systems, Ltd., called RYOBI MHI Graphic Technology Ltd., in which Ryobi has a controlling 60% stake.

Sales by segment

Ryobi's dominant die castings segment has the fastest sales growth



Source: Company data

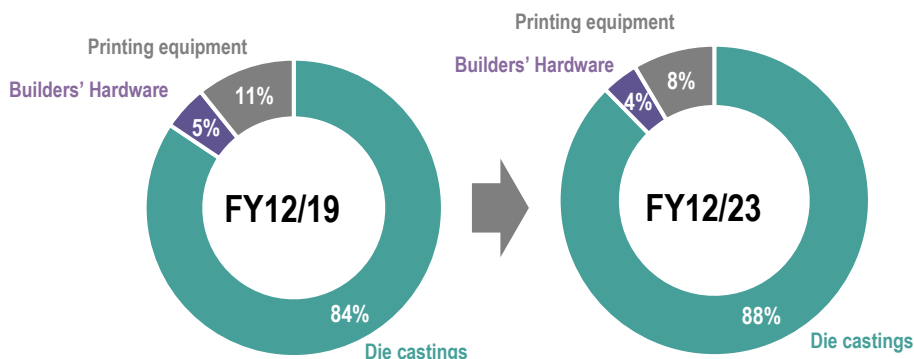
Changes in sales contribution over the last four years (FY19-FY23)

As Ryobi has grown sales at its much larger die castings business faster than that of builders' hardware and printing equipment, the sales ratio has expanded from 84% in FY12/19 to 88% in FY12/23. Given that the die castings business has the biggest growth potential going forward as well, we estimate that the sales ratio will further increase incrementally over the medium term to breach the 90% mark.



Sales split by segment

The dominant Die Castings segment has expanded its sales ratio between FY12/19 and FY12/23



Source: Company data

Segmental sales and profit trend

All business segments were hurt by the pandemic, but Die Castings and Printing Equipment were impacted more than Builders' Hardware

| Segment (¥bn) | FY12/19 | FY12/20 | FY12/21 | FY12/22 | FY12/23 |
|---------------------------|---------|---------|---------|---------|---------|
| Die Castings | | | | | |
| Sales | 185.94 | 145.87 | 169.90 | 215.73 | 247.55 |
| Growth YoY (%) | N/A | -21.5 | 16.5 | 27.0 | 14.8 |
| OP | 7.66 | (1.61) | (1.45) | 5.23 | 10.92 |
| Growth YoY (%) | N/A | N/A | N/A | N/A | 108.6 |
| OPM | 4.1 | -1.1 | -0.9 | 2.4 | 4.4 |
| Builders' Hardware | | | | | |
| Sales | 10.71 | 9.41 | 9.57 | 10.15 | 10.82 |
| Growth YoY (%) | N/A | -12.2 | 1.8 | 6.0 | 6.7 |
| OP | 0.70 | 0.80 | 0.36 | 0.23 | 0.17 |
| Growth YoY (%) | N/A | 14.7 | -54.7 | -37.4 | -24.1 |
| OPM | 6.5 | 8.5 | 3.8 | 2.2 | 1.6 |
| Printing Equipment | | | | | |
| Sales | 23.66 | 15.51 | 18.39 | 23.42 | 24.09 |
| Growth YoY (%) | N/A | -34.4 | 18.6 | 27.3 | 2.9 |
| OP | 0.14 | (0.94) | (0.42) | 1.51 | 1.14 |
| Growth YoY (%) | N/A | N/A | N/A | N/A | -24.6 |
| OPM | 0.6 | -6.1 | -2.3 | 6.4 | 4.7 |
| Total | | | | | |
| Sales | 220.52 | 170.97 | 198.07 | 249.52 | 282.69 |
| Growth YoY (%) | N/A | -22.5 | 15.9 | 26.0 | 13.3 |
| OP | 8.50 | (1.79) | (1.52) | 6.97 | 12.21 |
| Growth YoY (%) | N/A | N/A | N/A | N/A | 75.3 |
| OPM | 3.9 | -1.0 | -0.8 | 2.8 | 4.3 |

Source: Company data

Note: As Ryobi changed its fiscal year to a December end from March 2018, annual comps start from FY12/19

The Die Castings segment has experienced a recovery in margins from the pandemic. However, that recovery is expected to be temporarily stymied in FY12/24 by a slowdown in the recovery of auto production and increasing costs. The company had been forecasting FY12/24 OPM for this segment to reach 4.6%, but in November reduced that forecast to 3.1%.

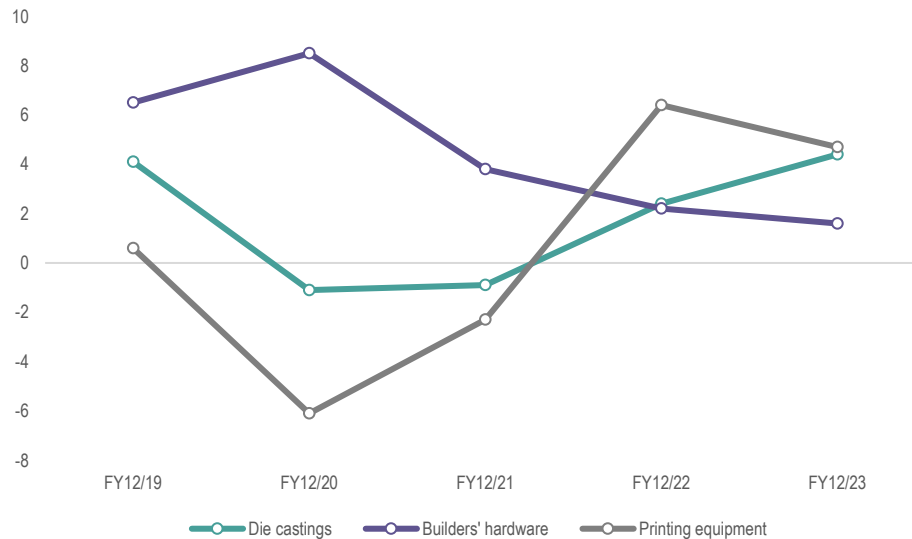
Both Builders' Hardware and Printing Equipment margins have been falling. The former is due to the impact of the currency. The company produces its door closers in China and



therefore, importing them into Japan while the yen is weak challenges profitability. The Printing Equipment segment faces temporary costs from an exhibition that are weighing on profitability as well as higher raw material costs.

Die Castings segment margin has been improving

Segmental profit margin trend (%)



Source: Company data

Die Castings growth drivers

The company has identified the following as growth drivers per business segment.

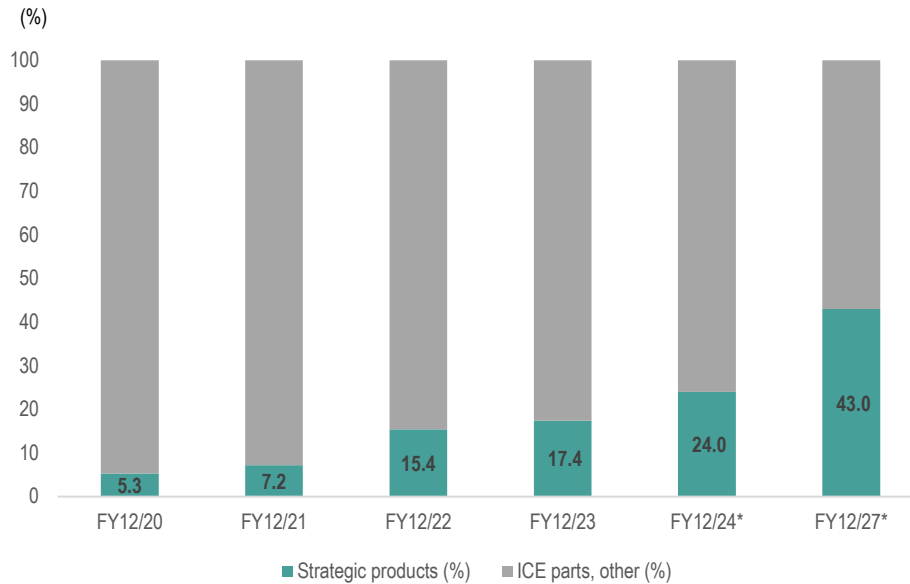
- **Lightweight aluminum parts for HEVs/PHEVs and BEVs** – Ryobi is targeting the ratio of sales from strategic products such as lightweight parts including body and chassis parts, and electrification parts to account for 43% of the segment total by FY12/27 from 17.4% in FY12/23.

Auto parts currently manufactured in Die Casting are:

- **Transmission parts** including transmission cases.
- **Engine parts** including cylinder blocks.
- **Electrification parts** including e-axle cases, battery cases, and inverter and converter cases (*strategic products*).
- **Lightweight parts** including suspension housing, steering supports, subframes and knuckles (*strategic products*).
- Others.

Strategic product sales mix

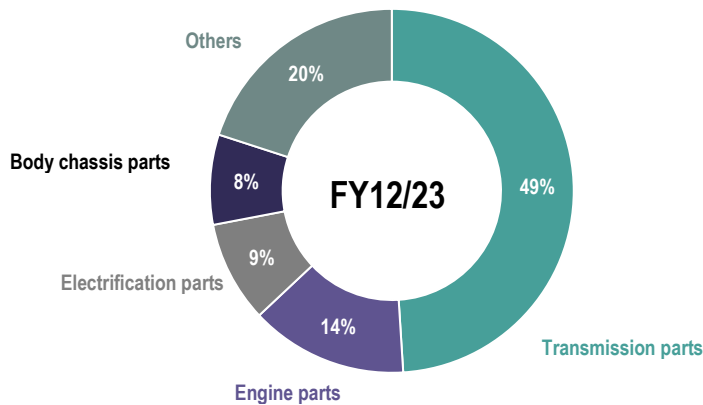
The company is targeting strategic products to account for 43% of sales by FY12/27



Source: Company data
 Note: Asterisk (*) = company forecasts

Half of segment sales come from transmission parts

Die Castings segment sales mix (FY12/23)



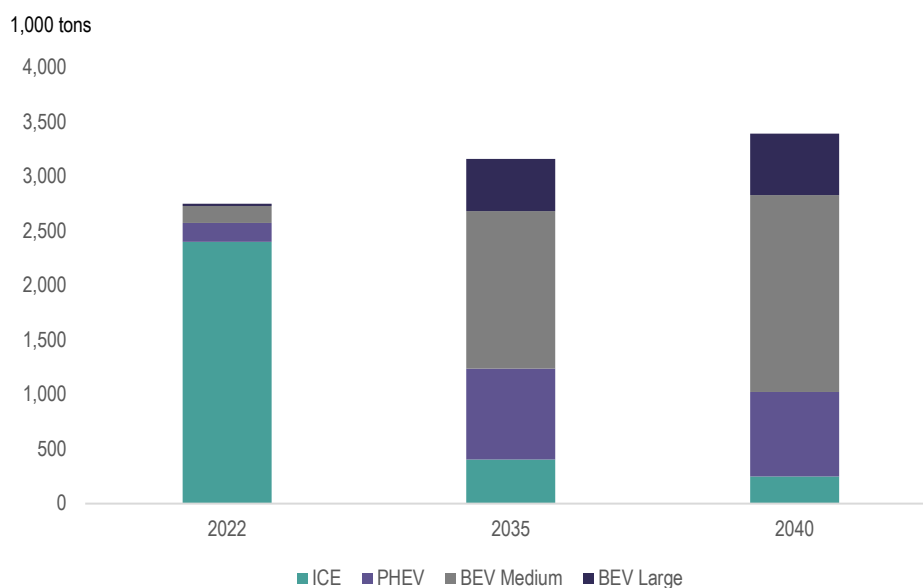
Source: Company data

Over the long term, Ryobi is estimating that the total market by volume for die-cast products (ICE, HEV/PHEV and BEV mid-sized and larger vehicles) will increase to 3.4m tons by 2040, from 2.7m tons in 2022. That represents an increase of 25.9% over 18 years, or CAGR of 1.3%. As ICE vehicle demand dwindles, demand for engine blocks, transmission cases and other products used in these autos will decline.

However, as the shift to BEVs and other more environmentally friendly vehicles progresses, the need for electrification products, such as battery cases, and lightweight products, such as body and chassis products, is expected to increase.



Demand for HEV, PHEV and BEV vehicles will drive die-cast market volume up 25.9% between 2022 and 2040, even as demand for ICE autos declines



Source: Company data

Other growth initiatives are:

- **Introduction of gigacast prototype service** – Ryobi has invested ¥5bn in the purchase of a gigacasting machine and the construction of a new factory. From FY12/25 it plans to start a prototype service for developing gigacast parts, such as front and rear underbodies, and battery cases.
- **Building an optimal supply chain** – The company aims to maintain strong relationships with its business partners and suppliers to ensure a stable supply chain to mitigate production bottlenecks during supply chain shocks.
- **High-quality products** – Ryobi aims to further raise sales by investing in the development of new products to offer to customers.



Builders' Hardware segment growth drivers

- Improving profitability in the domestic market.
- Developing and expanding sales of high-end next-generation products, including automatic electronic door devices that open and close even during power supply outages and concealed door closers that are more compact and higher performing than conventional products. These closers are placed inside the door or upper frame.
- Expanding sales overseas in growth markets, including the US and Europe.

