NOVA IMS Information Management School

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EQUITY VALUATION

Mercedes-Benz Group AG

Diogo Dantas de Caires

Master Thesis - Dissertation

presented as partial requirement for obtaining a Master's Degree in Information Management

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

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EQUITY VALUATION: Mercedes-Benz Group AG

by

Diogo Dantas de Caires

Master Thesis presented as partial requirement for obtaining the Master's degree in Information Management, with a specialization in Business Intelligence

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STATEMENT OF INTEGRITY

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism, any form of undue use of information or falsification of results along the process leading to its elaboration. I further declare that I have fully acknowledged the Rules of Conduct and Code of Honor from the NOVA Information Management School.

Lisbon, 15th July 2025

Diogo Dantas de Caires

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I would like to express my deepest gratitude to all those who supported me throughout this journey.

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Finally, to everyone who believed in me, thank you.

This achievement is as much yours as it is mine.

ABSTRACT

The primary aim of this thesis is to conduct an equity valuation of Mercedes Benz, with the objective of delivering an investment recommendation by determining the fair value of the company's shares. The valuation employs two main methodologies: the Discounted Cash Flow (“DCF”) model and the Relative Valuation (or multiples) model. Upon applying the DCF and Relative Valuation models, the resultant valuation suggests strategic investment actions. According to the outcomes derived from the DCF model, if the computed share value notably exceeds the market price as of the most recent fiscal year-end, a 'buy' recommendation may be warranted. Our analysis estimates a fair share price of €79.60, significantly above the market price of €50.90 as of 30 June 2025, leading to a buy or hold recommendation for investors. To support this, we applied two key market multiples: Price to Earnings (“P/E”) and Enterprise Value to EBITDA (“EV/EBITDA”). These were selected due to their relevance in assessing profitability, operational performance, and comparability within the mature automotive industry.

KEYWORDS

Mercedes-Benz Cars; Equity Valuation; Free Cash Flow to Firm; Relative Valuation; Automative Sector

Sustainable Development Goals (SDG):

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LIST OF ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
ASP	Average Selling Price
BEV	Battery Electric Vehicle
Capex	Capital Expenditures
CAPM	Capital Asset Pricing Model
D&A	Depreciation and Amortization
DCF	Discounted Cash Flow
DDM	Dividend Discount Model
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EPS	Earnings Per Share
ESG	Environmental, Social and Governance
EV	Electric Vehicle
EV/EBITDA	Enterprise Value to EBITDA Ratio
EV/Sales	Enterprise Value to Sales
EUR or €	Euros
EVA	Economic Value Added
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flow to the Firm
GDP	Gross Domestic Product
IEA	International Energy Agency

ICE	Internal Combustion Engine
MB.EA	Mercedes-Benz Electric Architecture
MB.OS	Mercedes-Benz Operating System
MMA	Mercedes-Benz Modular Architecture
OECD	Organisation for Economic Co-operation and Development
P/E	Price-to-Earnings Ratio
P/B	Price-to-Book Ratio
P/Sales	Price to Sales Ratio
PHEV	Plug-in Hybrid Electric Vehicle
R&D	Research and Development
SDV	Software-defined vehicles
TGR	Terminal Growth Rate
US	United States of America
USD	United States Dollar
USMCA	United States-Mexico-Canada Agreement
WACC	Weighted Average Cost of Capital
YoY	Year on Year

1. INTRODUCTION

The valuation of companies functions as a vital foundation for financial analysis since it helps organizations and investors make various strategic decisions and it is used throughout different industries. This research project aims to perform a valuation analysis of Mercedes-Benz Group with the goal of determining if its current market worth presents an undervalued or overvalued or neutral assessment.

This research starts with evaluating traditional and modern approaches to valuation methods. The theoretical framework set by Damodaran (2011,2012) and Koller (2020) will establish the basis for our valuation. The research then focuses on a detailed study of the automotive industry by analyzing its structural changes, technological developments and emerging market challenges that transform and force evolution upon the Automotive sector. This thesis dives into Mercedes-Benz through both historical and financial assessments of its operational structure and organizational framework along with its business performance results.
This thesis describes the evaluation methods used for the Mercedes-Benz Group while explaining the assumptions behind them before showing the analysis outcomes. The research results lead to a conclusion which aims to serve as an investment recommendation.

The German multinational Mercedes-Benz Group AG functions as a leading global automotive company which manufactures luxury vehicles and trucks and buses. Mercedes-Benz stands as a leading premium automobile producer which makes both passenger vehicles and commercial trucks and buses under its well-known brand name.
According to Interbrand (2024), Mercedes-Benz is the top luxury automotive brand in the world. The global reach of Mercedes-Benz allows it to manufacture its vehicles in various locations throughout the globe. Under its primary brand the company operates multiple separate brands which include Mercedes-AMG and Mercedes-Maybach that focus on different segments of high-performance and ultra-luxury automobiles. Through its Mercedes-Benz Mobility division, the group provides financial services and mobility solutions which include Mercedes-Benz Bank, Mercedes-Benz Financial Services and Athlon.

At the end of 2024 Mercedes-Benz operated with 175,000 employees across the globe and organized its operations into three main business segments including Mercedes-Benz Cars Mercedes-Benz Vans and Mercedes-Benz Mobility. The market dominance of the company continues to exist as the industry focuses more on sustainability and digital transformation.
The group generated €145.37 billion in revenue and registered an Earnings Before Interest and Taxes (“EBIT”) of €13.6 billion during the 2024 fiscal year.

Mercedes-Benz stands as one of the leading automobile manufacturers worldwide since it delivered more than 2.4 million vehicles to the global market in 2024. The brand continues its mission to produce advanced innovative vehicles that meet customer demands and lead

market trends. The rising electric vehicle competition from Tesla and BYD has led Mercedes-Benz to adopt a long-term strategic plan in order to keep its dominance in the luxury electric vehicle market. The key elements of this strategic plan focus on electrification and autonomy as well as sustainability. The 'Ambition 2039' initiative of Mercedes-Benz targets achieving carbon neutrality for its new car fleet during the next twenty years. The company's new vision extends beyond its previous direction by embracing luxury innovation and environmental responsibility as key components of future mobility.

This thesis delivers an exhaustive evaluation of Mercedes-Benz and Mercedes-Benz Cars segment through financial analysis, strategic market and business assessment. This thesis aims to generate valuable insights about the company's inherent worth as well as its enduring business stability while the automotive industry undergoes fast changes and remains uncertain. This thesis will first review various valuation methodologies (Literature Review), then it will dive into the automotive industry context (Automotive Industry Review), proceed to a detailed evaluation of Mercedes-Benz's strategic and financial position (Company Overview, Methodology, and Company Valuation Assumptions), and conclude with the valuation results and final recommendations (Results).

2. LITERATURE REVIEW

Financial valuation remains the core focus of analysts and investors in the complex field of Finance which continuously develops. This literature review demonstrates multiple methodologies which derive from different theoretical frameworks and practical assumptions.

2.1. DISCOUNTED CASH FLOW VALUATION

The DCF model represents one of the fundamental and most commonly used valuation methods in financial analysis. The model derives its value from the fundamental principle that company worth stems from future cash flows which require present value calculation. Brealey, Myers, and Allen (2020) state that DCF provides an advanced forward-looking approach to determine intrinsic value by analyzing detailed future financial performance projections. The reliability of the DCF model depends on both accurate projecting and suitable discount rate selection according to Damodaran (2017). The discount rate consisting of risk-free interest and risk premium must properly reflect firm-specific risks to generate significant outcomes. One notable advantage of the DCF approach compared to other valuation methods is its focus on a company's own fundamentals rather than market pricing. Damodaran (2012) notes that a properly executed DCF valuation, being grounded in the firm's cash flow and risk characteristics, is less swayed by short-term market moods or speculative trends than relative valuation methods. This intrinsic focus helps ensure that the estimated value reflects the company's true earning potential, making DCF a theoretically sound measure of a firm's worth (Damodaran, 2012).

2.1.1. Dividend Discount Model

The Dividend Discount Model, commonly referred to as DDM, is utilized to value stocks by focusing on projected dividend payments as a form of cash flow. Recent findings by Ross et al. (2019) suggest that DDM is suitable for companies that have consistent and predictable dividend distributions. The application of DDM to Mercedes Benz has been significantly enhanced by the steady dividend pattern observed since 2021, with an increase from 1.35 euros per share to 5 euros per share. While DDM offers a straightforward method for determining value, it is important to keep track of the dividend growth rate as it can have a substantial impact on the valuation results. One advantage of DDM, when compared to models relying on free cash flow, is its simplicity, especially when a firm maintains a stable dividend policy, a trait increasingly evident in the Mercedes-Benz Group. By focusing solely on actual dividend payments, DDM removes the need for complex projections regarding capital investments or debts, simplifying the valuation process as long as the dividends align with the company's ability to generate cash (Damodaran, 2012). This aspect makes the model

particularly appealing for well-established companies with consistent dividends, enabling investors to directly evaluate the anticipated cash returns they can expect (Damodaran, 2012).

