

ORBIS RESEARCH

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AUTHORS

Irakli Pipia

Director, Orbis Research

Enoc Pinto Perez

Product Manager, Orbis Research

CONTACT US

Americas

+1.212.553.1658

clientservices@moodys.com

Europe

+44.20.7772.5454

clientservices.emea@moodys.com

Asia

+85.2.2916.1121

clientservices.asia@moodys.com

Japan

+81.3.5408.4100

clientservices.japan@moodys.com

U.S. and Chinese automotive companies grew faster than their peers over the long-term.

SUMMARY

→ Since 2013, **Chinese** and **U.S.** automotive companies have reported the highest asset growth, ranging from 14% to 18%. This indicates stronger competitive dynamics and the expansion of production facilities.

→ Our analysis suggests some degree of correlation with the employment and asset growth trends in most of these countries. **Chinese** auto companies topped their peer group in cumulative hiring expansion for the last 5 years.

→ The most recent full year was successful for nearly **all auto companies**, with revenue growth rates surpassing the 10-year average in all countries.

→ For most auto companies, cost of goods sold (COGS) tracked operating revenue growth, showing **strong control of operating margins**.

→ The highest growth in long-term operating expenses was observed in **Chinese** auto companies. In contrast, **U.S.** auto companies managed their operating expenses better compared to their peers.

→ **Top and bottom line profitability growth trends diverged** notably for the **U.S.** and **Chinese** companies over the 10-year period. However, net profitability growth improved for these countries over the last 5 years.

→ **Germany** was one of the **worst performing** countries in terms of net profitability compared to peers for the last 5 years.

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COMPARATIVE ANALYSIS OF LEADING AUTO PRODUCERS EXAMINES SHORT, MEDIUM AND LONG-TERM TRENDS GLOBALLY

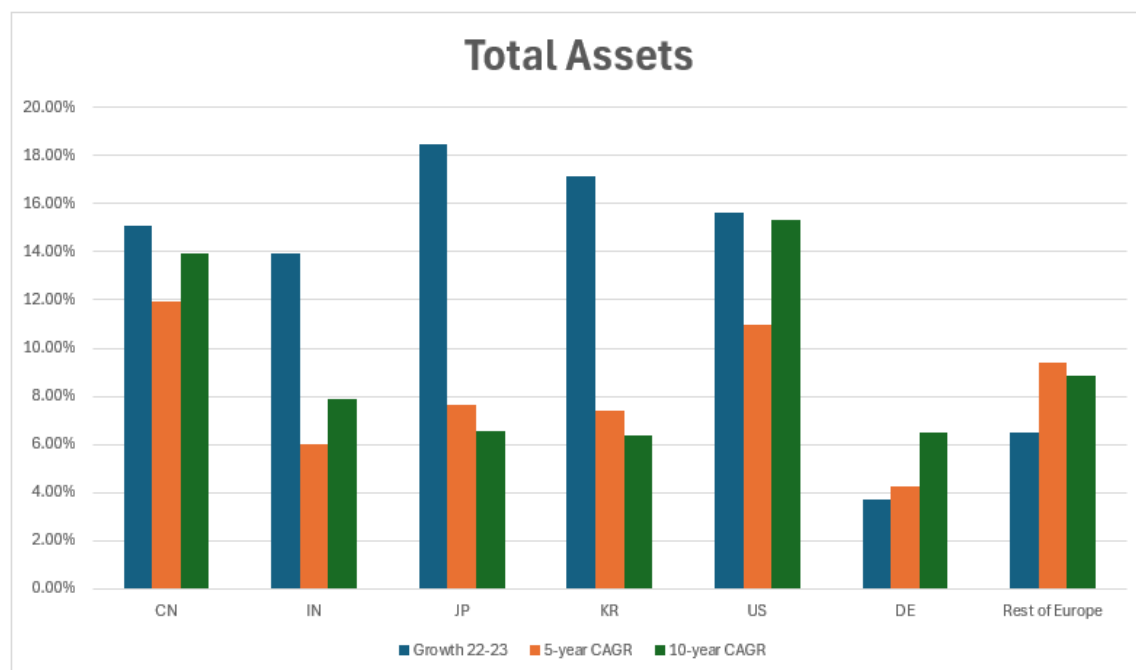
We analyzed 29 leading automotive companies across seven countries and compared annual, 5-year and 10-year trends on selected financial indicators using our Orbis database. This comparative analysis helps show how growth and profitability trends evolved in the auto industry and how different countries rank against each other on selected indicators (for more information about the research methodology refer to page 11).