Printing Equipment segment growth drivers

- Expanding sales of offset printing presses for packaging, such as its 970 model.
- Developing automated printing presses and solutions for assisting printing companies.
- Forging alliances with printing companies to counter the labor shortage in the sector.

Recent trends in the key Die Castings segment

Sales trends

The Die Castings segment has been going through a transformation. Previously, Ryobi and its peers relied on sales of die-cast sales of engine blocks, transmission cases, and other products for ICE vehicles. Targets to reduce fuel emissions have become more urgent and the shift away from ICE vehicles has begun in earnest.

There will be bumps along the way as the shift out of ICE cars will not be a linear one. Ryobi had forecast the FY12/23 strategic products ratio to reach 19%. However, due to a slowdown in Chinese auto production, production of body and chassis parts fell, preventing Ryobi from meeting this goal, and instead reaching 17.4%.

The company is expecting the ratio to grow rapidly to reach 24% in FY12/24, reflecting its ability to meet demand for die-cast products irrespective of vehicle type. The slowdown in BEV demand this FY has been mitigated by strong demand for HEVs and PHEVs instead. This flexibility is important for a company whose business can be impacted by external economic shocks.

Demand has been aided by adding Toyota group companies and others as customers for Ryobi's electrification parts, including inverter cases, converter cases and battery cases.

Sales have been inflated by the impact of the weak yen. In FY12/23 strong overseas currencies vs the yen added ¥8.7bn to sales.

OP trends

In FY12/18, Ryobi changed its depreciation accounting to the straight-line method which added ¥2bn to OP. Depreciation often weighs on Ryobi's OP because of the capital expenditure required to invest in growth and maintain existing assets. The split between new and maintenance capex is generally around 50-50.

We expect capex spending at the same pace or a little higher amid the shift to environmentally friendly vehicles. Ryobi needs to continue with technological innovations for production, increase sales with existing clients, acquire new ones and gain an advantage in price negotiations.

Over the past five fiscal years, the company's annual capex outlays have ranged between ¥13.1bn and ¥24.8bn. In FY12/23, the company announced an investment of ¥5bn on a gigacasting machine and the construction of a new factory. In FY12/25 it plans to start a prototype service for developing gigacast parts.

In FY12/22, the company started applying a revenue recognition standard that reduced COGS for the fiscal year, adding ¥300mn to OP. The weak yen has also helped lift OP, though not to the extent it has helped sales. In FY12/23 forex gains added ¥100mn to OP.

The biggest challenge for the company is how to absorb rising raw material and labor costs. At home, customers' contract review periods have been shortened to reflect rising raw material costs. The biggest impact likely occurs when secondary alloy aluminum prices soar suddenly, and it takes time for the company to pass on those costs. In Ryobi's FY12/24 Q1-3, raw material costs had a ¥700mn negative impact on sales vs the year-earlier period.



Group companies

Ryobi has manufacturing facilities across five countries outside of Japan.

Group Companies

| Subsidiary | Group company status | Stake | Activities |
|---|----------------------|-------|--|
| Ryobi Mirasaka Co. | Subsidiary | 97% | Die cast manufacturing |
| Ryobi Mitsugi Co. | Subsidiary | 99.7% | Plastic molding and die cast manufacturing |
| Tokyo Light Alloy Co., Ltd. | Subsidiary | 67.9% | Cast aluminum and die cast manufacturing and sales |
| Ikuno Co. | Subsidiary | 100% | Secondary aluminum alloy bullion manufacturing and sales |
| Fuji Kogyo Co., Ltd. | Subsidiary | 100% | Precision machining and die cast manufacturing |
| Hoei Industries Co., Ltd. | Subsidiary | 84.7% | Aluminum forged product manufacturing and sales |
| Ryobi MHI Graphic Technology Ltd. | Subsidiary | 60.0% | Printing equipment and related product manufacturing and sales |
| Asahi Sangyo Co. | Subsidiary | 99.2% | Insurance agency |
| Ryobi Land Development Ltd. | Subsidiary | 100% | Golf course management |
| Ryobi Life Services | Subsidiary | 100% | Nursery school management |
| Ryobi Die Castings (USA), Inc. | Subsidiary | 100% | Die castings manufacturing and sales |
| RDCM, S. DE R.L. DE C.V. | Subsidiary | 100% | Mexico-based die castings manufacturing |
| Ryobi Aluminium Castings (UK), Ltd. | Subsidiary | 100% | Die castings manufacturing and sales |
| Ryobi Die Castings Dalian Co., Ltd. | Subsidiary | 100% | China-based die castings and manufacturing, and sales |
| Ryobi Die Castings Changzhou Co., Ltd. | Subsidiary | 100% | China-based die castings manufacturing and sales |
| Ryobi Die Castings (Thailand) Co., Ltd. | Subsidiary | 100% | Die castings manufacturing and sales |
| Ryobi (Shanghai) Sales, Ltd. | Subsidiary | 100% | Die castings and die sales |
| Ryobi (Dalian) Equipment Co., Ltd. | Affiliate | 33.4% | Construction product manufacture and sales to parent. |

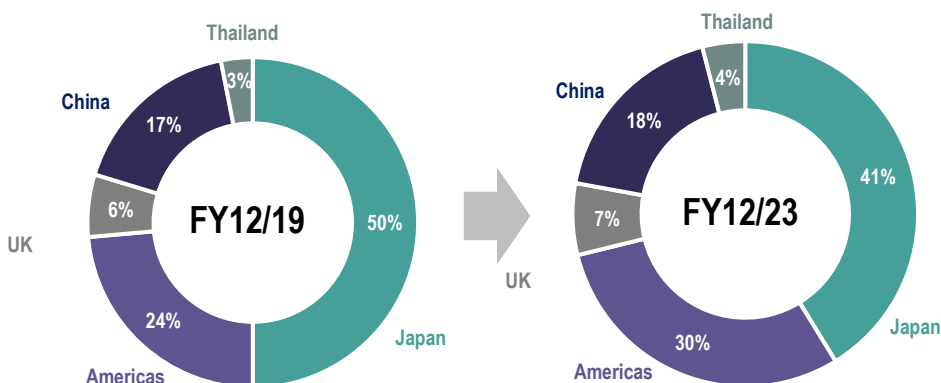
Source: Company (as of the end of December 2023, except Fuji Kogyo, which was acquired in November 2024).

Our commentary on regional markets

Ryobi has increased overseas sales in the Die Casting segment.

Ratio of overseas sales rose from 50% in FY12/19 to 59% in FY12/23

Die Castings segment sales mix by geography



Source: Company data

Examples of Ryobi's customers

Customers

| | |
|------------------------------|---------------------------------------|
| Aishin Corp. | Punch Powertrain PSA e-Transmissions |
| Isuzu Motors Ltd. | Hino Motors, Ltd. |
| JATCO Ltd. | BYD Company Ltd. |
| Suzuki Motor Corp. | Hyundai Motor Co. |
| Stellantis NV | Ford Motor Co. |
| Zhejiang Geely Holding Group | Volkswagen AG |
| Subaru Corp. | Prime Planet Energy & Solutions, Inc. |
| General Motors | Honda Motor Co., Ltd. |
| Daihatsu Motor Co., Ltd. | Mazda Motor Corp. |
| Toyota Motor Corp. | Mitsubishi Motors Corp. |
| Nissan Motor Co., Ltd. | Others. |

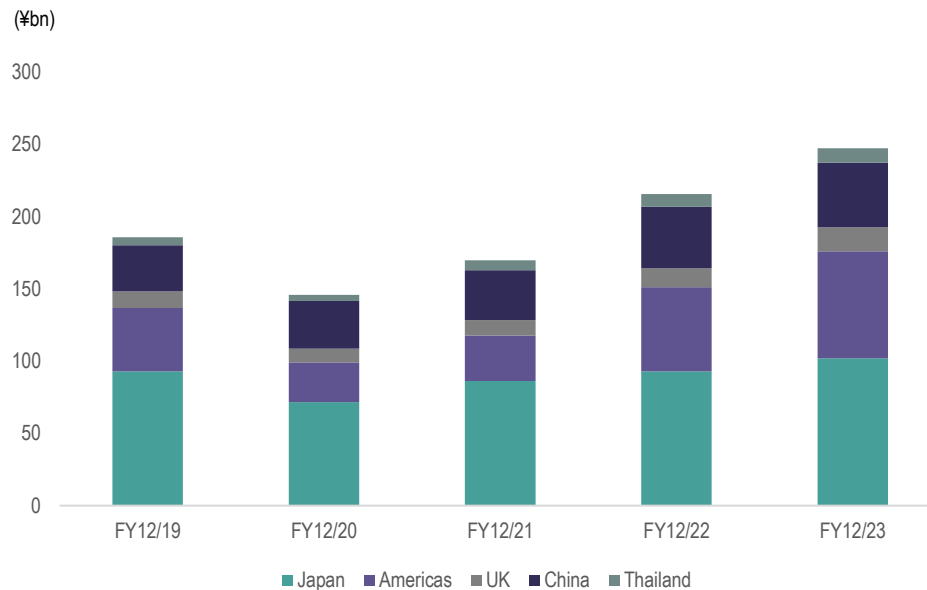
Source: Company data (as of December 2023)

The company has achieved this overseas growth despite strong competition from foreign competitors including Mexico-based Nemak S.A.B de C.V, Canada-based Magna International Inc., and Switzerland-based Georg Fischer Ltd.

Even though (aside from pandemic-impacted FY12/20) sales have been rising in all regions including Japan, the Americas have seen the biggest rise, in part amid the shift to BEVs, HEVs, and PHEVs. The weak yen has also inflated sales in that region.



The Americas region has led overseas growth over the past four years



Source: Company data

Ryobi expects demand from North America to continue to lead die-cast product demand over the long term to 2040.

Competitive environment in the domestic market

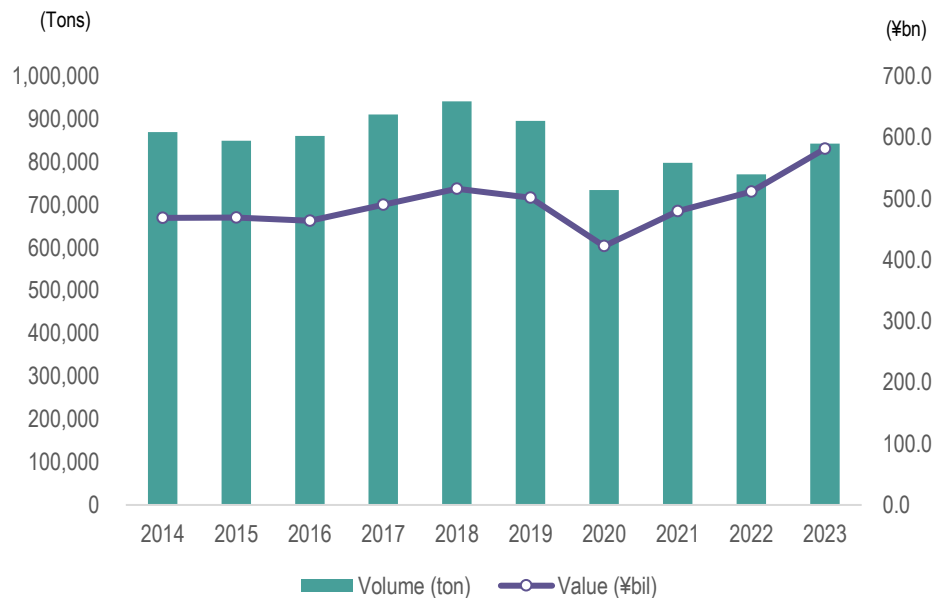
The domestic die castings market for the auto industry is highly fragmented. There are nearly 200 regular members of the Japanese Die Casting Association. While not all will be producing die-cast parts for automobiles, many will, given that nearly 90% of aluminum alloy die casting production volume supplies the auto sector (excluding motorbikes), according to the Japan Die Casting Association.

We estimate that Ryobi has the top share of the Japanese market at around 20%, with peers including Ahresty Corp. and Hiroshima Aluminum Industry Co., Ltd. In addition to these suppliers, Ryobi recognizes its biggest competitors to be the OEM companies themselves, producing die-cast parts in-house or within their group companies.

Over the past decade, on a volume basis, aluminum die-cast parts supplying the auto sector have been little changed with a 10-year CAGR of -0.1%. The steady upward trend was intermittently thwarted by the pandemic, when in 2020, production volume fell to 734,824 tons, according to the Japan Die Casting Association. On a value basis, the market has grown at a 10-year CAGR of +2.6%. This better growth by value vs volume likely reflects higher aluminum prices.



Japan's auto-related aluminum die-cast production is recovering from the pandemic



Source: Japan Die Casting Association

Our impressions

It makes sense to expect Ryobi's overseas sales ratio versus domestic sales to continue increasing, as Japan's demographic challenges make market expansion difficult over the long term.

This is encouraging for incremental improvements in OPM at the company. Lower margins at home are in part due to HQ costs and the fact that the design process for the dies in all markets takes place in Japan.

Ryobi has an impressive list of global customers, and it should benefit in the near term from the Toyota group's and other automakers' demand for HEV and PHEV parts, while long-term market growth, particularly expected in the US, should also fuel growth. While the long-term outlook for the Japanese auto market is challenged by the country's falling population, near-term demand appears to be solid in Japan amid the shift out of ICE vehicles and a recovery in production from the pandemic.