2.1.2. Free Cash Flow to the Firm

The method known as Free Cash Flow to the Firm ("FCFF") offers a more comprehensive perspective by examining the cash flows accessible to both debt and equity holders following required investments in working capital and fixed assets. According to Penman (2013), FCFF presents a detailed view of a company's operational performance that is not influenced by its financial setup, making it advantageous for industries with high capital requirements like Mercedes Benz, where evaluating FCFF considers the firm's underlying operational efficiencies and production capacities.

An important benefit of utilizing the FCFF method is its ability to avoid the necessity of forecasting financing flows, unlike methods solely focused on equity valuation. Since FCFF is calculated prior to interest payments, analysts are not obliged to forecast debt transactions in the valuation process, especially helpful when a company's leverage is anticipated to change over time (Damodaran, 2012). This simplification is particularly valuable for enterprises with evolving capital structures or those not paying dividends, as it captures the overall value of the firm's operations independently of short-term financial decisions (Damodaran, 2012).

2.1.3. Free Cash Flow to Equity

The Free Cash Flow to Equity ("FCFE") concept emphasizes the cash available to shareholders after accounting for all costs, investments, and debt obligations. According to Damodaran (2012), FCFE is a clear indication of the financial resources that can be shared among equity owners. It proves especially useful when analyzing companies that have diverse borrowing and debt repayment practices, common in industries like automotive. Looking at FCFE for Mercedes Benz can offer valuable insights into the potential profits that shareholders might expect based on current operational and financial strategies.

One of the key advantages of using the FCFE method instead of valuing the whole company is its direct consideration of the cash flows and profits anticipated by equity investors. Therefore, this approach simplifies the calculation of equity value by focusing solely on shareholder earnings, eliminating the need to assess the total company value and then subtract debts. By maintaining a consistent debt ratio, utilizing an FCFE model can streamline the evaluation process by depending on the cost of equity and avoiding the complexities of estimating a fluctuating weighted average cost of capital (Damodaran, 2012).

2.2. ECONOMIC VALUE ADDED

The Economic Value Added (EVA) method is utilized as a financial tool to evaluate the value generated that goes beyond what shareholders expect. Stern, Stewart, & Chew (1995)

introduced EVA as a measure calculated by subtracting the cost of capital from the net operating profit after taxes. This technique can assist Mercedes-Benz in assessing its financial performance comprehensively, considering capital investments. While the Discounted Cash Flow (DCF) method concentrates on future cash flows for valuation purposes, EVA offers unique insights into value creation by analyzing earnings and investments within specific time periods. Additionally, EVA complements DCF by indicating whether operational profits exceed capital expenditures. An advantageous feature of EVA, unlike traditional financial metrics, is its direct incorporation of capital spending in performance evaluation.

In contrast to basic profit measures, EVA considers capital allocation, clearly indicating when profits surpass the expected investor returns. This framework is in line with the net present value principle, revealing whether management is effectively enhancing economic value by pursuing ventures that generate returns greater than the cost of capital (Damodaran, 2012).

2.3. RELATIVE VALUATION (MULTIPLES)

The Relative Valuation method involves evaluating a company by comparing its pricing to standard financial performance metrics, as opposed to the intrinsic approach of the DCF method. According to Koller, Goedhart and Wessels (2015), key metrics like the P/E ratio and EV/EBITDA are crucial in stock trading and company negotiations. They emphasize that Relative Valuation benefits from market efficiency, assuming that market prices encompass all available information to offer an accurate market viewpoint. Fernandez (2023) points out that the main strength of relative valuation lies in its simplicity, aligning well with real market dynamics and enabling quick benchmarking and sector analysis. Nevertheless, there are drawbacks: multiples based on market prices can be influenced by temporary market inefficiencies, especially during speculative bubbles or economic downturns. The analysis may become unreliable if adjustments are not made to cater to differences in capital structure, business models, and geographic exposure.

Valuation multiples like P/E, EV/EBITDA, P/B, and P/Sales are commonly utilized. For instance, P/E compares a company's market price per share to its earnings per share. EV/EBITDA evaluates a company by dividing its total enterprise value by its EBITDA. P/B contrasts a company's market capitalization with the book value of its equity. P/Sales compares a company's stock price with its revenue. Metrics like EV/EBIT and EV/Sales, which are based on enterprise value, can be used when EBITDA or net income data is unreliable.

Relative valuation, in contrast to intrinsic valuation models, benefits from its simplicity and immediacy. A significant advantage is that it requires fewer inputs and inherently reflects the current market sentiment reflected in comparable company prices (Damodaran, 2012). This market-oriented approach makes relative valuation a valuable tool for swift benchmarking, capturing how the market values similar companies at the present moment, which is beneficial for investors and analysts evaluating a company's worth relative to its industry peers (Damodaran, 2012).

3. AUTOMATIVE INDUSTRY OVERVIEW

3.1. MACROECONOMIC ANALYSIS

3.1.1. Global GDP Analysis

OECD (2024) shows that worldwide economic expansion faces multiple challenges because both advanced economies and emerging markets experience enduring difficulties. While global Gross Domestic Product ("GDP") growth averaged 3.4% from 2013 to 2019, recent data shows a dip to around 3.2% in 2023. Projections suggest global growth will stabilize at 3.2% in 2024 before rising to 3.3% in 2025 and 2026. The OECD predicts modest economic growth of 1.7% to 1.9% in its member countries, citing risks from trade fluctuations and financial market adjustments. These nations are more vulnerable to trade conflicts compared to others, with some economies showing more resilience, contributing to the projected lower growth rates.

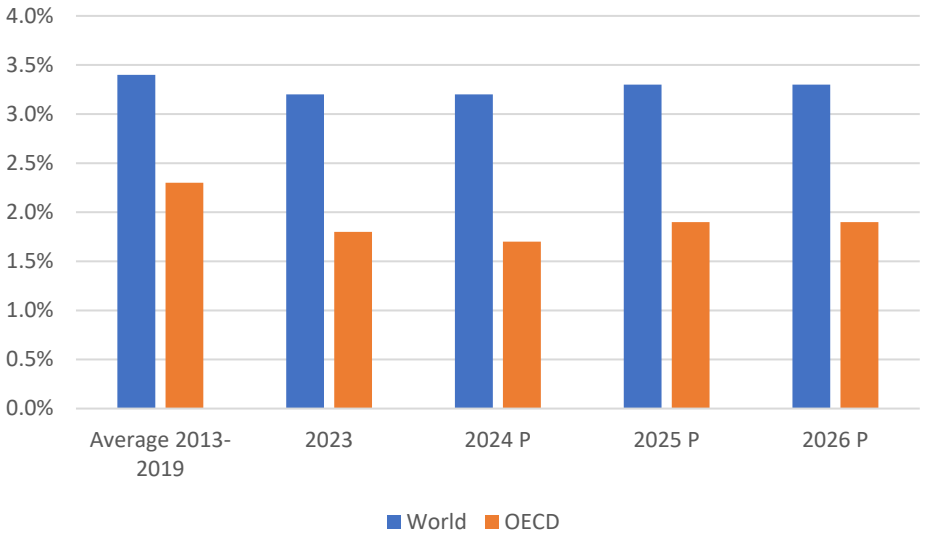

Figure 3. 1 - Global GDP growth by year

Source: OECD Economic Outlook (2024)

The slowdown in the economy is a result of sudden price hikes, strict monetary policies, and prolonged geopolitical uncertainty, leading to reduced investments and strained global trade. The figures presented for 2024 to 2026 are labeled as Projections ("P").

The expected slight growth from 2025 to 2026 depends on stabilizing inflation, securing supply chains, and boosting confidence in green energy and technology sectors. However, the current predictions face risks due to emerging challenges like rising trade barriers, climate-related disruptions, and unstable financial markets.
The OECD's economic growth outlook will face additional hurdles in the future. The table indicates a projected growth rate of 1.9% for 2026, subject to maintaining stable inflation levels and avoiding significant trade disruptions. Major economies have recently enforced protective tariffs, which threaten economic growth by disrupting crucial manufacturing and renewable energy supply chains, increasing costs for businesses and households. The interconnection of global markets makes them vulnerable to fragmentation caused by

retaliatory trade actions by advanced economies. Tensions in key regions due to geopolitical conflicts have led to unpredictable fluctuations in energy and commodity prices, raising inflationary pressures. Severe weather events and regulations targeting carbon emissions are reshaping industries, offering new business opportunities but also significant transition costs.
The financial industry remains at risk due to previous banking crises undermining investor trust, resulting in heightened market volatility and a shift towards alternative investments.