MOST AUTO COMPANIES GREW THEIR ASSETS BY SINGLE-DIGIT LEVELS SINCE 2013

Leading automotive companies in India, Japan, Korea and Rest of Europe - grew their total assets in the range of 6%-10% over the last 10 years. The lowest rate of asset growth was reported by German automotive companies, with the growth declining to 4% over the last 5 years.

Chinese and US automotive companies reported the highest asset growth, ranging from 14%-18% over the same period. *This shows stronger competition and expansion of production facilities by these companies in the last decade.*

FIGURE 1: Total assets compound annual growth rate (CAGR) (%)



EMPLOYMENT GROWTH TRENDS ARE MOSTLY CORRELATED WITH ASSET GROWTH

Our analysis suggests some degree of correlation with the employment and asset growth trends in the majority of these countries.

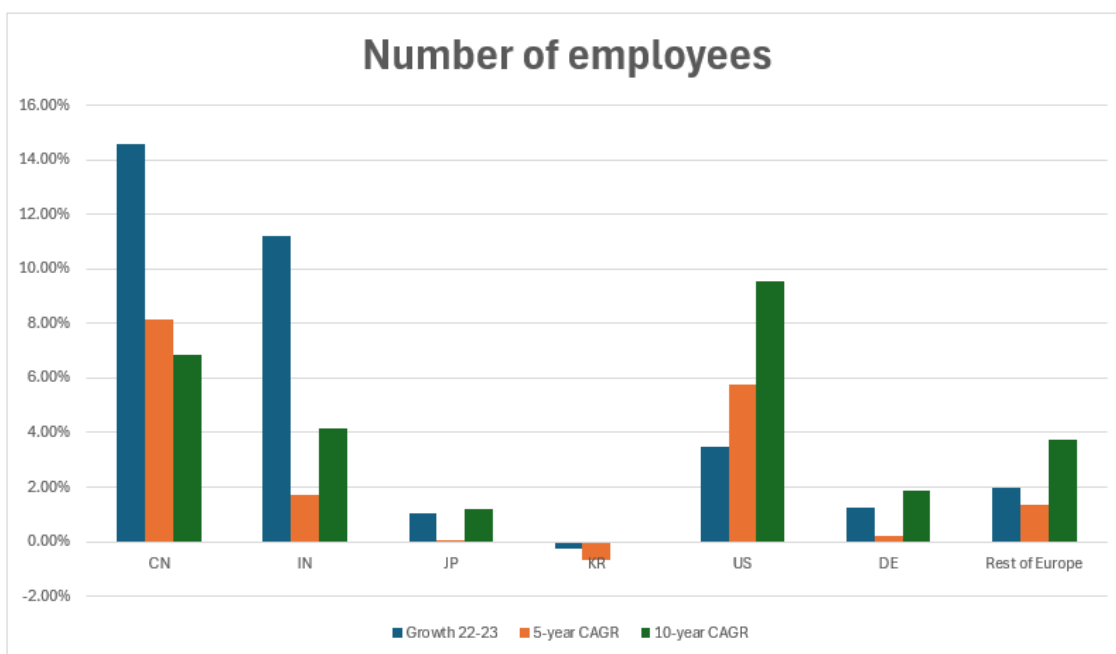
Chinese auto companies topped their peer group in cumulative hiring expansion for the last 5 years, with a double-digit growth in employee numbers in 2023.

Indian auto companies also rapidly expanded their employee numbers in line with their asset growth in 2023.

U.S. companies were more conservative in growing their work-force in the recent years, but grew numbers at a higher rate from 2013 to 2019. This growth was driven by Tesla Inc, while other U.S. auto companies kept employment numbers broadly flat.

Japan, Korea and Germany maintained broadly flat levels in their employment numbers over the medium-term.