The company's decision to put its first gigacasting machine in a domestic plant suggests at least medium-term potential for die-cast products both current sizes and larger ones in Japan to contribute to long-term growth.

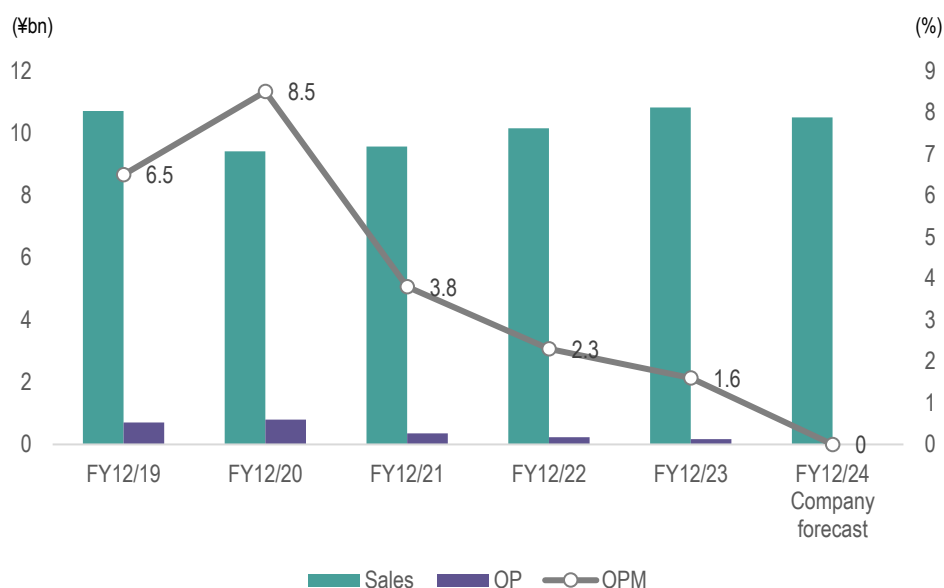
Our commentary on Builders' Hardware and Printing Equipment Businesses

Market conditions for both Builders' Hardware and Printing Equipment face broad fundamental challenges either in Japan or globally. For Builders' Hardware, Ryobi will increasingly rely on overseas markets in the face of Japan's demographic challenges weighing on new housing starts. For the Printing Equipment segment, the combination of increasing environmental consciousness alongside the growth of digital consumption of reading materials has already resulted in a sharp drop in the use of paper.

Builders' Hardware segment

This segment's OP has been heavily impacted by the stronger yuan. Ryobi relies on Chinese production of its products, of which most it imports into Japan for domestic sales. The yen's weakness against the yuan has raised procurement costs in China, putting downward pressure on OP over the past few years and is expected to again in FY12/24.

Builders' Hardware segment OP has been heavily impacted by the stronger yuan



Source: Company data

Ryobi estimates that it has a market-leading 75% share of door closers in Japan and can use that to introduce higher-end products such as its RUCAD automatic door controller at home. However, we anticipate that overseas sales will become increasingly important, and the greater sales it can produce overseas, the less impact exchange rates will have on the segment.

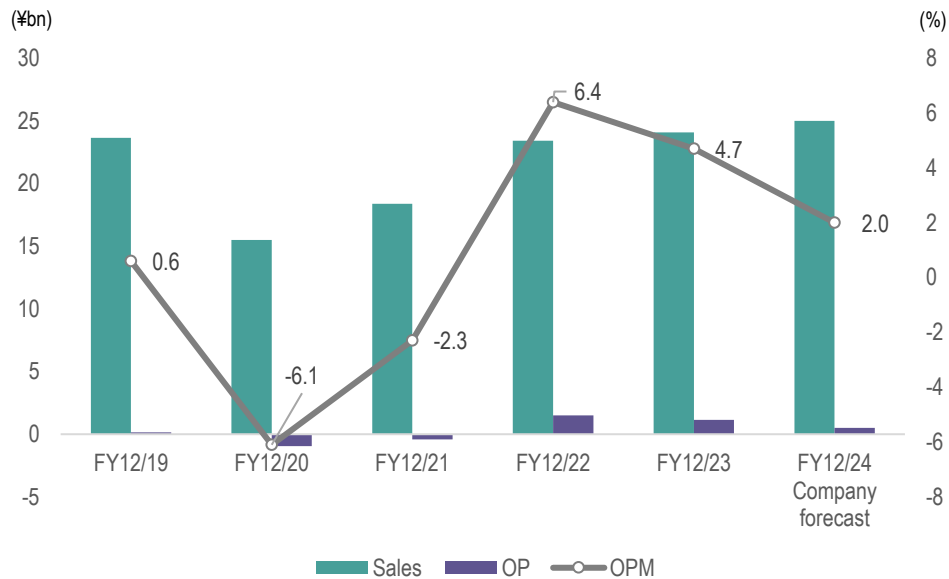
The company is developing its local sales networks in the US to increase sales of mid- and high-end door closers. Meanwhile, in Europe, the company is expanding its line-up of high-end door closers, while in Asia, it is focusing its sales activities on markets where Japanese doormakers have operations.



Printing Equipment segment (Ryobi MHI Graphic Technology)

Sales of offset printing presses and related services have been recovering since the pandemic, on the back of demand both at home and overseas; OPM is under pressure due to rising costs of raw materials and temporary exhibition expenses.

Printing Equipment segment OP margins are falling after a short-lived recovery



Source: Company data

As paper usage dwindles, Ryobi has been focusing offset printing press sales, such as its 970 model, on areas of demand such as food and makeup packaging. The company has also raised the automated functionality of its products to counter the lack of operators in the industry in Japan. The company sees an emerging opportunity in the market due to labor shortages and is eyeing opportunities to form alliances with other printing-related companies in this area. The company aims to improve margins by passing on rising costs to customers.



Management philosophy

Ryobi's corporate philosophy is "creating a sound and dynamic corporation through technology, trust and challenge." This philosophy is based on three key elements:

- **Corporate mission:** Create a higher standard of living and better quality of life by providing advanced technology with a vision of the future.
- **Management mission:** Value the trust and goodwill of society, and strive to become a strong, dynamic organization that reflects the originality and creativity of individual employees.
- **Employees' mission:** Develop a broad perspective and challenge goals with enthusiasm

The company also has a medium-term vision linked to this management philosophy based on the theme of "lightening the load worldwide". This medium-term vision highlights Ryobi's goals to:

- **Lightening vehicle weight** - Harnessing the properties of aluminum and die casting technologies.
- **Doors that open and close safely and quietly with a light touch** - Builders' hardware that turns doors into universally accessible portals, not barriers.
- **Lightening the workload for printing factories** - Multi-functional printing equipment that supports customers' switch to smart factories.
- **Lightening the impact on the environment** - Doing its part in the global effort toward carbon neutrality and a circular economy.
- **Lightening workstyles** – Offering a variety of systems to support employees on their career paths.



Business model

Key concepts and unique selling points

Typically, die-cast manufacturers:

- Sign contracts with customers for specific products over a certain period.
- The production of each product passes through six phases before being delivered to the customer. Those are:
 1. Discussions with customers about the needs and specifics of product development and the prototype.
 2. Die casting engineers deliberate over design and development
 3. Die-cast molds are designed using CAD [Computer Assisted Design] and CAM [Computer Assisted Manufacturing].
 4. Molten aluminum is injected into the mold at high speed and high pressure to instantly create the product.
 5. The die-cast products are finished, surface-treated and then assembled.
 6. Both human visual and automated inspection of products to ensure high quality and precision.

Ryobi's model has the following focus:

- A unique vertically integrated manufacturing process (incorporating product development and prototyping, die design, die fabrication, casting, machining and assembly, and quality inspection), which meets customer needs both speedily and accurately. The design necessarily takes place at its Japanese HQ to prevent technology leakage and higher costs if flaws appear in the initial production stages of a new die-cast product.
- Broaden the scope of die casting applications.
- Manufacturing bases in all the main markets that it serves to produce as close to customers as possible. It has production bases in Japan, the US, Mexico, China, the UK, and Thailand.
- Close co-operation with customers to ensure an optimal design and manufacturing process, and to help anticipate future needs. For example, Ryobi has announced a ¥5bn investment in a gigacasting machine (and the construction of a new factory), with plans to start a gigacast prototype service in March 2025. This investment is expected to enable Ryobi to play a larger role in vehicle development, adding to demand.
- Using 95% secondary aluminum alloys in its products, which produces only 3% of the carbon dioxide than that of using primary ingots, one of the company's solutions to tackling climate change.



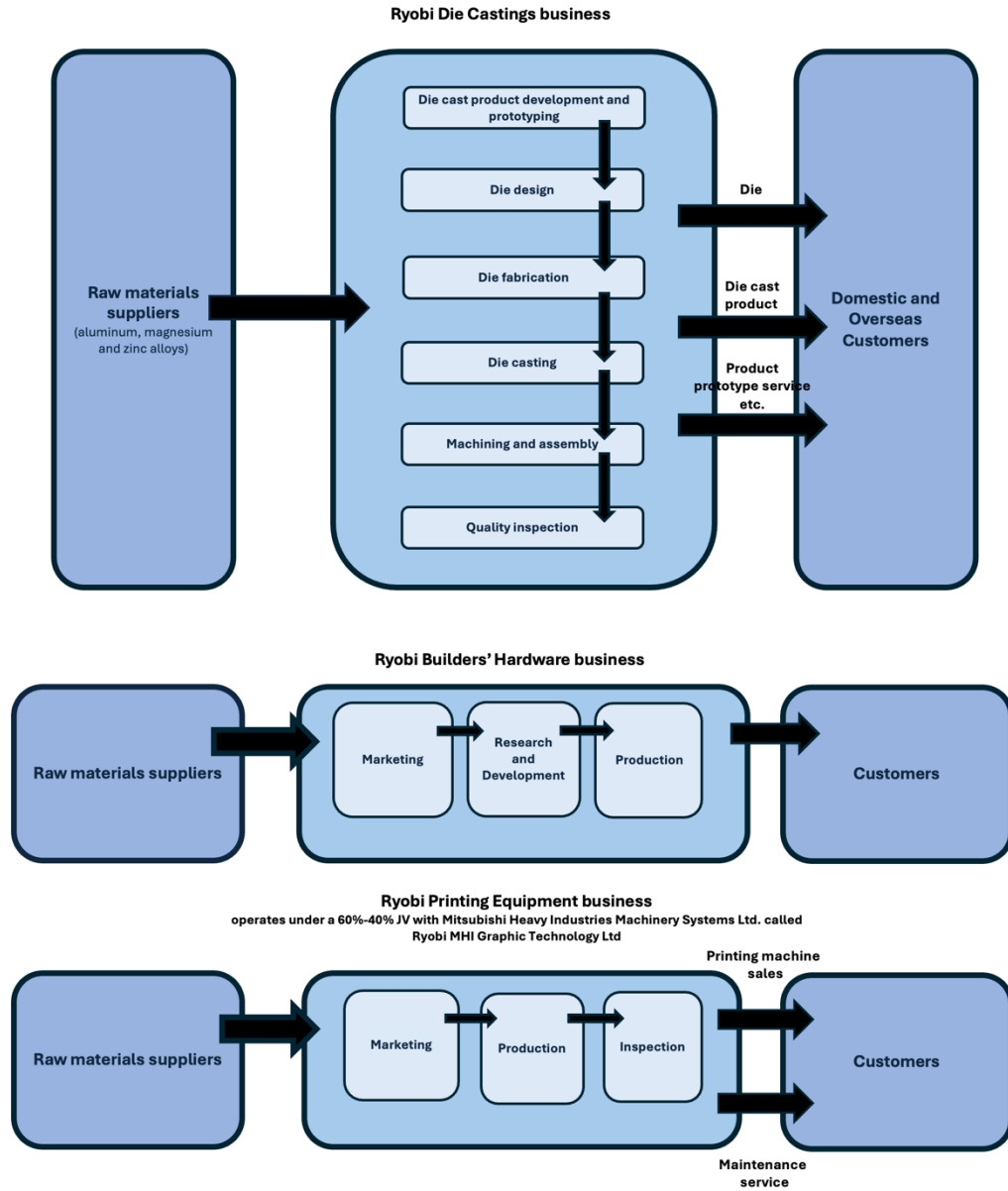
Route to market

Ryobi designs all its die-cast molds in Japan before they are delivered to manufacturing bases worldwide to be used to fulfil contracts with customers. Manufactured die-cast parts are then sent to the customer, such as OEMs and their group companies, parts makers, and battery makers for assembly into the vehicle.



Workflow

High-level workflow overview



Source: Company data



Revenue recognition

As a manufacturer, Ryobi's revenues are recognized based on fulfilling contracts with customers to produce a specific number of products over a specific period. The company applied the 'Accounting Standard for Revenue Recognition' as per the Accounting Standards Board of Japan [ASBJ] Statement No. 29, dated 31st of March 2020, from FY12/22. This means that revenue is recognized when contracted products have been transferred to the customer.

For the most part, this standard did not impact Ryobi's previous revenue recognition method of receiving payment upon receipt of goods. However, there were exceptions to this. For example, in the case that a customer supplies the raw materials, which Ryobi processes and then sells back to the customer, previously the sales amount included the material costs, but under the new standard, these expenses are now excluded, and only the net amount of the sales transaction is recognized.