Developing economies benefit from improved debt sustainability and stable currencies due to strong domestic demand and simpler financial markets. Advanced economies must strike a balance between controlling inflation and promoting growth within tighter constraints.

Restoring trade stability requires policymakers to encourage collaborative efforts, enhance climate resilience, and strengthen crisis-responsive fiscal frameworks. The ability to adapt to changing circumstances will be critical for the global economy to successfully navigate intertwined challenges. Sustaining growth will continue to be fragile and uneven unless countries work together to address trade fragmentation, climate risks, and financial uncertainties.

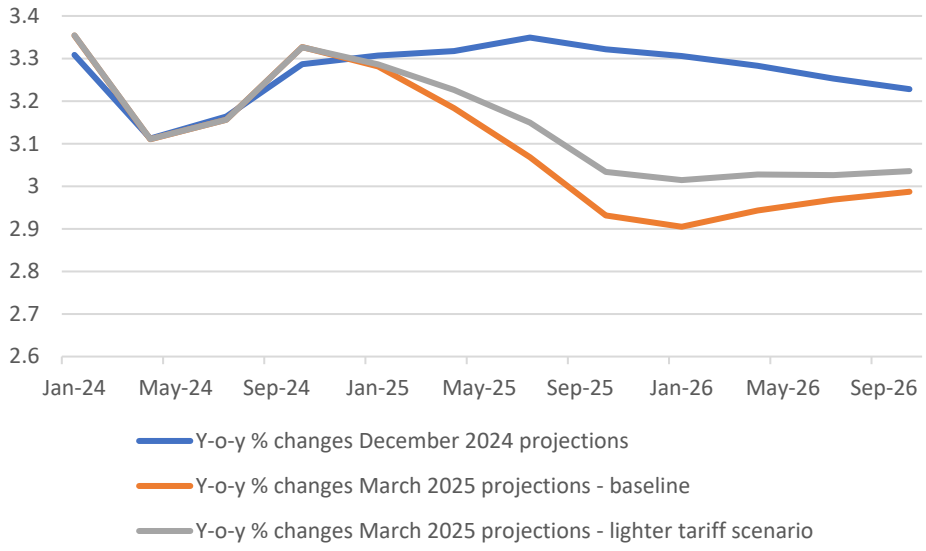

Figure 3. 2 – Global GDP growth by month

Source: OECD Economic Outlook (March 2025)

The OECD Economic Outlook Interim Report (March 2025) presents three different global GDP growth projections which originate from distinct trade policy assumptions and macroeconomic uncertainty levels, this is highly important as nowadays macroeconomic trends shift almost on a monthly basis. The three scenarios, December 2024 projections, March 2025 baseline and alternative lighter tariff scenario illustrate how macroeconomic conditions evolve in a world where trade relationships are fragmenting.

The December 2024 projections establish the foundation for comparison because they were developed before trade tensions rose in early 2025. The scenario predicts consistent global

growth throughout the projections period because it maintains stable international trade relations and policy conditions.

The March 2025 baseline scenario includes the recently implemented tariff increases which affect trade between the United States, Canada and Mexico. The implementation of extensive tariffs along with subsequent countermeasures will lead to decreased economic performance by both direct trade impacts and intensified uncertainty and investment reduction. The scenario demonstrates a gradual decrease in worldwide economic expansion while trade-sensitive nations become more reactive.

The lighter tariff scenario presents a hypothetical situation where trade barriers remain restricted due to the United States-Mexico-Canada Agreement ("USMCA") exemptions remain active and retaliatory actions decrease. The baseline projection shows weaker global growth than December 2024 projections but the path indicates that economic adjustments remain limited and some negative impacts from the baseline scenario are reduced.

The scenarios demonstrate how trade policy functions as a key driver in determining macroeconomic results while showing the extensive dangers of rising protectionism and the varying growth paths demonstrate both direct tariff effects and increased uncertainty's impact on worldwide economic expansion.

3.1.2. Global Trade Analysis

The approaching global war trade requires us to take into consideration recent global trade developments as we already face unpredictable circumstances which can impact any company valuation.

The worldwide trade sector demonstrated a recovery between 2022 and 2024 through its transition from initial negative phases reaching -4% in Q1 2022, to achieve 4.3% annualized growth in Q3 2024 which clearly indicates a larger economic shift after the pandemic. The current economic growth path faces substantial threats from intensifying trade disputes that now involve the United States against Canada and the European Union. The indicators show resilience through Asian technology exports and stabilized OECD services trade, but protectionist policies threaten to reverse these gains.

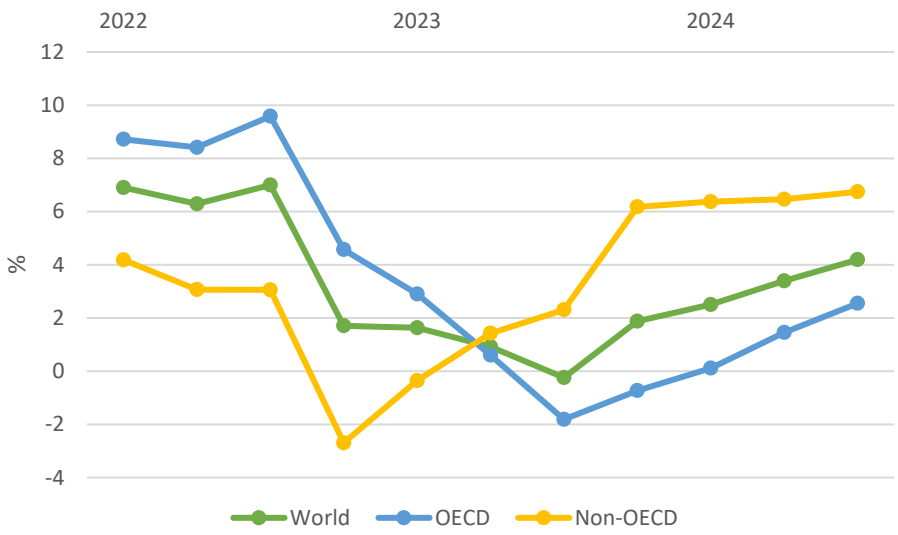

Figure 3. 3 - Global Trade Growth, by quarter

Source: OECD Economic Outlook (2024)

Historical precedents show that the 2018 – 2020 U.S. - China trade war together with tariff escalations and non-tariff barriers decreased cross-border efficiency while fragmenting supply chains and depressing investor confidence. Now the renewed U.S. and Canada trade conflict alongside U.S. and E.U. trade conflict targeting automotive goods and agricultural products or digital services will probably highly impact and reverse the evolution seen in 2024 both in OECD and Non-OECD countries.

The OECD Global Trade indicators remain highly unstable and unpredictable because of recent sanctions that have been implemented, since most countries involved in these applying and receiving end of these sanctions belong to the OECD. The current period of uncertainty makes it challenging to predict global trade growth because previous sanctions triggered new sanctions which will likely create double the trade flow disruption when initial sanctions are lifted. Even Non-OECD economies experience indirect exposure to transatlantic trade flows through disrupted global value chains and commodity price fluctuations. For example, the Association of Southeast Asian Nations agreements and diversified export strategies with regional partners have strengthened trade resilience but such mechanisms remain susceptible to large-scale trade war systemic shocks.

3.2. SECTOR ANALYSIS

Since its foundation in the late 19th century the automotive industry has experienced fundamental changes that have shaped global economic development. The industry has transformed from a luxury vehicle market niche into a modern mobility-focused complex ecosystem due to technological advancements and mass production and even changing consumer preferences. The industry is currently dealing with extraordinary obstacles while it moves toward sustainable practices and digital transformation alongside changing global political landscapes.

3.2.1. Historical Evolution

The automotive industry has experienced multiple phases throughout its history, namely when Henry Ford introduced his assembly line in 1913 which transformed manufacturing through its ability to produce affordable and extensive quantities of vehicles such as the Model T. Through its democratizing effect automobile ownership expanded globally as the industry established its worldwide presence.

The post-World War II period witnessed European and Japanese automakers such as Toyota, Volkswagen and Honda establishing themselves as major industry participants through globalization and the 1970s oil crises triggered manufacturers to concentrate on developing fuel-efficient smaller vehicles and the 1980s–1990s brought lean manufacturing alongside automation and fast production which improved productivity and quality.

During the 21st century, the industry experienced a fundamental transformation which emphasized sustainability and connectivity. The automotive industry underwent a transformation during the 2010 period when Tesla disrupted the market through electric vehicles and developers advanced autonomous driving technologies which changed industry direction.