FIGURE 2: Number of employees compound annual growth rate (CAGR) (%)



OPERATING REVENUES GREW AT THE HIGHEST RATE IN 2023

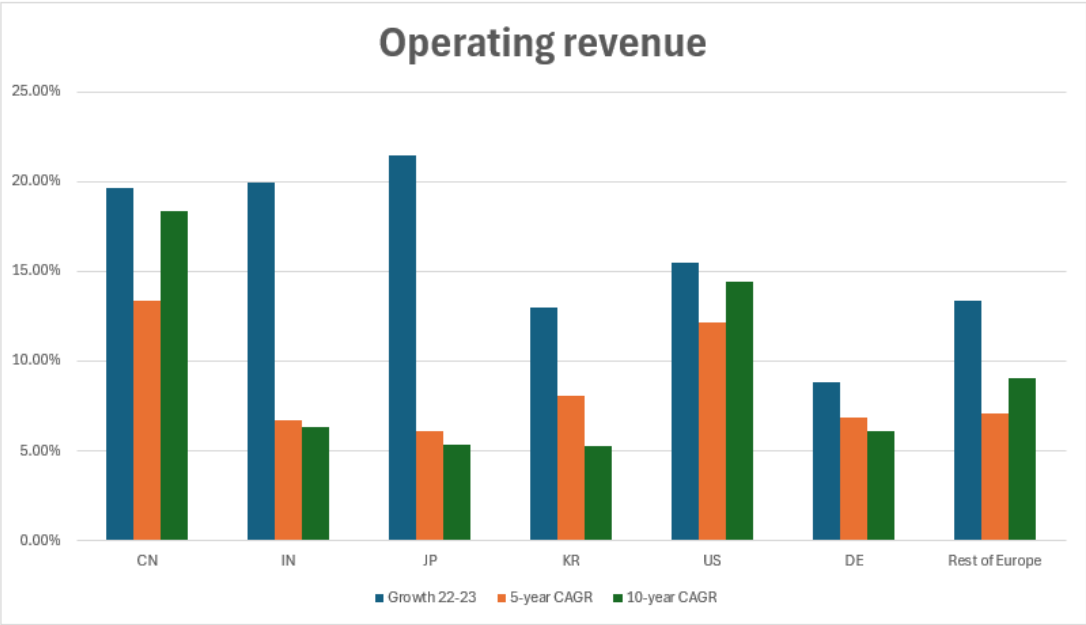
The latest full operating year was successful for most auto companies, with revenue growth rates surpassing the 10-year average in all countries.

Operating revenue growth rates were the highest in China, India and Japan led by the following companies: BYD Company Limited, TATA Motors, Mazda Motor Corporation, Subaru Corporation.

U.S. auto companies were most consistent in operating revenue growth, with the short-term and long-term trends ranging between a CAGR of 12%-15%.

Germany's operating revenue growth rates were similar to the Rest of Europe over the medium-term, but lower than those of the U.S. and China.

FIGURE 3: Operating revenue compound annual growth rate (CAGR) (%)