Additionally, in the case that revenues from die-cast mold transactions were collected over a specific period, whereas it used to be recognized at several stages over that period, now it is recognized only at only one point.

The impact on FY12/22 was a decrease in sales vs the earlier accounting standard by ¥5.56bn while COGS decreased by ¥5.9bn, resulting an increase of OP by ¥300mn.



Competitive advantages

We believe Ryobi has the following competitive advantages:

Ryobi's various innovations give the company an edge against rivals

- **Centralized die design in Japan** - Ryobi prefers to retain the die design process at its Hiroshima headquarters to prevent technology leakage and guarantee design, and subsequent manufacturing accuracy. The initial manufacturing process of newly designed die-cast parts requires some tweaks before mass production can proceed. Keeping these initial stages in one place is a preventative measure that would save the company substantial costs in the event of a design or initial production flaw.
- **Adaptability** - Die-cast parts makers such as Ryobi used to predominantly produce engine blocks and transmission cases for ICE cars. Therefore, the shift away from fossil fuels was seen in a negative light for the sector. However, Ryobi has demonstrated considerable adaptability by developing lightweight aluminum body chassis and electrification parts to position itself as a clear beneficiary of the shift towards carbon neutrality in the world.
- **Can meet demand regardless of the vehicle type** - The recent slowdown in sales of BEVs is not negative for the company. On the contrary, the recent revival of PHEV and HEV vehicles is also good for Ryobi, as these vehicles require an even higher ratio of lightweight aluminum parts than BEVs. Therefore, regardless of the type of car in demand – ICE, BEV, PHEV, or HEV -, Ryobi is expecting opportunities to grow in its die-cast business.
- **Innovation** - Ryobi has developed several production techniques that not only improve manufacturing productivity but the products themselves as well. For example, GD Squeeze is a proprietary die-casting method that combines gravity casting with squeeze casting. It is particularly useful for producing thick-walled parts like knuckles used in suspensions, and which are difficult to manufacture using die casting. Such innovations are based on the company's strength in understanding the most suitable production method to meet product specifications and customer needs.
- **Productivity improvements** - Ryobi attempts to motivate its employees to seek out productivity enhancements daily, with activities, targets, and guidance from management. Moreover, the company is aiming to digitize tasks where possible, particularly examining which aspects of manufacturing and maintenance can be applied. In the casting process, the company is investing in automating processing and inspections where possible. Moreover, Ryobi has managed to halve the lead time to produce dies from its 2,500-ton class machine between FY3/14 and FY12/23 thanks to improvements it made in its manufacturing process.



ROIC

We believe ROIC is a key indicator of a company's ability to create value. Ryobi's ROIC has averaged 2.1% for the last 5 years but on an annual basis can be rather volatile. For example, in FY12/23 it reached 4.8% but in FY12/21 it fell to just -0.9%. The company's 10-year average is slightly lower than the 3.5% average of its domestic peer group and significantly lower than the 8.8% of its overseas peer group.

Ryobi does not have a target for ROIC. However, we believe ROIC will improve over the long term as the company incrementally improves margins and as it starts its gigacast machine product prototype service from FY12/25.



Peer group analysis

We have selected the following peers to assess Ryobi's returns and valuations:

- **Domestic companies** – we have selected various companies that 1) are also die-cast manufacturers producing high-precision parts for the auto industry; and 2) manufacturers of die-cast machines.
- **Overseas companies** – these are various manufacturers of die-cast products serving the auto industry, as well as making components and products for other industries.

This is a customized and limited peer group which may make meaningful comparisons difficult. However, we aim to gain insight into key metrics to assess performance and valuations.

We view the die-cast manufacturing industry as globally competitive both in terms of specialized producers and OEMs manufacturing in-house. It is a relatively capital-intensive business with innovation important to establish a competitive advantage.

Domestic companies

| Company | Description |
|------------------------------------|---|
| UBE Corporation | Die cast, injection mold and other machine maker and chemicals producer |
| Ahresty Corporation | Producer of die cast parts for the auto industry |
| STG CO.LTD. | Maker of magnesium and aluminum die casting products |
| Daiki Aluminium Industry Co., Ltd. | Aluminum recycler supplying auto industry and can makers |
| Shibaura Machine Co., Ltd. | Manufacturer of die casting, injection molding and other machines |
| Taiho Kogyo Co., Ltd. | Producer of aluminum die cast products, bearings and precision molds |

Source: Companies' websites, Bloomberg

Overseas companies

| Company | Description |
|------------------------------|--|
| Waffer Technology Corp. | Taiwan-based manufacturer of die cast and injection mold products for the auto industry |
| Georg Fischer AG | Switzerland-based manufacturer of die cast products for the auto industry and construction solutions |
| Nemak SAB de CV | Mexico-based manufacturer of die cast products for the auto industry |
| MARTINREA International Inc. | Canada-based manufacturer of die cast products for the auto industry |
| Magna International Inc. | Canada-based manufacturer of die cast products for the auto industry and other vehicle-related solutions |
| Rheinmetall AG | Germany based die-cast auto parts, vehicle systems and arms manufacturer |
| Endurance Technologies Ltd. | India-based die cast auto parts and other vehicle components manufacturer |
| Sandhar Technologies Ltd. | India-based die cast auto parts and other vehicle components manufacturer |
| Minda Corp. Ltd. | India-based die cast auto parts and other vehicle components manufacturer |

Source: Companies' websites, Bloomberg

These are our core findings:

- **Profitability** – Ryobi’s historic operating margins are slightly better than domestic peers but worse than its overseas peer group. The company’s LTM 10-year average OPM is 4.5% vs a 4.0% average for the domestic peer group and 7.9% for its overseas peer group. We believe this indicates the following:
 - Domestic die-cast companies might face more intense price negotiations with their domestic clients than overseas peers, which have little or no exposure to the Japanese market.
 - Ryobi’s efforts to improve manufacturing productivity and continuously innovate with new products and processes appear to give the company an edge over domestic peers. For example, it has nearly halved the lead time for die production using its 2,500-ton class machine at its Hiroshima East factory. Moreover, the new version of its proprietary vacuum exhaust valve technology (RSV) has resulted in increasing production yields and downsizing mold sizes.
 - Ryobi’s LTM ROE of 7.2% compares favorably with its domestic peer average of 5.3%. The drop in the company’s ROE from 9.1% in FY3/16 (when the company had a March fiscal year end) to a negative -3.7% in FY12/21 highlights two things. First, the company is very capable of delivering a higher ROE than its FY12/23’s 7.1%. Second, its negative ROE was due to the impact of the pandemic on Ryobi’s earnings rather than internal company profitability issues.
- **Valuations** –
 - On an EV/EBITDA basis, Ryobi’s shares look undervalued at 3.7x versus the domestic peer average of 5.3x and the overseas peer average of 10.7x, though these companies’ average OPM is higher.
 - Its EV/sales multiple of 0.4x is more or less in line with the domestic peer average of 0.5x and lower than the overseas average of 1.6x, indicating a relatively low market expectation for future growth.
- **4-year track record** – Ryobi’s track record indicates a business with sales and OP growth, but whose business is impacted by external shocks such as the pandemic. We expect the company to benefit from the global auto industry’s exit from fossil fuel vehicles going forward, but there is a limit to what the company can do to shield itself from unexpected global events. (Note: the 4-year track record rather than the 5-year is due to the company’s shift from a March to December year-end in 2018.)



Peer analysis of key profitability and valuation metrics

| Ticker | Company | Mkt Cap US\$(m) | Profitability | | | | Valuation | | | | | |
|---------------------------|--------------------------|--------------------|---------------|--------------------------|-------------|---------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------|------------|
| | | | OPM LTM (%) | OPM 10-yr average (%) | ROE LTM (%) | ROIC 10-yr average (%) | EV/EBITDA 12M Fwd (x) | EV/Sales 12M Fwd (x) | Div yield 12M Fwd (%) | FCF yield 12M Fwd (%) | PER 12M Fwd (x) | PBR (x) |
| 5851 JP | Ryobi Ltd | 456 | 4.5 | 3.2 | 7.2 | 2.9 | 3.7 | 0.4 | 3.8 | 11.4 | 8.0 | 0.4 |
| <i>Domestic companies</i> | | | | | | | | | | | | |
| 4208 JP | UBE | 1,692 | 4.8 | 5.3 | 7.4 | 4.1 | 7.9 | 0.9 | 4.0 | -13.7 | 8.9 | 0.7 |
| 5852 JP | Ahresty | 115 | 1.4 | 1.3 | -14.0 | 0.3 | 3.2 | 0.3 | 2.0 | 4.2 | 2.0 | 0.4 |
| 5858 JP | STG | 14 | 5.7 | 4.6 | 13.6 | 4.4 | 6.6 | 0.8 | 1.1 | 8.3 | 9.6 | 1.3 |
| 5702 JP | Daiki Aluminium Industry | 317 | 1.8 | 4.2 | 4.6 | 6.9 | 11.9 | 0.4 | 3.9 | 2.6 | 16.0 | 0.7 |
| 6104 JP | Shibaura Machine | 540 | 8.5 | 3.9 | 17.6 | 2.4 | 2.7 | 0.3 | 3.8 | 9.4 | 9.1 | 0.8 |
| 6470 JP | Taiho Kogyo | 145 | 2.1 | 3.4 | 2.5 | 2.9 | 2.7 | 0.2 | 2.5 | 5.9 | 13.3 | 0.3 |
| Simple Average | | 470.5 | 4.0 | 3.8 | 5.3 | 3.5 | 5.3 | 0.5 | 2.9 | 2.8 | 9.8 | 0.7 |
| <i>Overseas Companies</i> | | | | | | | | | | | | |
| 6235 TT | Waffer Technology | 560 | 15.2 | 0.6 | 21.3 | 0.6 | 14.4 | 3.1 | 1.8 | - | 7.5 | 4.6 |
| GF SW | Georg Fischer | 5,468 | 8.3 | 7.2 | 31.0 | 11.2 | 10.4 | 1.4 | 2.3 | 3.3 | 15.5 | -115.8 |
| NEMAKA MM | Nemak | 457 | 4.0 | 7.4 | 2.2 | 5.0 | 3.2 | 0.4 | 30.0 | - | 6.9 | 0.3 |
| MRE CN | MARTINREA International | 645 | 5.6 | 5.1 | 10.1 | 7.5 | 3.0 | 0.4 | 1.8 | 14.4 | 4.5 | 0.6 |
| MG CN | Magna International | 12,188 | 4.7 | 6.1 | 8.9 | 11.9 | 4.4 | 0.4 | 4.5 | 9.4 | 6.8 | 1.1 |
| RHM GR | Rheinmetall | 22,473 | 11.8 | 6.7 | 18.8 | 10.8 | 11.6 | 2.2 | 1.8 | 3.1 | 20.3 | 6.7 |
| ENDU IN | Endurance Technologies | 4,581 | 8.3 | 7.8 | 14.5 | 13.9 | 22.0 | 3.1 | 0.4 | 1.6 | 40.8 | 8.4 |
| SANDHAR IN | Sandhar Technologies | 438 | 5.3 | 5.7 | 11.3 | 8.7 | 9.6 | 1.0 | 0.3 | - | 21.9 | 3.7 |
| MDA IN | Minda | 1,423.1 | 7.5 | 6.0 | 12.7 | 9.5 | 18.0 | 2.1 | 0.4 | - | 27.8 | 6.3 |
| Simple Average | | 6,029.1 | 7.9 | 5.8 | 14.5 | 8.8 | 10.7 | 1.6 | 4.8 | 6.4 | 16.9 | 4.0 |

Source: FactSet, Bloomberg, Astris Advisory

Notes: 1. If the 10-year average is unavailable, we have chosen the longest track record available 2. The average calculated omits major outliers