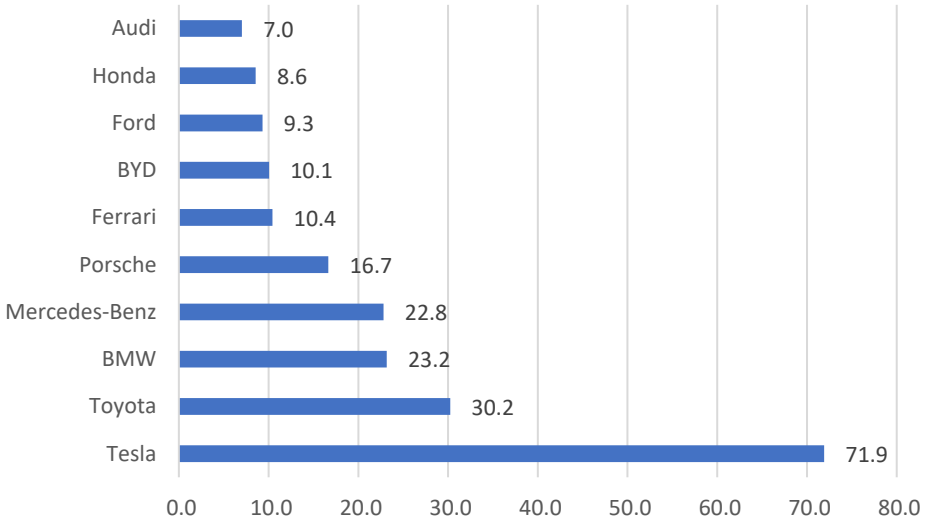

Figure 3. 4 -Most valuable automotive brands worldwide by brand value in 2024, in billions of USD

Source: Statista (2024)

According to McKinsey & Company (2023), the automotive industry worldwide during 2024 gets its direction from four key macro trends including software integration and regional electrification policies and supply chain control and luxury market dynamics. Tesla stands as

the perfect example of software-defined ecosystem transformation through its 71.9 billion USD brand value. Tesla uses its vertical battery and charging infrastructure expansion to support its autonomous driving platform that receives updates directly through over-the-air technology. McKinsey & Company (2023) reports that the industry currently shifts toward using technology in mobility solutions.

The hybrid vehicle strategy of Toyota (30.2 billion USD) focuses on reliability alongside step-by-step electric vehicle adoption. The regional energy transition asymmetry drives Southeast Asian markets to choose hybrids and hydrogen technology over complete electrification. Toyota still, to this day, prouds itself of its internal combustion engine profitability and is at the same time pursuing hydrogen investments and this dual approach highly reflects the difficulties traditional automobile producers face in combining new approaches with established practices.

BMW and Mercedes-Benz represent European luxury brands that show how premium sectors shift toward technology-based exclusivity through their strategies. These companies direct their efforts toward creating autonomous systems and Artificial Intelligence (“AI”)-powered infotainment systems as well as sustainable production methods to reach Chinese consumers who represent a key market for premium Electric Vehicle (“EV”) adoption (Deloitte, 2024). The luxury car manufacturers Porsche (16.7 billion USD) and Ferrari (10.4 billion USD) focus on exclusivity rather than scale by uniting electric technology with traditional heritage elements to maintain high profit margins. Porsche generates profitability at a level comparable to technology companies while Ferraris restricted release hybrid models satisfy traditionalists about the limited availability in the luxury market.

The Chinese electric vehicle leader BYD demonstrates vertical integration while receiving state support for its expansion plans. The company's control of both batteries and semiconductors allows it to maintain low prices which dominates both the Chinese EV sector and enables global expansion through cost advantages (BYD Annual Report, 2023). Ford and Honda encounter difficulties in transitioning their legacy operations because of their delay in adopting electric vehicles. The Ford automobile company uses electric vehicle technology to upgrade flagship models alongside internal combustion engine profits but Honda depends on hybrid vehicles and strategic partnerships because it has not fully committed to EVs.

Audi is now facing difficulties in standing out as a distinct entity within the Volkswagen Group operations mainly due to conglomerate structures creating problems for EV differentiation. The company's premium status has come to weaken because of software delays which proves how vital independent innovation is a key factor for the market.

The future success of the automotive industry depends on how well companies adapt their strategies. Tesla and BYD establish success through their software systems and supply chain dominance and Porsche and BMW achieve success through technology-based exclusivity. Survival for legacy automakers requires them to separate their operations from Internal

Combustion Engine ("ICE") dependence. The winners in this software-defined electrified era will be determined by regional policies and sustainability needs and customer expectations.

3.2.2. Electric vehicles

The International Energy Agency ("IEA") identifies electric vehicles (EVs) as the essential technology to reduce road transport emissions because transportation through roads produces more than 15% of global energy-related emissions.

The EV market expansion is driven by two main vehicle categories:

- Battery Electric Vehicle ("BEV"): These vehicles operate solely on rechargeable batteries to provide zero-emission electric power. The global BEV market is under a huge growth trend as sales numbers doubled from 2021 to 2023; and,
- Plug-in Hybrid Electric Vehicle ("PHEV"): These vehicles unite a rechargeable battery system with an internal combustion engine yet they do not achieve complete emission neutrality.

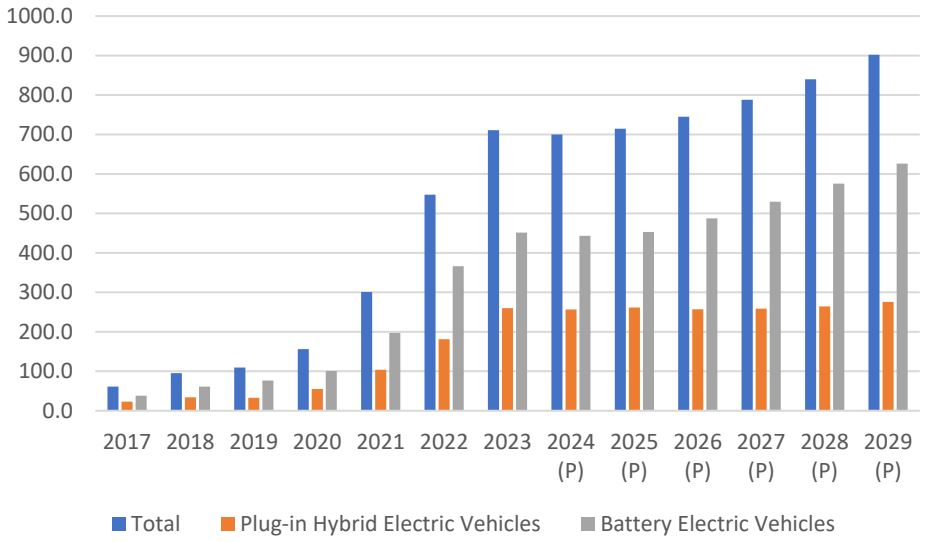

Figure 3. 5 - Electric Vehicles Revenue, in billions of EUR

Source: Statista (2024)

The Chart shows that there is a positive and consistent increase in EV revenues from 2017 to 2029. This is because there is a shift in the automotive industry structure, which is being brought about by policy measures, technological change and changes in the market structure.

EV sales revenue stood at €61.1 billion in 2017 and rose to €711.0 billion in 2023 and is expected to reach €901.9 billion in 2029. This significant growth points to the fact that electrification is a key factor in modern mobility plans and the industry's move from conventional internal combustion engines.

There is a distinguishable trend in the evolution between PHEVs and BEVs. During the first years of the analysis, both categories recorded revenue growth, but BEVs have become the leading product in the market. In 2023, BEVs generated the most revenue for EVs, and the projections show that this will be the case going forward. BEV revenue is predicted to grow from €451.2 billion in 2023 to €626.2 billion in 2029, which will cement BEV's status as the preferred technology and business model for car makers.

On the other hand, the PHEV revenue seems to stagnate after 2023 and only oscillates between €256.7 billion and €275.7 billion until 2029. This indicates that PHEVs are gradually becoming less relevant in the overall EV market, which can be attributed to their intermediate position and the improving competitiveness of full electric versions.

This is in line with other large-scale tendencies: the enhanced focus on zero-emission transportation, the integration of policies with the long-term energy and climate change plan, and the learning effects related to EV systems and battery systems production. Overall, the data points to the economic development of the EV sector and the strategic shift towards BEVs as the main driver of sustainable automotive innovation.

The difference in revenue per electric vehicle type shows different business models. BEVs were helped by declining battery costs (which decreased by about 80% from 2010 to the present), closing the price difference with ICE vehicles and increasing climate concerns and the need to ban fossil fuels. PHEVs, on the other hand, were transition vehicles, which were preferred by consumers who wanted lower emissions without range issues, in regions with inconsistent charging facilities. Mercedes-Benz and other traditional car manufacturers used PHEVs to fulfill their emission standards for the time being, but the vehicles lost their relevance when BEV infrastructure became more advanced.

Looking into the future, BEVs should represent around 80-90% of the global EV market by 2030 as a result of supportive policies, infrastructure spending, and manufacturers' focus on electrification. PHEVs will still be seen in specific niches, such as delivery services or countries with underdeveloped charging systems, but their market share is expected to decrease as BEVs reach price parity and public confidence in full electric vehicles grows. This is the path of the automotive industry towards zero-emission transportation, where BEVs are the mainstay of sustainable mobility plans.