COST OF GOODS GROWTH RATES ARE CLOSELY CORRELATED WITH OPERATING REVENUES

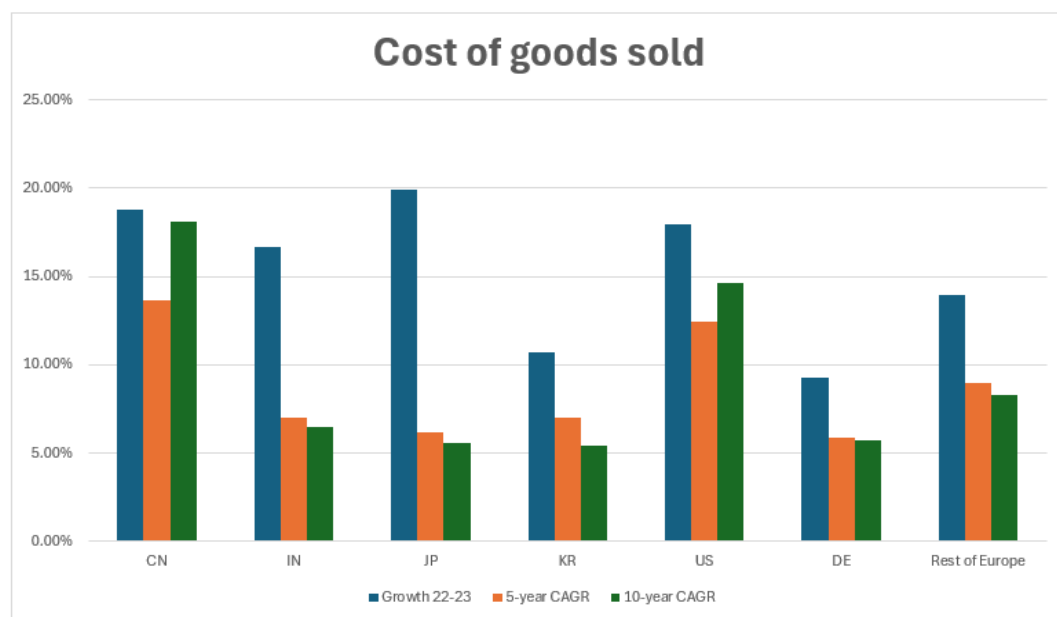
For most auto companies the cost of goods sold (COGS) developed in close correlation with the operating revenue growth rate, indicating strong control of operating margins.

China, Japan and India had their COGS growth above 15% in 2023, which matched similar growth rates in operating revenues.

U.S. auto companies maintained a consistent COGS growth rate of 13%-15% in the medium and long-term trends. However, Tesla Inc. caused a spike in the COGS growth rate in 2023.

German auto companies' COGS and operating revenue both grew at 9% in 2023. Operating revenue and COGS were also balanced over the long-term with growth rates of 5%.

FIGURE 4: Cost of goods sold compound annual growth rate (CAGR) (%)



OPERATING EXPENSES SPIKED IN THE LEADING COUNTRIES

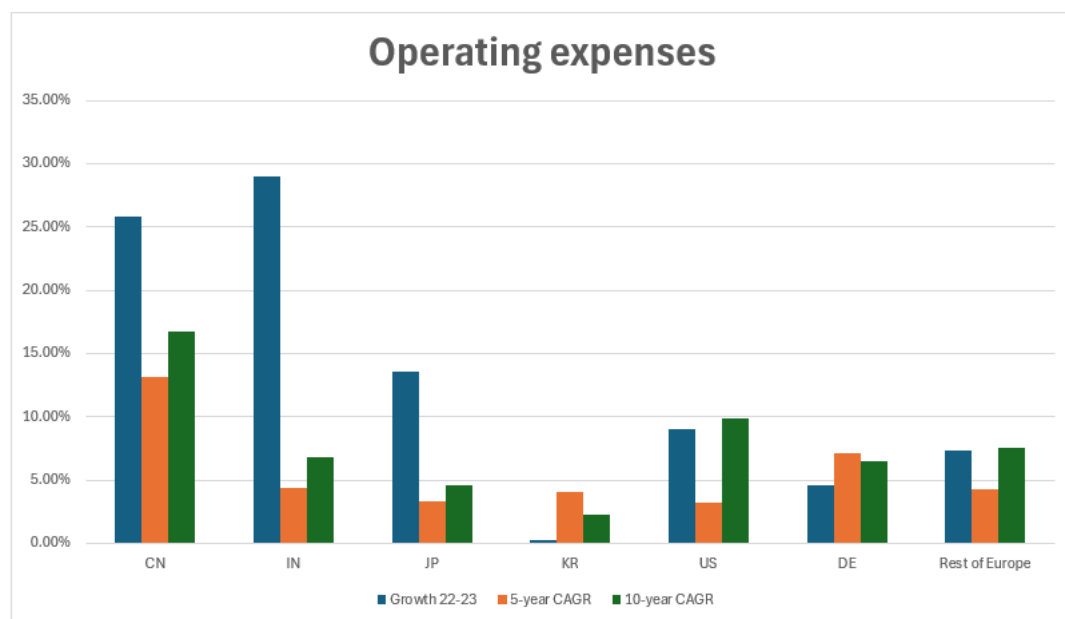
Operating expense growth exceeded double digits in **China, India** and **Japan** in 2023. This was due to significant inflationary pressure that these companies had to deal with in the aftermath of Covid-19 restrictions.