Peer analysis of track record – growth (4-year CAGR)

| Stock | Name | Growth 4-year CAGR (%) | | | | | | Total assets growth | 5-year delta | | | |
|-----------------------|--------------------------|------------------------|--------------|--------------|--------------|-------------|--------------|---------------------|--------------------|--------------|--------------|--|
| | | Sales | EBIT | Net Income | EPS | BPS | Chg. in GPM | | Chg. in FCF margin | Chg. in ROE | Chg. in ROA | |
| 5851 JP | Ryobi Limited | 6.41 | 12.78 | 19.79 | 19.79 | 5.85 | 4.91 | -2.40 | 0.28 | -3.58 | -1.24 | |
| <i>Domestic</i> | | | | | | | | | | | | |
| 4208 JP | UBE | -8.50 | 3.61 | 5.98 | 7.05 | 6.34 | 2.06 | 0.75 | 3.64 | -2.54 | -0.57 | |
| 5852 JP | Ahresty | 7.03 | - | - | - | -2.35 | 1.72 | -1.46 | 2.93 | -14.89 | -6.04 | |
| 5858 JP | STG | 20.99 | 15.65 | 5.55 | 1.03 | 15.38 | 32.72 | -4.70 | -4.25 | -33.46 | -6.50 | |
| 5702 JP | Daiki Aluminium Industry | 13.36 | -6.42 | -12.71 | -12.70 | 16.84 | 13.61 | -2.63 | -5.20 | -10.79 | -3.07 | |
| 6104 JP | Shibaura Machine | 8.30 | 19.00 | 25.01 | 24.97 | 6.41 | 13.18 | 3.76 | 6.65 | 12.89 | 5.10 | |
| 6470 JP | Taiho Kogyo | 1.84 | 15.69 | 15.21 | 15.38 | 3.67 | 2.96 | -2.30 | 2.82 | -1.56 | -0.83 | |
| Simple Average | | 7.17 | 9.50 | 7.81 | 7.15 | 7.71 | 11.04 | -1.09 | 1.10 | -8.39 | -1.99 | |
| <i>Overseas</i> | | | | | | | | | | | | |
| 6235 TT | Waffer Technology | 27.46 | 13.24 | 7.29 | 3.55 | 19.66 | 20.95 | 10.31 | 5.92 | 14.62 | 7.28 | |
| GF SW | Georg Fischer | 2.00 | 11.35 | 7.96 | 7.93 | - | 5.24 | 2.08 | 0.17 | 9.34 | -1.94 | |
| NEMAKA MM | Nemak | 3.44 | 18.66 | -58.00 | -57.88 | -2.74 | 1.25 | -4.34 | -9.13 | -9.05 | -3.57 | |
| MRE CN | MARTINREA International | 8.43 | 1.48 | -4.04 | -3.18 | 5.42 | 6.56 | -2.40 | 4.38 | -6.81 | -3.04 | |
| MG CN | Magna International | 2.50 | -3.29 | -8.56 | -6.40 | 4.24 | 6.19 | -1.13 | -3.66 | -10.03 | -4.75 | |
| RHM GR | Rheinmetall | 3.49 | 15.64 | 14.66 | 12.19 | 11.55 | 12.66 | 3.56 | 4.97 | 2.70 | 0.98 | |
| ENDU IN | Endurance Technologies | 10.76 | 5.31 | 4.73 | 4.74 | - | 11.68 | 14.32 | -0.31 | -6.40 | -1.58 | |
| SANDHAR IN | Sandhar Technologies | 16.02 | 16.33 | 17.86 | 17.99 | - | 15.34 | 9.36 | 0.76 | -2.72 | -1.42 | |
| MDA IN | Minda | 20.36 | 15.63 | 13.77 | 60.50 | - | 10.24 | 4.95 | -1.80 | -4.76 | -0.68 | |
| Simple Average | | 10.49 | 6.33 | -0.48 | 4.38 | 7.63 | 10.01 | 4.08 | 0.14 | -1.46 | -0.97 | |

Source: FactSet. Bloomberg

Note: 4-year CAGR instead of 5-year due to Ryobi's fiscal year-end change to December from March in 2018, leaving no base year to make a like-for-like comparison



Balance sheet

Our peer group displays mostly similar characteristics to Ryobi when comparing balance sheets. Ryobi's liquidity ratio of 1.3x is slightly lower than the 1.6x for its domestic peer group and slightly higher than the 1.2x for its overseas peer group. However, the divergence is minimal, and Ryobi's ratio is not particularly low.

Although Ryobi has been borrowing to help fund growth (it has ¥46.2bn in short-term borrowings and long-term borrowing maturing within a year and ¥24.0bn in long-term debt), it has a low net debt/equity ratio of 0.3x, slightly below the average of both domestic peers at 0.4x and 0.5x of overseas peers.

Other key findings are as follows:

- Ryobi's asset turnover ratio of 0.9x is slightly lower than domestic peers at 1.1x and 1.2x for overseas peers. This suggests that there is room for improving the utilization of its assets to further raise sales.
- Ryobi has a substantially shorter cash cycle of 93.6 days compared to its domestic peer group at 131.8 days. This is likely partly due to the efforts that Ryobi has made to halve the lead time for a die cast in its 2,500-ton class machine at its Hiroshima East factory over nine years. The figure is higher than overseas peers at 65.1 days. This may be due to Ryobi's preference to keep its die-cast design in Japan, which could impact the cash cycle for overseas contracts.

Liquidity, Leverage, and capital efficiency

| Company | Liquidity | | Leverage | | | | | Efficiency | | |
|--------------------------|-------------------|-----------------|------------------------|------------------------|--------------------|---------------------------|------------------|--------------------|------------------------|-------------------|
| | Current ratio (x) | Quick ratio (x) | Net debt to equity (x) | Net debt to EBITDA (x) | Interest cover (x) | Total debt to capital (%) | Equity ratio (%) | Asset turnover (x) | Inventory turnover (x) | Cash cycle (days) |
| Ryobi | 1.3 | 0.8 | 0.3 | 1.3 | 21.5 | 30.0 | 49.1 | 0.9 | 4.3 | 93.6 |
| Domestic | | | | | | | | | | |
| UBE | 1.5 | 0.8 | 0.5 | 4.2 | 47.2 | 37.4 | 51.8 | 0.6 | 2.9 | 146.8 |
| Ahresty | 1.0 | 0.8 | 0.6 | 1.9 | 20.7 | 44.4 | 39.2 | 1.2 | 9.5 | 57.1 |
| STG | 1.4 | 0.9 | 1.2 | 3.2 | 9.4 | 64.2 | 29.0 | 1.0 | 4.2 | 110.3 |
| Daiki Aluminium Industry | 1.9 | 1.2 | 0.6 | 5.0 | 6.7 | 40.3 | 51.5 | 1.9 | 6.3 | 115.4 |
| Shibaura Machine | 1.6 | 0.8 | -0.4 | -2.5 | 79.9 | 9.6 | 44.1 | 0.7 | 1.2 | 274.4 |
| Taiho Kogyo | 2.3 | 1.7 | 0.0 | 0.2 | 82.3 | 23.9 | 60.3 | 1.0 | 5.9 | 86.5 |
| Simple Average | 1.6 | 1.0 | 0.4 | 2.0 | 41.0 | 36.6 | 46.0 | 1.1 | 5.0 | 131.8 |
| Overseas | | | | | | | | | | |
| Waffer Technology | 1.0 | 0.8 | 0.2 | 0.6 | 36.4 | 30.0 | 43.5 | 0.8 | 4.6 | 91.6 |
| Georg Fischer | 1.7 | 1.1 | -42.7 | 4.1 | 7.9 | 101.8 | -1.1 | 1.0 | 3.4 | 120.6 |
| Nemak | 0.9 | 0.5 | 0.9 | 2.8 | 4.2 | 52.1 | 32.2 | 0.9 | 5.0 | 23.0 |
| MARTINREA International | 1.2 | 0.8 | 0.7 | 1.8 | 7.7 | 45.8 | 36.9 | 1.3 | 7.6 | 0.4 |
| Magna International | 1.1 | 0.8 | 0.6 | 1.7 | 20.1 | 40.8 | 35.3 | 1.4 | 8.9 | 34.1 |
| Rheinmetall | 1.3 | 0.6 | 0.4 | 1.1 | 10.7 | 34.8 | 28.9 | 0.7 | 2.2 | 231.8 |
| Endurance Technologies | 1.7 | 1.3 | -0.1 | -0.4 | 31.1 | 13.3 | 63.1 | 1.4 | 8.5 | 13.4 |
| Sandhar Technologies | 0.9 | 0.6 | 0.7 | 2.0 | 6.6 | 42.2 | 41.9 | 1.5 | 8.7 | 26.7 |
| Minda | 1.8 | 1.3 | 0.0 | 0.1 | 9.2 | 21.3 | 57.6 | 1.4 | 6.7 | 44.6 |
| Simple Average | 1.3 | 0.8 | 0.5 | 1.5 | 14.9 | 42.4 | 37.6 | 1.2 | 6.2 | 65.1 |

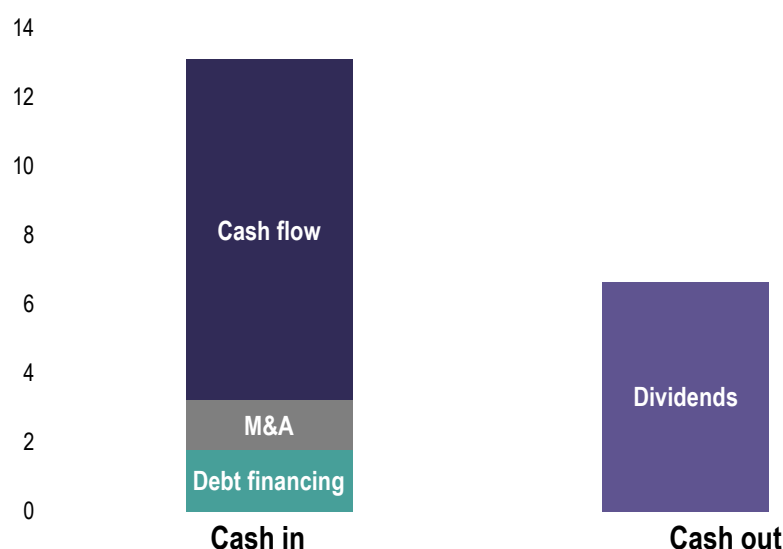
Source: Refinitiv, FactSet

Capital allocation

Ryobi’s capital investments in its factories, M&A including the acquisition of a plant, and product innovations have generated free cash flow of ¥9.88bn over the past five years to FY12/23, a level that would likely have been even higher without the negative impact of the pandemic. Our FCF definition is cash flow from operating activities less expenditures for acquisitions of tangible and intangible fixed assets. The company has been funding business expansion via cash flow and debt financing whilst allocating the equivalent of around half of the capital inflows to shareholder returns in the form of dividends.

Free cash flow has funded expansion and shareholder returns

5-year cumulative capital generation and allocation (¥bn, FY12/19 – FY12/23)



Source: Company data

- Positive free cash flow generation** – Ryobi has been relatively consistent in generating FCF in the past decade, with eight out of the 10 years positive. The company recorded negative FCF in FY12/20 due to the impact of the pandemic, while FCF was slightly negative in FY12/22 before making a strong recovery in FY12/23.
- M&A** – The company has not often used M&A for expansion in the past. Most recently, it acquired Fuji Kogyo Co., Ltd. In 2018, Ryobi acquired Asahi Tech Aluminium, which is now renamed Ryobi’s Kikugawa plant. The company is open to M&A in the future, should a suitable candidate emerge, but has no specific target in mind. M&A is positive cash-in, due to the sale of stakes in affiliated companies.
- Shareholder returns** – Ryobi has a goal of achieving a 30% dividend payout ratio every year. It didn’t achieve that in FY12/21 as it fell into the red due to the pandemic. However, it recovered the ratio to 30.4% in FY12/22 and in FY12/23 came in slightly below the goal at 25.6%. We anticipate that the company will announce a more comprehensive shareholder returns policy when it publishes a medium-term management plan in early FY12/25. Considering Ryobi’s investment



needs for future growth, we expect that the policy will incorporate flexible buyback guidelines rather than increasing its dividend payout ratio.



Recent results

FY12/24 Q1-3 results

Slowdown in the global auto output recovery hit Q3 earnings, hurting Q1-3 results

Key financials

| (¥bn) | FY12/23 Q1-3 | FY12/24 Q1-3 | Growth YoY (%) | FY12/24 revised guidance | Growth YoY (%) |
|---------------------------------------|-----------------|-----------------|-------------------|--------------------------------|-------------------|
| Sales | 203.22 | 215.22 | +5.9 | 292.00 | +3.3 |
| Gross profit/(loss) | 24.74 | 23.99 | -3.0 | | |
| Gross margins (%) | 12.2 | 11.1 | | | |
| Operating profit/(loss) | 8.47 | 6.06 | -28.5 | 8.5 | -30.4 |
| Operating margins (%) | 4.2 | 2.8 | | 2.9 | |
| Ordinary profit | 9.95 | 7.25 | -27.1 | 9.50 | -31.5 |
| Net income attributable to the parent | 7.10 | 5.51 | -22.4 | 7.00 | -30.8 |

Source: Company

The weak yen helped sales rise despite a slowdown in the auto production recovery; but costs rose

| Sales by segment (¥bn) | FY12/23 Q1-3 | FY12/24 Q1-3 | Growth YoY (%) | FY12/24 revised guidance | Growth YoY (%) |
|---------------------------|-----------------|-----------------|-------------------|--------------------------------|-------------------|
| Die Castings | | | | | |
| Sales | 178.22 | 190.48 | +6.9 | 256.50 | +3.6 |
| OP | 7.70 | 6.15 | -20.2 | 8.00 | -2.9 |
| OPM (%) | 4.3 | 3.2 | | 3.1 | |
| Builders' Hardware | | | | | |
| Sales | 7.82 | 7.96 | +1.8 | 10.50 | -3.0 |
| OP | 0.15 | (0.31) | N/A | 0.00 | N/A |
| OPM (%) | 1.9 | -3.9 | | N/A | |
| Printing Equipment | | | | | |
| Sales | 17.02 | 16.61 | -2.4 | 25.00 | +3.8 |
| OP | 0.63 | 0.24 | -62.5 | 0.50 | -56.0 |
| OPM (%) | 3.7 | 1.4 | | 2.0 | |

Source: Company

Key highlights

- **Sales and OP impact in FY12/24 Q1-3** - Ryobi's FY12/24 Q1-3 sales rose +5.9% YoY to ¥215.22bn, while OP fell 28.5% YoY to ¥6.06bn. While sales benefited from the weak yen, OP suffered amid rising costs, including labor.