Therefore, the next step is to identify the market leaders in the BEVs niche.

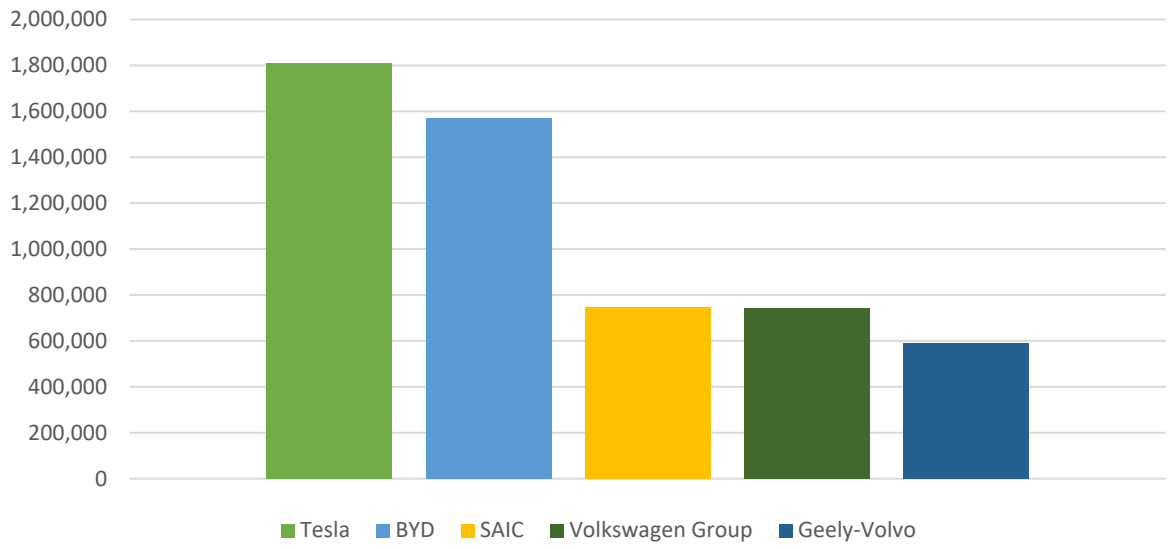

Figure 3. 6 - Best-selling battery-electric vehicle manufacturers worldwide in 2023, by total number of sales

Source: Statista (2024)

During 2023 the global BEV sector demonstrated how different regions fought for control through strategic advancements and government-backed expansion. Tesla continued as the leading BEV producer in the world by selling about 1.8 million units in 2023 while demonstrating its permanent dominance in a rising competitive market. The Chinese automotive industry experienced a rapid climb towards industry leadership during this period. The competition between BYD and Tesla ended with BYD selling 1.6 million units while SAIC sold 750,000 units and Volkswagen Group sold 740,000 units. The fifth position in the ranking went to Geely-Volvo with 590,000 units because it combined hybrid-electric capabilities with electric vehicle premium development goals.

The market leadership of Tesla rested on its complete manufacturing system together with customer loyalty and its ability to expand production. Tesla demonstrates clear financial strength through its $96.8 billion annual revenue in 2023 which grew by 18.8% year over year mainly due to the popularity of high-volume models such as the Model Y. Chinese competitors, on the other hand, have intensified their pressure on Tesla with their affordable prices and domestic market control and state-sponsored benefits were transforming global supply networks.

China took its position as the world's leading center of both BEV innovation and adoption since it accounted for more than 60% of worldwide electric vehicle sales. BYD demonstrated the country's leadership in electric vehicle production because it stood as the biggest EV manufacturer in China. The annual revenue of $83 billion from EVs and related products gave BYD control over essential components like batteries and software which helped the company reduce costs while increasing its production scale. BYD's dual strategy between BEV and PHEV products enabled it to claim the majority of the Chinese market while it penetrated European

and Southeast Asian regions. SAIC focused on delivering affordable urban mobility solutions for price-sensitive customers in emerging economies.

The Volkswagen Group demonstrated the strategic transformation of traditional automakers despite being surpassed by Chinese competitors. The 740,000 BEV sales demonstrated Volkswagen's platform and premium model investments yet software development delays and sluggish market adoption rates limited its advancement. The 590,000 unit sales of Geely-Volvo demonstrated how luxury car manufacturers merged premium quality with electrification to maintain their traditional heritage while advancing their technological capabilities.

The IEA predicts electric car sales need to expand at a yearly rate of 23% from 2024 to 2030 to reach Net Zero Emissions targets by 2050. The wide open market space will be shaped by government purchasing incentives and provides automakers with an extensive opportunity to penetrate this developing sector.

3.2.3. Luxury vehicles market

The luxury automotive industry is undergoing a profound transformation, driven by rapid technological advancements, evolving consumer expectations and dynamic policy shifts. Different strategies are being adopted to stay competitive in a market increasingly defined by innovation, sustainability and digital integration.

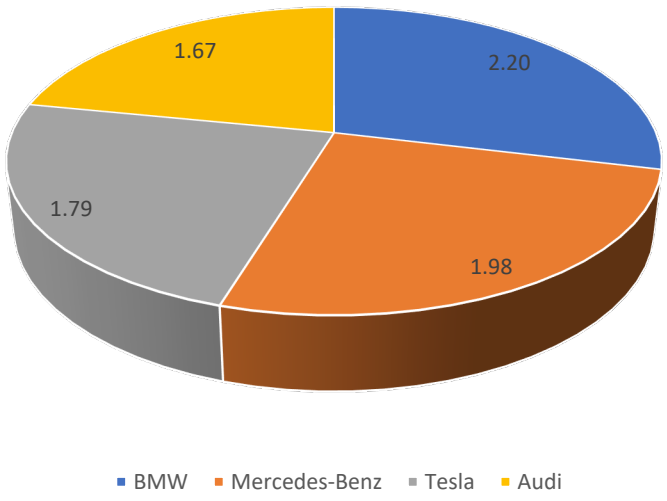

Figure 3. 7 – Best-selling luxury car brands in 2024, in millions of units

Source: Statista (2025)

In 2024, BMW emerged as the best-selling luxury car brand globally with 2.20 million units sold, followed by Mercedes-Benz with 1.98 million, Tesla with 1.79 million and Audi with 1.67

million. This competition reflects broader industry trends in electrification, connected technologies and regional adaptation (Statista, 2025).

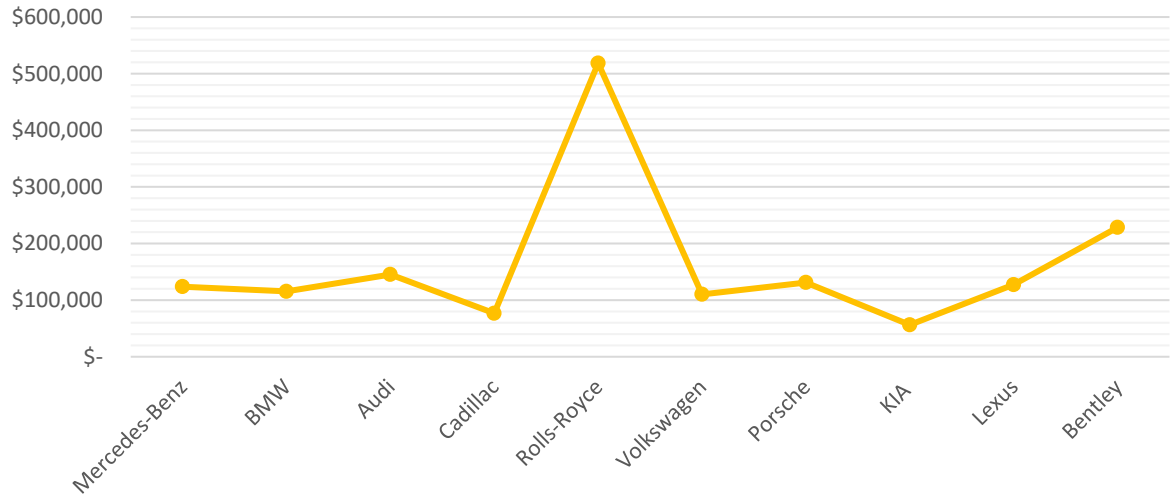

Figure 3. 8 - Average luxury vehicle price sold in 2023, in USD

Source: Statista (2025)

Mercedes-Benz continues to dominate the market along with BMW by using its premium SUV lineup and an expanding portfolio of electric vehicles (EVs). Having a market share of 17.7% in 2023 (Statista, 2025), the brand is driving aggressively towards full electrification by 2030. It is carrying this vision through contributions in scalable EV platforms, battery systems that are more efficient, and AI-powered infotainment capabilities. Mercedes retains its leadership position in Europe and China where it is allowed to set premium prices—up to 178% above the market average in China—which proves that it is a brand that combines prestige with technological innovativeness.