The highest growth in operating expenses was observed in **Chinese** auto companies with a CAGR of 15% for the 10-year period.

The growth of operating expenses was managed better by **U.S.** auto companies compared to the Chinese peers, especially during the past five years.

Most of the **other countries**, India, Japan, Korea, Rest of Europe, etc., kept operating expense growth below 5% over the 5-year period.

FIGURE 5: Operating expenses compound annual growth rate (CAGR) (%)



MEDIUM-TERM PROFITABILITY TRENDS ARE COMPARABLE ACROSS DIFFERENT PEERS

Not all automotive companies succeeded in converting growth in operating revenue into corresponding increases in profit before-tax (PBT). The trends in top-line and bottom-line profitability varied significantly among U.S. and Chinese companies over the 10-year period. However, net profitability growth has shown notable improvement in these countries over the past five years.

The correlation between operating revenues and PBT was more consistent for most auto companies over the 5-year period.

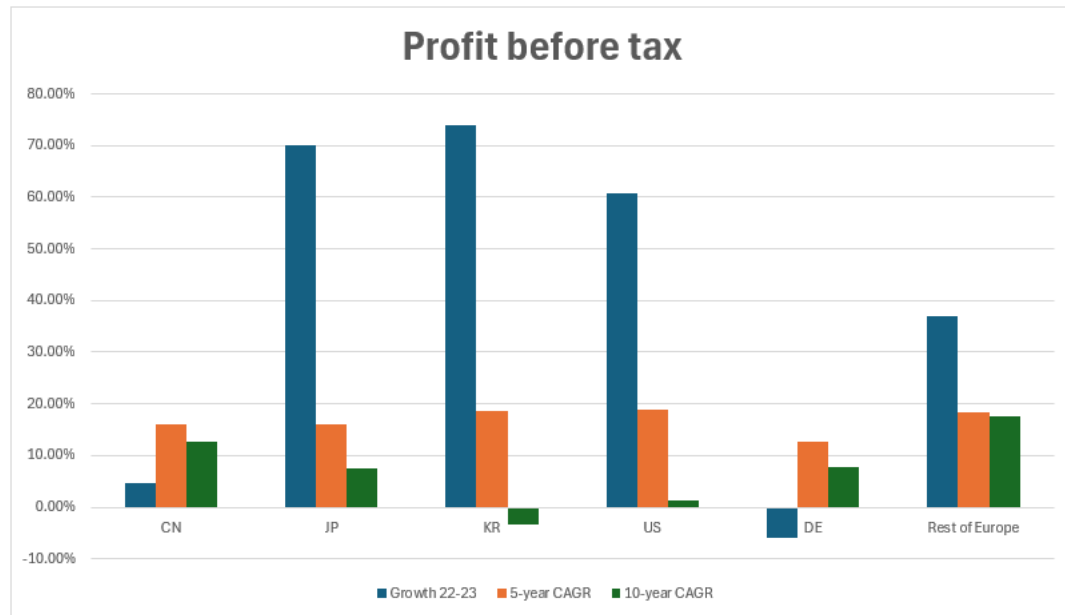
The highest PBT growth rates were reported by Rest of Europe companies over the 10-year period.

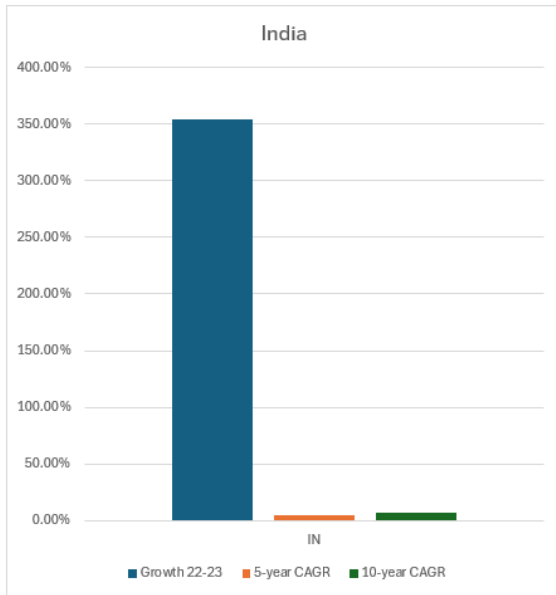
However, U.S. and Korean companies matched on this metric over the 5-year period.