After a relatively strong H1, where slower demand for BEVs globally and a prolonged decline in Chinese auto production was more than covered by demand for PHEVs and HEVs elsewhere, Q3 alone revealed a slowdown in the auto production recovery in its bigger markets of Japan, the Americas and Europe. In Q3 alone, sales were ¥70.58bn (-3.8% YoY) and OP was ¥0.86bn (-76.2% YoY).

Moreover, Builders' hardware OP fell into the red amid increasing procurement costs from China, due to the weak yen, and in spite of productivity improvement and expenditure reduction efforts.

Finally, in the Printing equipment segment, while the company benefited in Q1-2 from government subsidies to promote capital investment, it secured almost all its



OP in Q1 alone as in Q2 it faced a temporary increase in costs from exhibition expenses and has faced rising raw material costs since Q2.

The yen weakened against all key currencies during FY12/24 Q1-3 vs the year-earlier period

| Currency | FY12/23 Q1-3 | FY12/24 Q1-3 |
|----------|--------------|--------------|
| USD | ¥137.69 | ¥151.59 |
| GBP | ¥171.15 | ¥192.81 |
| CNY | ¥19.58 | ¥21.00 |
| THB | ¥3.99 | ¥4.23 |

Source: Company

The yen is weaker than Ryobi's currency assumptions

| Currency | FY12/24 Q1-3 (average) | FY12/24 Q1-4 (company forecast) |
|----------|---------------------------|------------------------------------|
| USD | ¥151.59 | ¥145.0 |
| GBP | ¥192.81 | ¥190.0 |
| CNY | ¥21.00 | ¥20.50 |
| THB | ¥4.23 | ¥4.00 |

Source: Company

- **Company revised down full-year forecasts** - With Ryobi expecting the recovery in auto production to remain slow through Q4, it reduced its full-year forecasts and is now guiding for sales of ¥292bn (+3.3 % YoY) vs its earlier estimate of ¥305bn, which would have marked a record for Ryobi generating more than ¥300bn in sales for the first time. OP was revised down to ¥8.50bn (-30.4% YoY) vs an earlier forecast of ¥13bn. That takes the OP margin forecast down to 2.9% from the previous forecast of 4.3%. Ryobi is taking measures to reduce fixed costs as it tries to limit the impact of slower auto production on profitability. The company maintained its FY12/24 forex forecasts despite the yen trading weaker than its forecasts across Ryobi's four key currencies Q1-3.

Ryobi revised down full-year forecasts amid a slowing recovery for auto production

Ryobi revised down both its full-year sales and operating profit forecasts

| (¥bn) | FY12/23 results | FY12/24 old forecast (Feb 2024) | FY12/24 revised guidance (Nov 2024) | Growth YoY (%) |
|---------------------------------------|--------------------|---------------------------------------|---|-------------------|
| Sales | 282.69 | 305.00 | 292.00 | +3.3 |
| Gross profit/(loss) | | | | |
| Gross margins (%) | | | | |
| Operating profit/(loss) | 12.21 | 13.00 | 8.50 | -30.4 |
| Operating margins (%) | 4.3 | 4.3 | 2.9 | |
| Ordinary profit | 13.86 | 12.80 | 9.50 | -31.5 |
| Net income attributable to the parent | 10.12 | 9.00 | 7.00 | -30.8 |

Source: Company

Most of the downward revision was due to the impact of the Die Castings segment. However, it did also reduce its sales forecast for Builders' Hardware and now expects the segment to only breakeven, instead of earning ¥0.3bn in OP. It reduced its sales forecast for Printing Equipment but is managing to keep costs under control to maintain its OP forecast for the segment.

Ryobi reduces sales forecasts across all segments and OP in Die Castings and Builders' Hardware

| Sales by segment (¥bn) | FY12/23 Results | FY12/24 Old forecast (Feb 2024) | FY12/24 New forecast (Nov 2024) | Growth YoY (%) (New forecast) |
|---------------------------|-----------------|---------------------------------------|---------------------------------------|-------------------------------------|
| Die Castings | | | | |
| Sales | 247.55 | 267.70 | 256.50 | +3.6 |
| OP | 10.92 | 12.20 | 8.00 | -26.7 |
| OPM (%) | 4.4 | 4.6 | 3.1 | |
| Builders' Hardware | | | | |
| Sales | 10.82 | 11.00 | 10.50 | -3.0 |
| OP | 0.17 | 0.30 | 0.00 | -100.0 |
| OPM (%) | 1.6 | 2.7 | N/A | |
| Printing Equipment | | | | |
| Sales | 24.09 | 26.30 | 25.00 | +3.8 |
| OP | 1.14 | 0.50 | 0.50 | -56.0 |
| OPM (%) | 4.7 | 1.9 | 2.0 | |

Source: Company

- In its FY12/24 Q1-2 presentation, when Ryobi was starting to see slower than expected auto production growth in Japan and Thailand, and falling sales at some automakers in China was already impacting the company, Ryobi revised down sales forecasts for these three markets. However, at that time production growth in the Americas and the UK was better than the company had forecast. That outperformance was enough to make up for the downward revisions elsewhere. As a result, Ryobi maintained its overall Die Castings segment sales forecast at the end of Q2. Despite the downward revision at its Q1-3 earnings, Ryobi did not disclose any revised forecasts for regional sales.

A reduction in Die Castings regional sales forecasts was not disclosed despite the company's downward revision. The most recent forecast is from August 2024

| Region | FY12/24 original forecast (Announced Feb 2024) (¥bn) | FY12/24 most recent forecast (Announced Aug 2024) (¥bn) |
|--------------|---|--|
| Japan | 109.5 | 101.7 |
| Americas | 82.7 | 90.0 |
| UK | 19.1 | 23.0 |
| China | 46.0 | 43.0 |
| Thailand | 10.4 | 10.0 |
| Total | 267.7 | 267.7 |

Source: Company data



Medium-term targets

Targets

The company does not have a medium-term management plan. However, it plans to disclose one in February 2025. The medium-term management plan (FY12/25 - FY12/27) will focus on strengthening the company's foundations as a base to realize its vision through to FY12/35. This focus will incorporate:

- **Improving ROE via strengthening profitability, improving the asset turnover ratio and other financial metrics.** This will include continued investments in growth areas, predominantly strategic products alongside increasing production, reducing cross-shareholdings, and revising its shareholder returns policy, including the incorporation of flexible buybacks.
- **Improving PER via strengthening its IR activities and reducing the cost of capital.** This will include disclosing KPIs and explaining management's vision clearly, expanding the stock's inclusion in ESG indexes, discussing whether to introduce a stock compensation scheme and enhancing disclosure to the capital markets, including through the publication of research reports.

Right now, the company is keenly aware of the importance of taking measures to nudge its PBR closer to 1x. Ryobi does have a few existing targets. They are:

- To increase sales of strategic products to 43% in FY12/27 from 17.4% in FY12/23.
- To improve operating margins. Its OPM was 4.3% in FY12/23 and is forecast to fall to about 3% in FY12/24. However, the company is aiming for a recovery to the 4% range within the earliest timeframe possible and then target further improvement.
- To review its annual dividend payout ratio (which currently stands as 30%), conduct flexible share buybacks and review other shareholder return forecasts.

Shareholder returns

The company is expected to announce a more comprehensive plan for enhancing shareholder returns in February 2025, as part of its medium-term management plan. Its existing dividend payout ratio target is 30%, a level it met in FY12/22 at 30.4% but fell short of in FY12/23 at 25.6%. Capital expenditures and R&D are unavoidable for a company that depends on innovation and production expansion to raise corporate value. Therefore, to balance investments for future growth and shareholder returns, the new medium-term management plan is expected to incorporate flexible share buybacks. For FY12/24, Ryobi increased its dividend forecast at its Q1-2 FY12/24 results announcement to ¥85 a share from ¥80.

M&A

Ryobi has made the occasional acquisition in the past. It recently acquired Fuji Kogyo. In 2018, the company acquired Asahi Tech Aluminium, which has since been renamed as its Kikugawa plant, which produces die-cast auto products. Given the company is expecting demand to increase in the future, M&A is an option.



Astris earnings estimates and key assumptions

Astris' key earnings forecasts are as follows:

Astris Advisory earnings estimates

| Year-end | FY12/24 Guidance | FY12/24E | FY12/25E | FY12/26E |
|----------------------|---------------------|---------------|---------------|---------------|
| Sales (¥bn) | 292.00 | 292.61 | 304.57 | 322.73 |
| Growth YoY (%) | +3.3 | +3.5 | +4.1 | +6.0 |
| OP (¥bn) | 8.50 | 8.18 | 10.23 | 13.50 |
| OPM (%) | 2.9 | 2.8 | 3.4 | 4.2 |
| EBITDA (¥bn) | | 27.32 | 30.15 | 34.61 |
| EBITDA margins (%) | | 9.3 | 9.9 | 10.7 |
| FCF (¥bn) | | 11.57 | 7.97 | 10.40 |
| FCF margin (%) | | 4.0 | 2.6 | 3.2 |
| FCF conversion (%) | | 124.3 | 70.2 | 71.2 |
| FCF yield (%) | | 16.5 | 11.4 | 14.8 |

Source: Astris Advisory

Note: FCF definition is cash flow from operating activities less expenditures for acquisitions of tangible and intangible fixed assets.

The core assumptions of our estimates are as follows:

- **Sales growth** – During FY12/24 Q1-2, demand for PHEVs and HEVs, which require larger volumes of aluminum die-cast products, was more than making up for slower demand in general for BEVs and production delays in China. However, Q3 showed that the auto production recovery is now slowing more than Ryobi had forecast, and the impact was being felt across all of its regions. Vehicle inventories are rising, according to JD Power, and uncertainties over the pace of the take-up of BEVs is growing.

This is particularly relevant in the US where there is a risk that emission rules proposed under the current administration, aimed at accelerating the shift to BEVs in the market, could be rolled back once President Donald Trump takes office. We are therefore erring on the side of caution with our estimates for FY12/24 and FY12/25, incorporating downside risk of a slowdown in the adoption of BEVs, even though we expect sales to rise still.

In terms of upside risk, the yen has continued to fall against Ryobi's key currency forecasts as it enters into mid Q4. The company has maintained its exchange rates forecasts and therefore overseas sales should continue to benefit.

However, in FY12/26, potential momentum starting to build from the anticipated FY12/25 launch of its prototype service of gigacast parts in Japan, we expect sales growth to reaccelerate.

- **Profitability** – Increasing fixed costs are eating into OP margins in FY12/24. Ryobi is facing depreciation costs from its capital outlays from its gigacasting machine investment at home starting in FY12/25. However, a combination of sales growth and a potentially slower rise in costs should help improve margins in FY12/25 YoY.

We expect margins to improve further in FY12/26 as sales growth also improves from the launch of its gigacasting prototype service.

- **Sustainable free cash flow generation** – Although the company needs to make capital expenditures, we expect Ryobi to be able to generate sustainable FCF.



Company information

Management (10 members: 10% female ratio, 60% outside directors. As of December 2023)

| | |
|---|--|
| President, Representative Director and CEO | Akira Urakami |
| Shareholding (no of shares in thousands) | 56 |
| Career history | |
| April 1989 | Joins Ryobi Ltd. |
| June 2003 | Operating officer and Manager of the Building Hardware Division |
| November 2004 | Operating officer, Deputy General Manager of the Die Castings Division, Planning and Management Department Manager, and Market Development Manager |
| June 2005 | Company Director |
| June 2007 | President and Representative Director of subsidiary Ryobi Imagix Co. |
| June 2011 | President and Representative Director of the Company. |

| | |
|--|---|
| Outside Director | Satoshi Ohka |
| Shareholding (no of shares in thousands) | 4 |
| Career history | |
| April 1975 | Joins Japan Development Bank (currently Development Bank of Japan, or DBJ) |
| May 2002 | Executive Advisor of DBJ |
| April 2003 | Professor at Nihon University, Lecturer at Keio University, Lecturer at Chuo University Graduate School |
| June 2003 | Joins Ryobi Ltd. as an outside auditor |
| June 2006 | Outside director of the Company (current position) |
| June 2012 | Outside Director of LINTEC Corp.. |

| | |
|--|---|
| Outside Director | Masahiko Ikaga |
| Shareholding (no of shares in thousands) | 2 |
| Career history | |
| October 1979 | Joined Tohmatsu Aoki Audit Corp. (currently Deloitte Touche Tohmatsu LLC.) |
| May 1988 | Director of Tohmatsu Touche Ross Consulting Co., Ltd. (currently ABeam Consulting Ltd.) |
| May 1990 | Partner at Tohmatsu Aoki Audit |
| April 1993 | Director of Tohmatsu Consulting Co., Ltd. (currently Deloitte Tohmatsu Consulting LLC.) |
| March 2000 | President and Representative Director of Tohmatsu Consulting |
| October 2010 | Chairman of Tohmatsu Consulting |
| November 2013 | CSO (Chief Strategy Officer) of Deloitte Touche Tohmatsu LLC. |
| April 2016 | Founded and Representative Director of Masahiko Ikaga Certified Public Accountant Office (current position) |
| May 2016 | Representative Director of Prajna Link Co., Ltd. (current position) |
| June 2016 | External Auditor of Morinaga Milk Industry Co., Ltd. (current position) |
| March 2017 | External Auditor of Yamaha Motor Co., Ltd. |
| June 2017 | Outside Director of Ryobi Ltd. (current position) |
| June 2022 | Outside Auditor of Santen Pharmaceutical Co., Ltd. (current position). |