BMW, taking advantage of its brand as the "Ultimate Driving Machine," balances performance with electrification and autonomy. These EVs from BMW are created on adaptable platforms that are aimed at keeping driving dynamics while at the same time attracting sustainability-minded consumers. In China, the biggest EV market in the world, BMW has started to produce locally a domestic model with the help of local partners.

On the other hand, Porsche decides to follow a "profit over volume" strategy and instead of selling big numbers of cars, it focuses on high-margin, customizable vehicles. The electric Taycan of Porsche is not only seen as the main vehicle of the sustainability they want to aim for but is also a performance car that meets the needs of eco-conscious and well-off consumers. The pledge of the brand to carbon-neutral manufacturing and hybrid technology shows its efforts to continue the driving excellence while adjusting to the transition to the green side of the mobility.

Tesla revolutionizes the automotive industry via software-enabled innovation, the introduction of self-driving features, and a direct sales model that avoids the traditional dealership network. The business is attracting the tech-savvy, younger demographic that is now reshaping consumer expectations for luxury mobility.

On the other hand, BYD, a Chinese car manufacturer is also driving the transformation of the automotive industry with double speed. They produce affordable electric cars that are integrated with modern technology at a competitive price using state-led vertical integration. These brands are proliferating fast on the global stage after they have established their domestic base and are setting their sights on European and Southeast Asian markets with aggressive export planning.

Nevertheless, transformation usually comes with its challenges. Traditional brands are in a difficult position as they have to maintain their status while, at the same time, introduce new innovative products into the market. This is especially true since younger consumers demand sustainability, digital functionality, and transparency. Inflation, issues in the supply chain, and geopolitics add more layers of complexity which make it harder for players to plan their next steps in the market. In order to lessen the risk, companies such as Mercedes-Benz and Porsche implement the diversification of their operations in the emerging markets as a means to be less reliant on China.

Eco-friendliness is now widely recognized as the main characteristic that brands can use to stand out from the competition. These car manufacturers introduce themselves as participants in the circular economy by, for example, the use of recycled materials and battery recycling in the closed cycle they are doing to respond to consumer expectations as well as to regulations.

Statista (2025) data shows that the global luxury car market has reached the highest level of USD 21.7 billion in 2024, and it is expected to have a 7.4% compound annual growth rate

To the maximum extent possible, the prospect of the luxury segment in electric smart mobility depends on the brands' capacity to come up with environmentally friendly innovations and at the same time remain true to their brand history. The three brands – Mercedes-Benz with the focus on premium EV, BMW, which is a smart blending of tradition and modernity, and Porsche, which is an exclusive, high-margin model – form the core that is changing in the industry. On the other hand, Tesla and Chinese rivals are rewriting the luxury market by fusing their software with the environmentally friendly production. Winners will be the brands that go beyond words and really deeply understand the people in the regions they operate in, and, moreover, they focus on sustainability, technology, and customer-centricity while formulating their strategies.

3.2.4. Macro tendencies affecting the sector

According to Roland Berger (2024), the automotive industry transforms due to four macro tendencies that affect luxury vehicles and electric mobility. The automotive consultancy Roland Berger uses "PACE" to explain four dominant industry trends including Polarization, Automation, Connectivity, and Electrification.

The market transition from global to regional operations occurs due to various geopolitical changes and regulatory requirements and consumer tastes in worldwide markets. Automotive manufacturers operating in the luxury segment encounter major obstacles and promising opportunities because of this market fragmentation. Luxury automotive brands such as Mercedes-Benz are strongly affected by economic conditions in the regions where they operate, alongside regulatory requirements and protectionist policies as these elements directly shape their manufacturing and market activities. The automotive industry sometimes needs to adopt localized production methods together with market-specific strategies in order to answer to regulatory requirements and to face protection policies

The car manufacturing industry revolved a lot owing to the progress achieved in self-driving technologies that in turn led to automation. Roland Berger's survey points out that self-driving systems will be implemented initially in high-end and luxury segments as they are more expensive. Autonomous vehicles will penetrate major metropolitan cities of China and America first before spreading to other areas. Autonomous driving technology enables luxury vehicle manufacturers including Mercedes-Benz to differentiate their products by delivering advanced driving experiences coupled with exclusive autonomous services to their target premium customer base.

The automotive industry experiences a significant transformation through connectivity because software-defined vehicles (“SDV”) have become the industry standard. According to Roland Berger the entire automotive industry will adopt software-centric vehicle architectures by 2040 which will transform both vehicle capabilities and customer vehicle engagement. The luxury vehicle market will definitely reap far more benefits from such technologies as premium brands have an opportunity to use software updates, connectivity and customer experience improvements to justify high prices and create brand differentiations.

Electrification stands as the most impactful macro trend which transforms the automotive industry structure. The "Automotive Outlook 2040" report indicates that Roland Berger predicts BEV market share will reach 71% globally by 2040 based on regulatory requirements alongside environmental goals and shifting customer tastes. The luxury automotive sector shows direct alignment with customer expectations regarding sustainability and technological innovation and driving performance improvement due to this trend. The European market will drive worldwide electrification progress by reaching 99% total electrification of new vehicles by 2040 which will substantially impact Mercedes-Benz and other European luxury automotive manufacturers.

Raw materials needed for battery production have a global source base in the Southern Hemisphere while China handles most of the processing work which creates substantial supply chain threats for luxury electric vehicle manufacturers. Luxury electric vehicle producers face substantial strategic risks because of their dependence on global raw material supplies. Major markets of Europe and the United States have started major investments to develop domestic battery manufacturing capabilities because of supply chain risk mitigation needs.

Consumer behavior transformation stands as a major macro element which significantly affects the automotive industry. The luxury vehicle market shows growing consumer interest in digital experiences alongside sustainability and advanced technology which drives faster adoption of electric vehicles and autonomous driving solutions in the premium sector.

4. COMPANY OVERVIEW

4.1. COMPANY HISTORY

Mercedes-Benz, synonymous with automotive brilliance, funded the brand in the late 19th century with the innovative work of Karl Benz and Gottlieb Daimler. In 1886, Karl Benz created the Benz Patent Motor Car, considered the first car to be powered by an internal combustion engine. At the same time, Gottlieb Daimler and his collaborator Wilhelm Maybach converted a stagecoach by inserting a petrol engine, thus making an important step in the automotive history.

The trademark "Mercedes" was born in 1901 and was inspired by Emil Jellinek, an Austrian car dealer, and a businessman. Jellinek, a fervent supporter of Daimler-Motoren-Gesellschaft (DMG), called the 1901 Mercedes 35 hp after his daughter, Mercédès Jellinek. This model was the talk of the town and thus the Mercedes brand was established as one of the most innovative and luxurious in the automotive industry...

In 1926, the most important move was the merger between DMG and Benz & Cie., they formed Daimler-Benz AG. This was a union of two strongest companies and from now on they were producing vehicles under the Mercedes-Benz brand. The famous triple star logo, representing the mobility in the three elements: land, sea, and air, was first introduced at this time, thus reinforcing the brand's identity.

Mercedes-Benz was the most successful 20th-century automotive company and its engineering was at the forefront, introducing many innovations that set safety, performance, and design standards. The brand's dedication to quality and the excellent work made it famous worldwide.

Over a couple of years, Mercedes-Benz has concentrated on sustainable mobility and technology development. The company has also invested in the electric car market with the launch of the EQ series that is targeted at the green car market. On top of that, the brand has included firmly the new tech of the self-driving cars and the car's connectivity into its strategy, which helps the brand remain at the very apex of the automotive sector of the future.
The financial health of Mercedes-Benz Group AG has been quite solid. The group reported revenues of 145.6 billion euros for the year 2024 and had a workforce of 175,000 people all over the globe, as granted from the company’s annual report. These figures reinforce the company's strong presence in the global automotive market and its firm commitment to innovation and excellence.

Mercedes-Benz today is still about luxury, performance, and innovation, carrying the strong legacy while going through changes according to the new demands of the car industry.