Short-term profitability improved most for Korean, Japanese and U.S. companies, while Chinese entities had the lowest growth in PBT in 2023.

Germany was one of the worst performing countries on this indicator for the last 5 years.

FIGURE 6: Profit before tax growth (PBT) rate (%) compound annual growth rate (CAGR) (%)

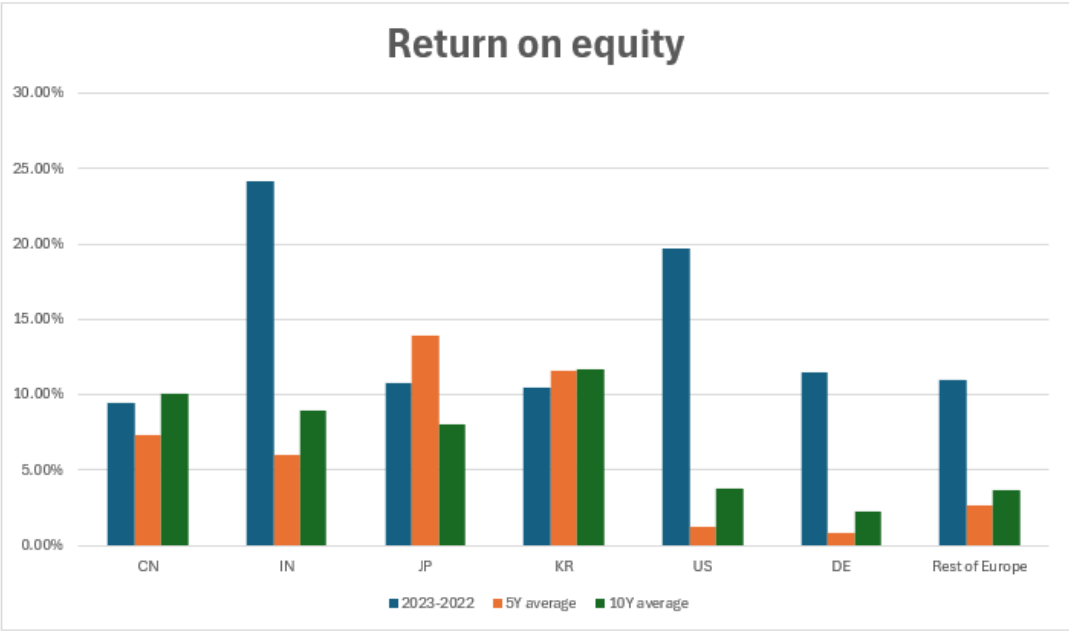




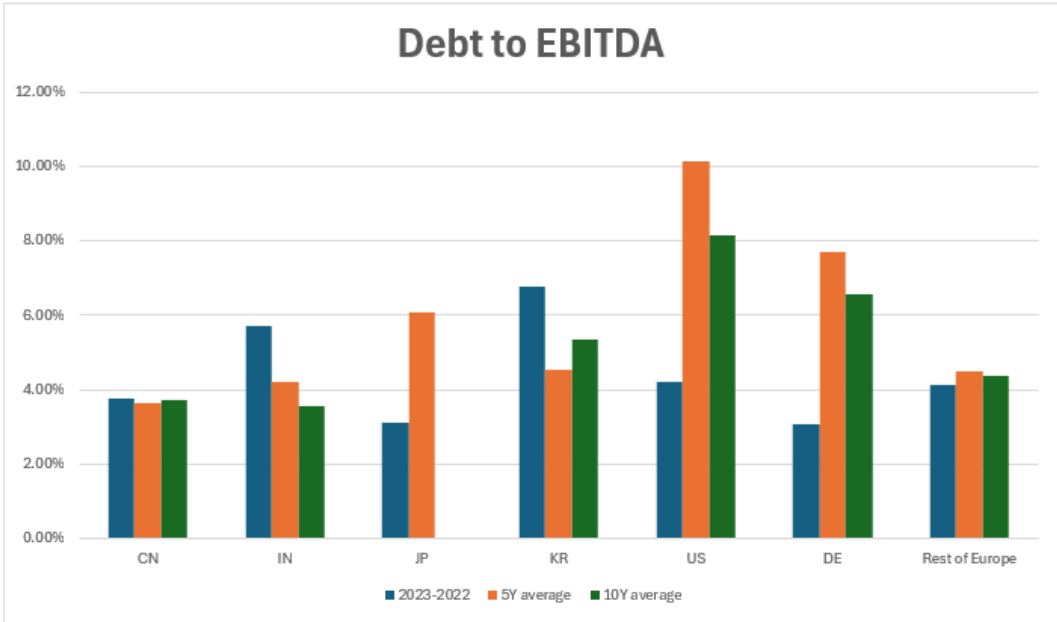
We separated the profit before tax exhibit for Indian auto companies as being notable outliers in this metric in 2023. This was driven by TATA Motors returning to meaningful profitability compared to break-even levels in preceding years, resulting in a very high percentage change in this metric in 2023.

APPENDIX

APPENDIX I: Return on equity (%)



APPENDIX II: Debt to EBITDA (%)



RESEARCH METHODOLOGY AND SCOPE

Using Orbis search steps we analyzed the average annual growth of financial factors: total assets, revenue, number of employees and profit before tax for the list of 29 car manufacturers in seven countries.

We compared the 10 CAGR, 5 year CAGR and last year growth to analyse car industry performance in different countries. We did not give preference to geographic location or reporting standards. All these entities had full financial statements available for the respective years.

PRINCIPAL RATIO DEFINITIONS

For more detailed definitions refer to Orbis Data and Ratio Definitions in the Help section of Popular Guides, Financial Data.