| | |
|--|---|
| Outside Director | Mami Ito |
| Shareholding (no of shares in thousands) | 0 |
| Career history | |
| March 2000 | Representative Director Nihon Dento Kougyo Co., Ltd. (current position) |
| April 2012 | President and Representative Director of Nihon Accessory Co., Ltd. (current position) |
| July 2012 | President and Representative Director Julico Co., Ltd. (current position) |
| May 2015 | Vice Chairman of the Saitama Prefecture Entrepreneurs Association (current position) |
| June 2020 | Outside Director of Kimoto Co., Ltd. (current position) |
| April 2021 | Vice Representative Director of Nadeshiko General Incorporated Association (current position) |
| May 2021 | Chairman of the Saitama Prefecture Electroplating Industry Association (current position) |
| March 2023 | Outside Director of Ryobi Ltd. (current position) |
| June 2023 | Outside Director of Mandom Corp. (current position). |
| Director | Kazuhiko Fujii |
| Shareholding (no of shares in thousands) | 4 |
| Career history | |
| April 1988 | Joins Ryobi Ltd. |
| May 2019 | Executive Officer and General Manager of Die Castings Planning and Development Division |
| January 2021 | Executive Officer and General Manager of the Corporate Planning Division (current position) |
| March 2024 | Director of the Company. |
| Director | Hideki Tanifuji |
| Shareholding (no of shares in thousands) | 5 |
| Career history | |
| April 1985 | Joins Ryobi Ltd. |
| November 2014 | Senior Vice President of Ryobi Die Castings (USA) Inc. (secondment) |
| May 2019 | Executive Officer and General Manager of the Die Castings Mold Division of Ryobi Ltd. |
| May 2022 | Executive Officer and General Manager of the Die Castings Planning and Development Division (current position) |
| January 2024 | Ryobi (Shanghai) Trading Co., Ltd (current position) |
| March 2024 | Director of Ryobi Ltd. (current position), Chairman of Ryobi Die Castings (Dalian) Co., Ltd. (current position), and Chairman of Ryobi Die Castings (Changzhou) Co., Ltd. (current position). |
| Outside Director | Yoichi Arai |
| Shareholding (no of shares in thousands) | 1 |
| Career History | |
| April 1977 | Yoichi Arai Law Office (currently Arai Sogo Law Office) (current position) |
| January 1990 | Outside Auditor of Zuken Inc. |
| June 2012 | Outside auditor of Ryobi Ltd. |
| June 2016 | Outside Director of Zuken (current position) |
| March 2024 | Outside director of Ryobi. |

| Full-Time Auditor | Takashi Suzuki |
|--|--|
| Shareholding (no of shares in thousands) | 16 |
| Career history | |
| September 1985 | Joins Ryobi Ltd. |
| May 2005 | General Manager of Builders' Hardware Division's Building Equipment Department |
| June 2008 | Executive Officer and General Manager of Builders' Hardware Division's Building Equipment |
| November 2012 | Executive Officer, Manager of the Company's Tokyo branch and General Manager of Builders' Hardware Division's Building Equipment |
| January 2015 | Executive Officer, Manager of the Company's Tokyo branch and General Manager of Builders' Hardware Division |
| June 2016 | Director of the Company |
| May 2020 | Executive Officer, Manager of the Company's Tokyo branch and General Manager of Builders' Hardware Division's Building Equipment |
| May 2021 | Executive Officer, Manager of the Company's Tokyo branch and General Manager of Builders' Hardware Division |
| March 2022 | Full-time Audit & Supervisory Board Member of the Company (current position) |
| Outside Auditor | Takashi Hatagawa |
| Shareholding (no of shares in thousands) | 2 |
| Career History | |
| April 1977 | Joins Bank of Japan |
| May 1994 | Examination Bureau Investigator of the BoJ |
| August 1996 | Principal at AT Kearney |
| April 2004 | Director and Managing Executive Officer of Daiwa Life Insurance Co., Ltd. |
| April 2006 | Chairman and Representative Director of American Appraisal Japan |
| May 2012 | Senior Advisor to Oliver Wyman Group |
| May 2014 | Representative Director of Riverfield Corp. |
| June 2015 | Outside auditor of Ryobi Ltd. |
| Outside Auditor | Takashi Hirano |
| Shareholding (no of shares in thousands) | 0 |
| Career History | |
| August 1990 | Joined Blakemore Law Office |
| January 1991 | Partner at Blakemore Law Office (current position) |
| April 2000 | Joined Microsoft Asia Ltd. |
| September 2003 | Executive Officer, and General Manager of the Legal and Policy Planning Division, Microsoft KK |
| June 2006 | Director of the Computer Software Association of Japan |
| January 2008 | Outside auditor of Morpho Inc. |
| June 2019 | Outside auditor of FALTEC Co., Ltd. |
| March 2024 | Outside auditor of Ryobi Ltd. |

Source: Compa

Contact details

Address

Ryobi Ltd.
762 Mesaki-cho,
Fuchu, Hiroshima
726-8628 Japan

IR Contact:

Tel: +81 (0)847 41-1111

Source: Company

Shareholder details (as of December 2023)

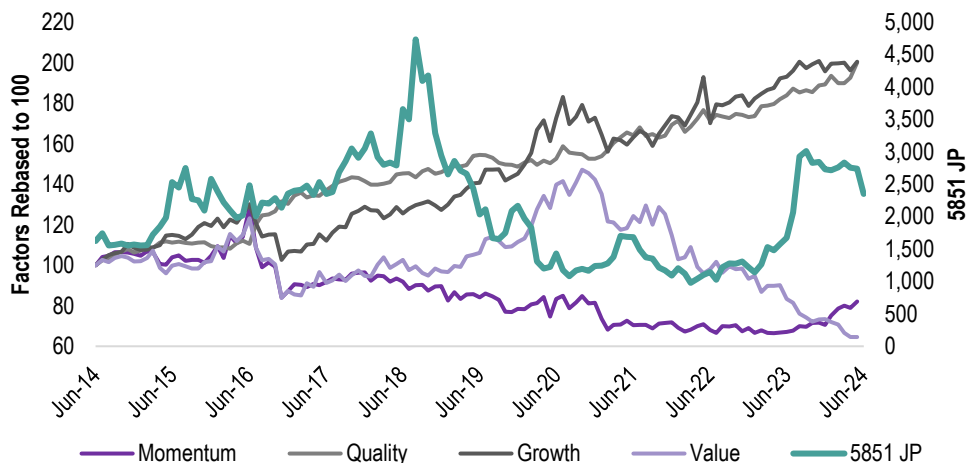
| Major shareholders | Stake (%) |
|--|-----------|
| The Master Trust Bank of Japan, Ltd. (trust account) | 9.69 |
| Mitsubishi Employees' Stock Ownership Association | 6.47 |
| Meiji Yasuda Life Insurance Co. | 5.74 |
| Custody Bank of Japan Ltd. (trust account) | 5.07 |
| Dai-ichi Life Holdings Inc. | 4.98 |
| Credit Suisse AG Hong Kong Trust A/C Client | 4.22 |
| Nippon Life Insurance Co. | 3.85 |
| The Urakami Scholarship Foundation | 3.58 |
| Mitsubishi UFJ Financial Group | 3.22 |
| Sumitomo Mitsui Trust Bank Ltd. | 2.16 |

Source: Company



Astris Quant Sheet

Share price chart and factor analysis (from March 2014)



Source: FactSet

| Factors | 2 Year Corr | 5 Year Corr | 10 Year Corr |
|--|-------------|-------------|--------------|
| Momentum: 12 Month - 1 Month Performance | 0.23 | 0.16 | 0.21 |
| Quality: Free Cash Flow Yield | -0.14 | 0.05 | -0.14 |
| Growth: Operating Profit Growth | 0.08 | -0.06 | 0.04 |
| Value: Book to Market | -0.33 | -0.30 | -0.04 |

Source: FactSet

Ryobi Ltd has consistent correlations with the Momentum factor, with 2-year and 10-year correlations above 0.20. Over the short term, the stock shows a significant negative correlation with the Value factor, exhibiting a 2-year correlation of -0.33.

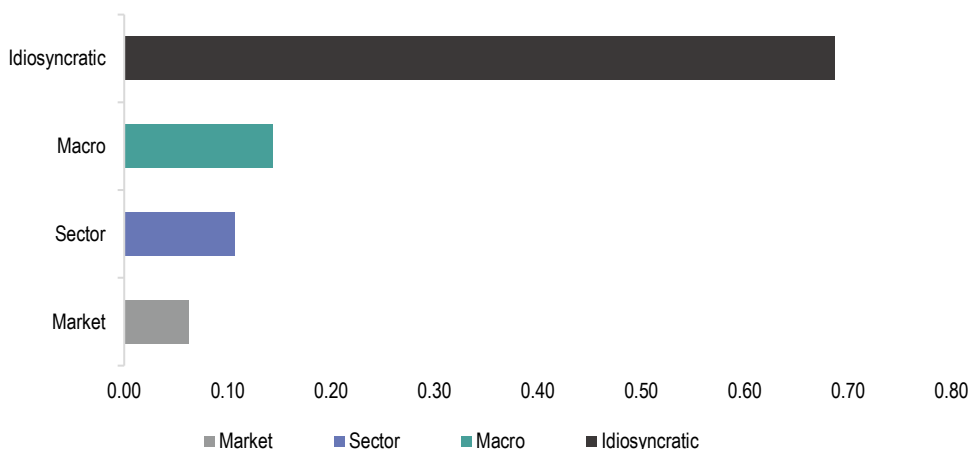
Calculation method and definition of factors in the time series

| Universe | |
|---|-------------------------------------|
| TOPIX500 | |
| Factor return calculation | |
| Quartile Range Analysis: Calculate the element return by subtracting the average performance of the lower quartile from the average performance of the upper quartile for each element forecasted for one month. This analysis is repeated monthly without considering transaction costs. | |
| Factor | |
| Momentum | |
| 1-month return | |
| 12-month return | Subtracting the most recent 1 month |
| Quality | |
| FCF yield (estimate) | |
| Growth | |
| Operating profit growth (estimate) | |
| Value | |
| Book-to-Market ratio (actual) | |

Source: FactSet



Drivers of stock price performance and multiple regression analysis (since March 2014)



Source: FactSet

Ryobi's largest share price driver is the Macro factor, albeit at a relatively small 14%. The majority of this is derived from exchange rate movements. The sector and market factors have relatively minor impacts, together explaining less than 20% of Ryobi's share price movement.

Calculation method for multiple regression analysis

Multiple regression analysis

Perform regression analysis including all drivers, and conduct individual regression analysis by excluding one driver at a time. To quantify the specific impact of each driver, calculate the partial coefficient of determination (partial R-squared value) using the formula: (Residual Sum of Squares from regression analysis including all drivers - Residual Sum of Squares from regression analysis excluding one driver) / Residual Sum of Squares from regression analysis excluding one driver.

Source: FactSet

Multiple regression analysis results

| Factors | 2 Year Corr | 5 Year Corr | 10 Year Corr |
|-----------------------------|-------------|-------------|--------------|
| Market | | | |
| Topix 1st Section | 0.36 | 0.57 | 0.57 |
| Topix Nonferrous Metals | 0.36 | 0.51 | 0.53 |
| Topix Small Cap Index | 0.51 | 0.64 | 0.62 |
| MSCI Japan | 0.33 | 0.53 | 0.55 |
| MSCI Japan Industrials | 0.34 | 0.54 | 0.55 |
| Macro | | | |
| 10Y JGB | 0.08 | -0.16 | -0.05 |
| CPI Nationwide | -0.03 | 0.10 | 0.04 |
| JPYUSD | -0.21 | -0.26 | -0.31 |
| JPYCN | -0.21 | -0.30 | -0.34 |
| Industrial Production | -0.22 | -0.05 | -0.02 |
| JP Core Machine Tool Orders | 0.06 | 0.08 | -0.10 |
| Eco Watchers Outlook | 0.17 | 0.21 | 0.21 |

Source: FactSet

Ryobi Ltd has a consistently high correlation with the TOPIX Small Cap index, above 0.60 over 5 and 10 years. Short-term correlations with equity indices are lower than long-term correlations in all cases. Of the macro factors, significant negative correlations exist with the CNY and USD, reflecting the significant overseas sales exposure of Ryobi. A consistent correlation is also seen with the EcoWatchers Outlook, showing some degree of sensitivity to economic trends.

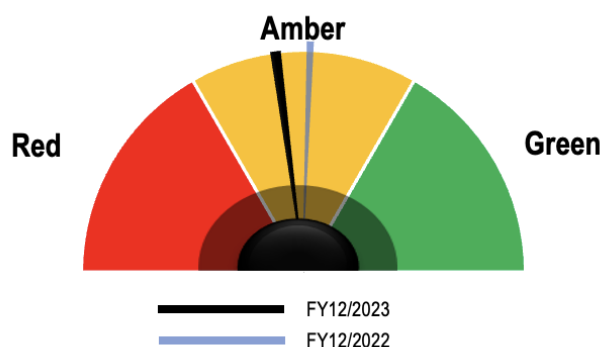
Astris-Sustainability ESG assessment

Ratings and scorecard

Our in-house Astris-Sustainability ESG model rates Ryobi with a combined score of **45.2%**, placing it in our assessment's 'Amber' rating in FY12/23.