4.2. BUSINESS MODEL

In 2024, Mercedes-Benz Group AG reported total revenues of €145.6 billion, a decrease from €152.4 billion in 2023. The group's operations are organized into three primary business

segments: Mercedes-Benz Cars, Mercedes-Benz Vans, and Mercedes-Benz Mobility. Let's see how the Groups revenue splits by the three subsidiaries, percentage wise:

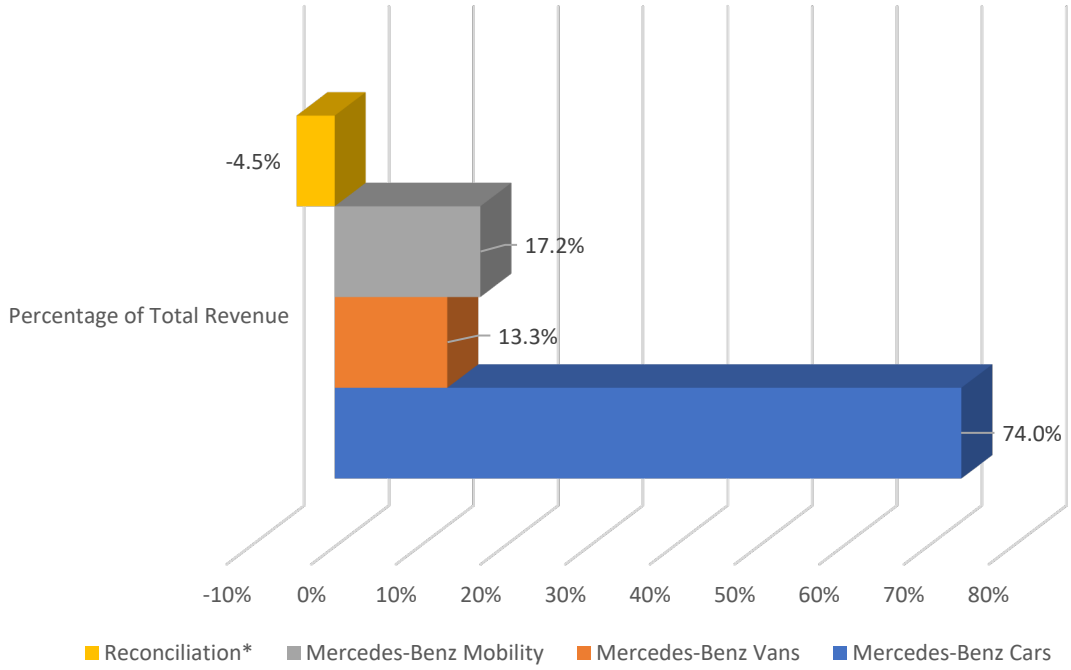

Figure 4. 1 - Revenue by Segment in 2024

Source: Mercedes-Benz Group AG Annual report (2024)

The Mercedes-Benz Cars segment functions as the main business unit of the group as it generated €107.8 billion in revenue which accounted for 74.0% of total revenue. The segment includes passenger vehicle development along with manufacturing and distribution of Mercedes-Benz models that span luxury sedans coupes SUVs and EVs. Multiple sub-brands operate within this segment to build on the group's market dominance across high-value segments. The Mercedes-AMG high-performance division serves customers who want more powerful vehicles with enhanced performance while Mercedes-Maybach delivers ultra-luxury vehicles that battle against Rolls-Royce and Bentley in the elite market segment. The smart brand operates as a 50/50 joint venture with Geely since it reorganized to become a fully electric brand focused on sustainable urban transportation.

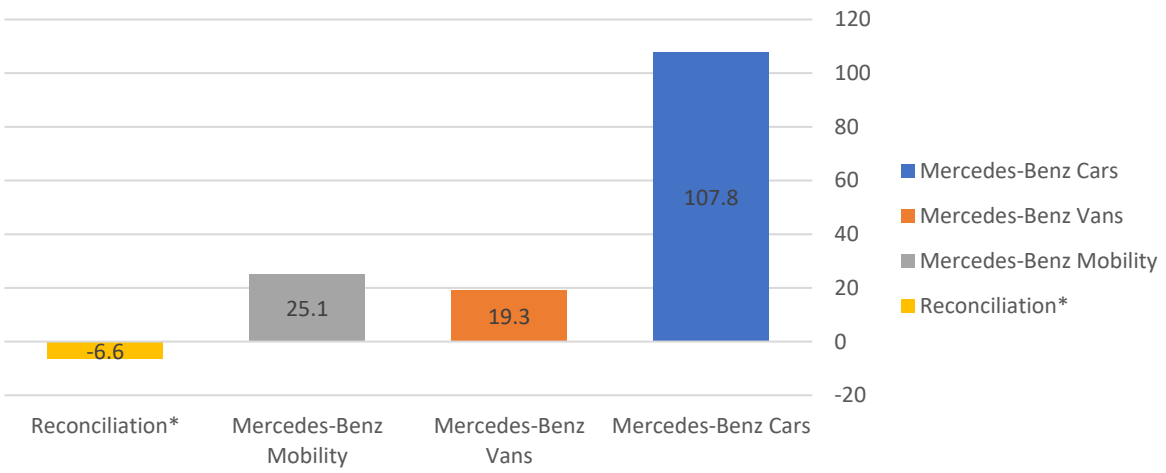

Figure 4. 2 - Revenue by Segment in 2024, in billions of EUR

Source: Mercedes-Benz Group AG Annual report (2024)

The strategic development of Mercedes-Benz Cars follows the group's long-term plan. The core element of this strategy involves transitioning to electrification through the "Ambition 2039" initiative that targets a carbon-neutral vehicle fleet for 2039. The company plans to introduce an all-electric vehicle lineup starting from 2030 unless market conditions prohibit it. The company has dedicated major funding to develop electric vehicle platforms, such as Mercedes-Benz Electric Architecture (“MB.EA”) and Mercedes-Benz Modular Architecture (“MMA”) alongside battery systems and charging stations for its electrification strategy. The company has established a clear focus on luxury vehicles while it reduces its entry-level product range to focus on premium high-margin segments. The brand's "modern luxury" direction finds strong appeal among tech-savvy younger consumers through this strategic move.

Digital innovation stands as a fundamental element for the segment to achieve its long-term objectives. Mercedes-Benz User Experience system along with over-the-air software updates represents the group's dedication to digital-first experiences for its customers. The upcoming Mercedes-Benz Operating System (“MB.OS”) represents the company's goal to establish leadership in software-defined vehicles and connected services because it will launch in the middle of the decade. The group is enhancing its worldwide production network by building battery production partnerships and flexible manufacturing systems to support electric mobility transition. The strategic moves demonstrate how Mercedes-Benz Cars transforms from a conventional automotive producer into a future-oriented mobility solution provider that combines luxury features with sustainability initiatives and digital technologies.

Mercedes-Benz Vans produced €19.3 billion in 2024 revenue which represented 13.3% of the company's total revenue. Mercedes-Benz Vans operates as a division that produces and markets light commercial vehicles. The segment addresses commercial and private users through its Sprinter and Vito and V-Class product range. The product range caters to diverse

operational requirements through versatile and dependable vehicles that perform both cargo hauling and passenger transportation duties.

The former Daimler Financial Services unit now operating as Mercedes-Benz Mobility produced €25.1 billion in 2024 revenue that constituted 17.2% of total group revenue. The segment provides extensive financial and mobility services through vehicle financing and leasing as well as fleet management and insurance solutions and digital charging and payment services. The business segment provides vehicle financing and leasing services together with car subscription and rental packages and fleet management programs and insurance products and digital payment solutions for charging systems. This segment provides flexible and innovative solutions to enhance customer mobility experiences while addressing the changing transportation requirements.

4.3. BUSINESS BY REGION

The 2024 financial report of Mercedes-Benz Group AG shows total revenues at €145.6 billion which represents a 4.5% decrease from the 2023 total of €152.4 billion. The sales performance across major markets including Asia and Europe and North American challenges led to this decrease. The company-wide performance shows how regional market changes have created both demand and competitive structural challenges.

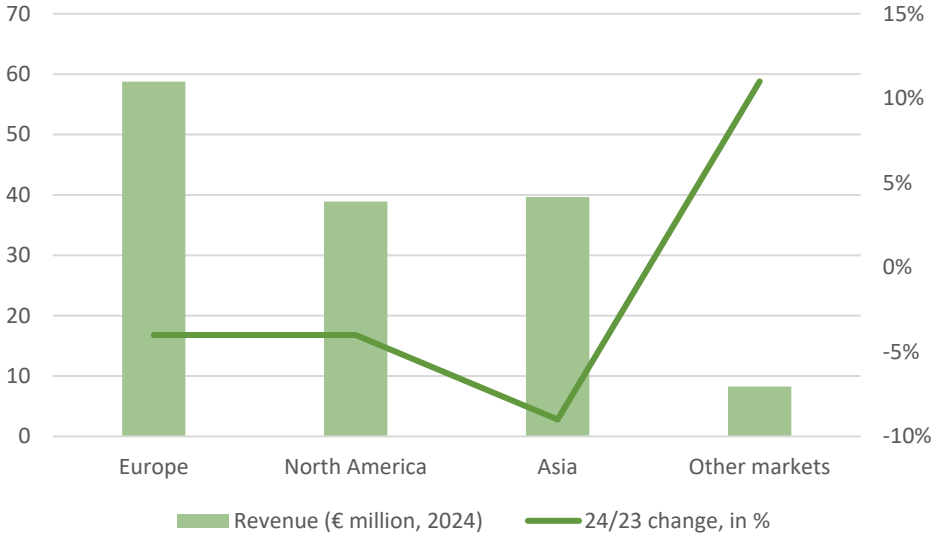

Figure 4. 3 - Revenue by region in 2024

Source: Mercedes-Benz Group AG Annual report (2024)

4.4. MERCEDES-BENZ CARS

Mercedes-Benz Cars functions as a worldwide leading automotive division within Mercedes-Benz Group AG which designs and manufactures premium and luxury vehicles for global

distribution. The company traces its origins to Karl Benz who invented the first automobile in 1886 and has since established itself as a global leader in engineering excellence and luxury automotive design. The brand produces a diverse lineup of models which span from compact sedans to luxury limousines as well as high-performance sports cars and SUVs.