LIST OF ENTITIES

COMPANY NAME	BvD ID
VOLKSWAGEN AG	DE2070000543
TOYOTA MOTOR CORPORATION	JP1180301018771
STELLANTIS N.V.	NL60372958
FORD MOTOR CO	US380549190
BAYERISCHE MOTOREN WERKE AG	DE8170003036
GENERAL MOTORS COMPANY	US270756180
MERCEDES-BENZ GROUP AG	DE7330530056
HONDA MOTOR CO., LTD.	JP6010401027577
HYUNDAI MOTOR COMPANY	KR1101110085450
SAIC MOTOR CORPORATION LIMITED	CN30087PC
TESLA, INC.	US912197729
NISSAN MOTOR CO., LTD.	JP9020001031109
BYD COMPANY LIMITED	CN30914PC
KIA CORPORATION	KR1101110037998
RENAULT	FR441639465
TATA MOTORS LIMITED	IN30033FI
SUZUKI MOTOR CORPORATION	JP8080401002431
PACCAR INC	US910351110
MAZDA MOTOR CORPORATION	JP3240001036223
SUBARU CORPORATION	JP5011101019196
BAIC MOTOR CORPORATION LIMITED	CN42035PC
GREAT WALL MOTOR COMPANY LIMITED	CN30936PC
CHONGQING CHANGAN AUTOMOBILE COMPANY LIMITED	CN30053PC
GUANGZHOU AUTOMOBILE GROUP CO., LTD.	CN32256PC
IVECO GROUP NV	NL83102701
MAHINDRA & MAHINDRA LIMITED	IN30073FI
FERRARI N.V.	NL64060977
KG MOBILITY CORP	KR1101110035132
ASTON MARTIN LAGONDA GLOBAL HOLDINGS PLC	GB11488166

For more information

CONTACT US

AMERICAS

+1.212.123.4567

clientservices@moodys.com

EMEA

+44.20.1234.5678

clientservices.emea@moodys.com

ASIA (Excluding Japan)

+852.1234.5678

clientservices.asia@moodys.com

JAPAN

+81.1234.5678

clientservices.japan@moodys.com

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