Our in-house methodology* takes what we have selected as core measurable ESG factors, ranking its performance versus its domestic GICS Machinery companies with a market capitalization of ¥20bn to ¥100bn (a total of 43 companies).

Astris-Sustainability ESG model rating for Ryobi



Source: Astris Advisory (*Note – for details of our in-house rating system please contact Astris Corporate Advisory)

ESG scorecards

| | FY12/22 | FY12/23 |
|---|--------------|--------------|
| Environmental (4 factors from a selected peer group) | | |
| Astris Environmental score | 28.62 | 29.22 |
| Social (7 factors from a selected peer group) | | |
| Astris Social score | 60.23 | 60.23 |
| Governance (30 factors from a selected peer group) | | |
| Astris Governance score | 54.61 | 45.98 |
| TOTAL SCORE (Out of a total of 41 factors) | 50.60 | 45.20 |

Source: Company, FactSet, Astris Corporate Advisory

Our methodology has highlighted the following key topics:

Environmental

Ryobi has established an environmental preservation committee and has several environmental impact reduction targets. They include:

- Long-term target: Achieve carbon neutrality by 2050 via measures such as introducing energy-saving equipment and renewable energy.
- Medium-term target: Reduce the volume of CO₂ emissions by at least 47% from 2018 levels by 2030. The company achieved a 22% decrease in FY12/23.
- Core business-related: Increasing the ratio of strategic products to 43% by FY12/27.
- Reducing water consumption by 1% annually.
- Maintain a recycling ratio of at least 99%.

Social

The company has outlined initiatives to contribute to local communities. They include:

- Collecting aluminum cans from local residences, selling them to recycling companies, and donating the profits to non-profit organizations.
- Employees helping pick up litter locally.
- Employee blood donation drives.

For employees, Ryobi's aims include:

- Ensuring a safe and healthy working environment.
- Assisting employees and their families in maintaining physical and mental health.
- Encouraging male employees to take full advantage of childcare leave.

Governance

The corporate governance system at Ryobi is organized in the following manner:

- **Board of Directors** – currently comprised of seven board members led by President, CEO, and Representative Director Akira Urakami. There are four outside directors. There were 18 board meetings held in FY12/23.
- **Audit committee** – Ryobi does not operate under an audit and supervisory committee company structure. It has a Board of Corporate Auditors, comprised of three members, two of which are independent, and a Nomination and Compensation Advisory Committee, of which there are three members.
- **Director compensation** – Compensation for directors, excluding external members, is both base- and performance-based, the latter of which is mainly linked to the company meeting profitability targets and medium- to long-term goals. Outside directors and auditors receive a base salary only, in line with their responsibilities.

Controversies

We note we have been unable to find major controversies that may have significant financial or reputational repercussions for the company and its shareholders.



Areas of discussion

Highlighting key topics for investors

We believe the following will be key areas for discussion with investors:

- Are you already securing contracts for gigacast parts that you will start prototyping in FY12/25?
- Have you had discussions about focusing all your resources entirely on the faster-growing die-casting business?
- If so, what kind of discussions were had, and what conclusions were reached?
- What are your plans to improve ROIC?



JGAAP Financial Summary

| Income statement (¥bn) | FY 12/22 | FY 12/23 | FY 12/24E | FY 12/25E | FY 12/26E |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|
| Sales | 249.52 | 282.69 | 292.61 | 304.57 | 322.73 |
| COGS | 221.28 | 248.20 | 260.43 | 269.54 | 284.01 |
| Gross profit | 28.25 | 34.49 | 32.19 | 35.03 | 38.73 |
| Gross profit margin (%) | 11.3 | 12.2 | 11.0 | 11.5 | 12.0 |
| Operating profit | 6.97 | 12.21 | 8.18 | 10.23 | 13.50 |
| OP margin (%) | 2.8 | 4.3 | 2.8 | 3.4 | 4.2 |
| Non-operating income | 2.29 | 3.34 | 2.81 | 2.81 | 2.81 |
| Non-operating expense | (1.47) | (1.69) | (1.69) | (1.69) | (1.69) |
| Recurring profit | 7.79 | 13.86 | 9.30 | 11.35 | 14.62 |
| Pre-tax profit | 6.96 | 13.22 | 9.30 | 11.35 | 14.62 |
| Tax | (1.72) | (2.53) | (1.69) | (2.07) | (2.66) |
| Effective tax rate (%) | 24.7 | 19.1 | 18.2 | 18.2 | 18.2 |
| Net income | 5.24 | 10.70 | 7.61 | 9.28 | 11.96 |
| Non-controlling NI | 0.46 | 0.58 | 0.52 | 0.55 | 0.53 |
| Parent attributable NI | 4.78 | 10.12 | 7.09 | 8.74 | 11.43 |

| | | | | | |
|------------------------|-------|--------|-------|-------|-------|
| Sales growth YoY (%) | +26.0 | +13.3 | +3.5 | +4.1 | +6.0 |
| OP growth YoY (%) | N/A | +75.2 | -33.0 | +25.0 | +32.0 |
| Pre-tax profit YoY (%) | N/A | +90.0 | -29.6 | +22.0 | +28.8 |
| NI growth YoY (%) | N/A | +111.4 | -29.9 | +23.2 | +30.8 |

| Balance sheet (¥bn) | FY 12/22 | FY 12/23 | FY 12/24E | FY 12/25E | FY 12/26E |
|---|---------------|---------------|---------------|---------------|---------------|
| Cash & equivalents | 27.34 | 27.64 | 27.29 | 32.95 | 40.87 |
| Marketable securities | 0.65 | 0.65 | 0.65 | 0.65 | 0.65 |
| Notes and Accounts receivables | 58.34 | 64.30 | 66.55 | 69.27 | 73.41 |
| Inventory | 55.46 | 59.95 | 62.05 | 64.59 | 68.44 |
| Other | 3.56 | 4.11 | 4.25 | 4.43 | 4.69 |
| Current assets | 145.34 | 156.65 | 160.80 | 171.89 | 188.05 |
| Tangible assets | 123.96 | 123.45 | 126.01 | 128.68 | 131.50 |
| Goodwill | - | - | - | - | - |
| Intangible assets | 2.80 | 2.62 | 2.30 | 1.97 | 1.62 |
| LT investments | 14.83 | 19.18 | 19.18 | 19.18 | 19.18 |
| Other | 13.36 | 16.95 | 16.95 | 16.95 | 16.95 |
| Fixed assets | 154.94 | 162.19 | 164.44 | 166.78 | 169.26 |
| Total assets | 300.28 | 318.84 | 325.24 | 338.67 | 357.31 |
| Short-term borrowing | 39.94 | 36.63 | 26.86 | 26.86 | 26.86 |
| Trade payables | 46.55 | 50.91 | 54.77 | 56.69 | 59.73 |
| Other | 28.21 | 30.38 | 33.36 | 34.18 | 36.20 |
| Current liabilities | 114.70 | 117.92 | 114.99 | 117.72 | 122.78 |
| LT borrowing | 27.87 | 24.02 | 24.02 | 24.02 | 24.02 |
| Other LT liabilities | 13.99 | 16.19 | 16.19 | 16.19 | 16.19 |
| Long term liabilities | 41.86 | 40.20 | 40.20 | 40.20 | 40.20 |
| Shareholders' equity | 134.46 | 151.30 | 160.71 | 171.37 | 184.96 |
| Share acquisition rights | - | - | - | - | - |
| Non-controlling interests | 9.26 | 9.42 | 9.34 | 9.38 | 9.36 |
| Total net assets | 143.72 | 160.72 | 170.05 | 180.74 | 194.32 |
| Total liabilities and net assets | 300.28 | 318.84 | 325.24 | 338.67 | 357.31 |

Source: Company, Astris Advisory (estimates)

| Cash flow statement (¥bn) | FY 12/22 | FY 12/23 | FY 12/24E | FY 12/25E | FY 12/26E |
|---|----------------|----------------|----------------|----------------|----------------|
| Profit before tax | 6.96 | 13.22 | 9.30 | 11.35 | 14.62 |
| Depreciation/amortization | 18.33 | 18.49 | 19.14 | 19.92 | 21.11 |
| Changes in working capital | (8.32) | (3.37) | 2.34 | (2.69) | (3.19) |
| Other non-cash items | 0.65 | (0.57) | 0.04 | (0.26) | (0.11) |
| Tax paid | (0.84) | (1.77) | (1.69) | (2.07) | (2.66) |
| Cash from Operating Activities | 16.79 | 26.01 | 29.12 | 26.24 | 29.77 |
| Capex | (16.88) | (16.32) | (17.56) | (18.27) | (19.36) |
| Expenditures from acquisitions of subsidiary shares leading to change in scope of consolidation | - | - | - | - | - |
| Other investing cash flow | 1.02 | (1.11) | (0.05) | (0.58) | (0.31) |
| Cash from Investing Activities | (15.86) | (17.43) | (17.60) | (18.85) | (19.68) |
| Total cash dividends paid | (0.97) | (1.94) | (2.59) | (2.13) | (2.62) |
| Borrowing repayments and bond redemption expenditures | (1.72) | (6.32) | (9.77) | - | - |
| Equity financing | - | - | - | - | - |
| Other | (0.17) | (0.33) | - | - | - |
| Cash from Financing Activities | (2.86) | (8.59) | (12.36) | (2.13) | (2.62) |
| FX impact | 0.64 | 0.32 | 0.48 | 0.40 | 0.44 |
| Net cash flow | (1.29) | 0.30 | (0.35) | 5.67 | 7.91 |
| Free cash flow | (0.09) | 9.68 | 11.57 | 7.97 | 10.40 |
| EBITDA | 25.30 | 30.70 | 27.32 | 30.15 | 34.61 |
| EBITDA margins (%) | 10.1 | 10.9 | 9.3 | 9.9 | 10.7 |
| Free cash flow margin (%) | -0.0 | 3.4 | 4.0 | 2.6 | 3.2 |
| Free cash flow conversion (%) | N/A | 73.2 | 124.3 | 70.2 | 71.2 |
| Capex/sales (%) | 6.8 | 5.8 | 6.0 | 6.0 | 6.0 |
| Capex/depreciation (%) | 92.1 | 88.3 | 91.7 | 91.7 | 91.7 |
| CFO margin (%) | 6.7 | 9.2 | 10.0 | 8.6 | 9.2 |

| Key metrics | FY 12/22 | FY 12/23 | FY 12/24E | FY 12/25E | FY 12/26E |
|---|--------------|-------------|--------------|--------------|--------------|
| Profitability | | | | | |
| Gross margin (%) | 11.3 | 12.2 | 11.0 | 11.5 | 12.0 |
| Operating margin (%) | 2.8 | 4.3 | 2.8 | 3.4 | 4.2 |
| Net margin (%) | 1.9 | 3.6 | 2.4 | 2.9 | 3.5 |
| ROA (%) | 1.7 | 3.3 | 2.2 | 2.6 | 3.3 |
| ROE (%) | 3.7 | 7.1 | 4.5 | 5.3 | 6.4 |
| ROCE (%) | 3.8 | 6.1 | 3.9 | 4.6 | 5.8 |
| ROIC (%) | 2.7 | 4.8 | 3.2 | 3.9 | 4.8 |
| Liquidity | | | | | |
| Current ratio (x) | 1.3 | 1.3 | 1.4 | 1.5 | 1.5 |
| Quick ratio (x) | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 |
| Leverage | | | | | |
| Debt/Equity ratio (x) | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 |
| Net Debt/Equity ratio (x) | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 |
| Equity ratio (x) | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 |
| Interest cover (x) | 6.8 | 8.6 | 8.0 | 10.1 | 13.3 |
| Net debt/EBITDA (x) | 1.6 | 1.1 | 0.9 | 0.6 | 0.3 |
| Valuation | | | | | |
| EPS reported (¥) | 147.80 | 312.51 | 219.13 | 269.88 | 353.05 |
| PER (x) | 14.5 | 6.9 | 9.8 | 8.0 | 6.1 |
| Diluted PER (x) | 14.5 | 6.9 | 9.8 | 8.0 | 6.1 |
| DPS (¥) | 45.0 | 80.0 | 65.7 | 81.0 | 105.9 |
| Dividend payout ratio (%) | 30.4 | 25.6 | 30.0 | 30.0 | 30.0 |
| Dividend yield (%) | 2.1 | 3.7 | 3.1 | 3.8 | 4.9 |
| Total shareholder returns (%) | 2.1 | 3.7 | 3.1 | 3.8 | 4.9 |
| Free cash flow yield (%) | (0.1) | 13.8 | 16.5 | 11.4 | 14.8 |
| Diluted free cash flow yield (%) | (0.1) | 13.8 | 16.5 | 11.4 | 14.9 |
| PBR (x) | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |
| EV/sales (x) | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 |
| EV/EBITDA (x) | 4.4 | 3.6 | 4.1 | 3.7 | 3.2 |
| EV/EBIT (x) | 16.1 | 9.2 | 13.7 | 10.9 | 8.3 |
| EV/FCF (x) | (1,215.9) | 11.6 | 9.7 | 14.0 | 10.8 |



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