Mercedes-Benz Cars has initiated a strategic shift toward sustainable mobility by focusing on electric powertrains and digital systems and autonomous vehicle technology development. The company pursues its “electric only” strategy through the EQ series launch to establish leadership in zero-emission mobility while defending its position as a global luxury automotive benchmark.

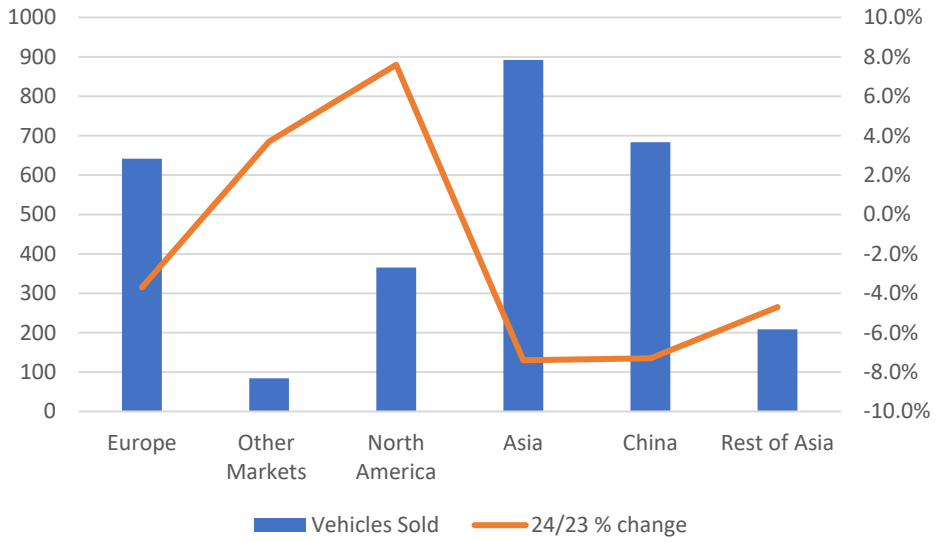

Figure 4. 4 - Vehicle sold by Mercedes-Benz Cars Segment in 2024, by region, in thousands of units

Source: Mercedes-Benz Group Fact Sheet (Q4 2024)

The chart above highlights regional performance differences in vehicle sales for Mercedes-Benz Cars in 2024, including year-over-year changes. The information below complements this by showing the relative contribution of each region to total sales, with additional detail on the Asian market distribution.

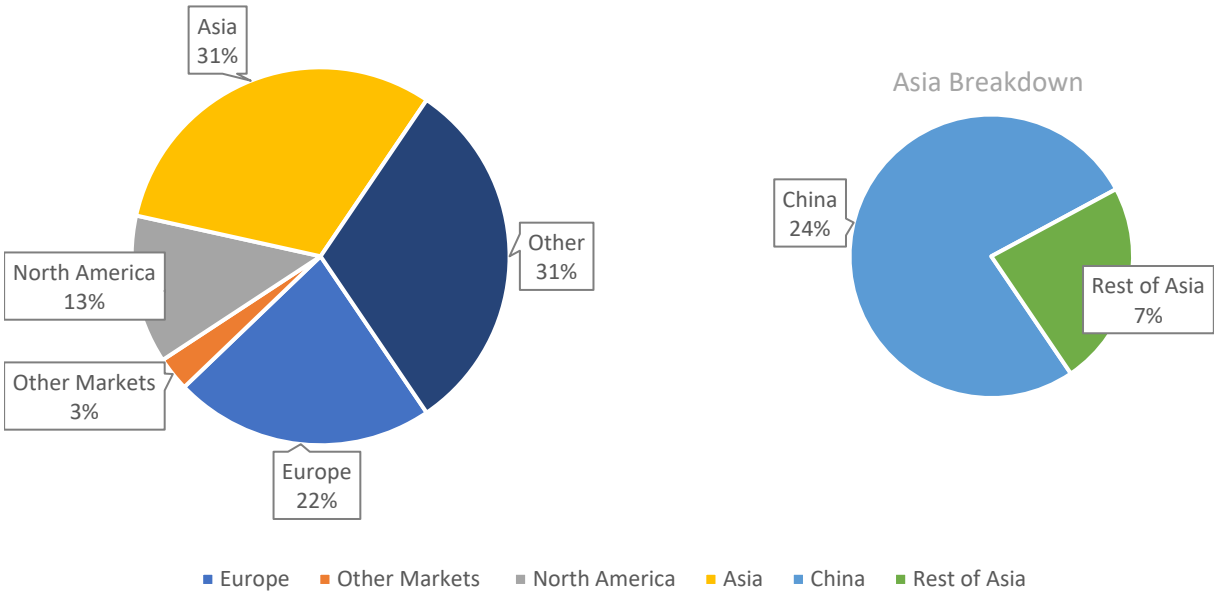

Figure 4. 5 - Vehicles sold by Mercedes-Benz Cars in 2024, by region

Source: Mercedes-Benz Group AG Annual report (2024)

Mercedes-Benz Cars managed to sell 892,100 vehicles in Asia during that year with a 7% decrease from the previous year and China was responsible for 683,600 units with a 7.3% decrease. The company faces major problems because China holds a vital position in its operations. The Financial Times published an article, “Mercedes-Benz cuts sales forecast as China demand falls short” in January 2024, in which it says that the market decrease resulted from increased competition between Chinese electric vehicle manufacturers such as BYD and Nio, these local carmakers have successfully expanded their market share through their competitively priced technologically advanced models which attract Chinese consumers who now prefer to buy domestic brands.

According to PwC (2025), premium imported vehicles across Asia suffer from protectionist policies and EV incentives that benefit local producers while consumers lose confidence post-pandemic. The report points to restricted credit options and reduced accessible auto financing as major factors that specifically impact mid-to-high-end Asian car purchases in China and South Korea.

Mercedes-Benz Cars reported 641,800 unit sales across Europe for the period but experienced a 3% decrease in numbers. The European market for Mercedes-Benz shows signs of maturing since annual vehicle sales have reached a plateau while showing small annual decreases. The market shows characteristics of saturation because growth is restricted by high penetration levels and fierce competition in the premium automotive sector. Expansion in such an

environment will require strategic changes toward electrification and digital services together with brand differentiation rather than focusing on volume growth.
The Mercedes-Benz Cars division in North America reported an 8% rise in vehicle sales totaling 365,400 units but the group experienced a 12% decline in regional revenue to €38.9 billion from €44.1 billion due to a 31% decrease in North American Vans Segment unit sales.

4.4.1. Electric Vehicle Sales

EVs, which are a large category comprising both battery electric vehicles (BEVs) and PHEVs, sold 367,610 units in 2024 representing an 8.5% decrease compared with the 401,945 units sold in 2023. This overall decline masks two opposing trends within the EV segment though.
Sales of BEVs plunged dramatically, from 240,668 units in 2023 to 185,059 units in 2024, a drop of 23.1%. The contraction indicates that there may be problems in the adoption of fully electric cars, which can be explained by some market-specific conditions such as charging infrastructure, affordability, or product availability.
The BEV part of the total group sales fell from 11.8% to 9.3%, showing a significant going-back in the strategically critical segment.
On the other hand, PHEV sales were hiked from 161,277 units in 2023 to 182,551 units in 2024, demonstrating 13.2% growth over the previous year. This means that Mercedes-Benz has been more successful in continuing and growing its PHEV portfolio, most probably being supported by consumers' interest in vehicles that provide the benefits of electrification but are not completely dependent on charging networks.

The 2023–2024 numbers indicates that Mercedes-Benz Cars is gaining momentum in the PHEV segment even though its poor performance in BEVs is of strategic concern. Industry projections foresee that BEVs represent almost totality of EV sales worldwide by 2030, due to battery price fall, policy incentives, and consumer need for zero-emission mobility.

In order for Mercedes-Benz to hold its place as a technological innovator in the luxury car market, it has to, not only stop the downward trend in the sales of battery electric vehicles (BEV), but also speed up its spending on BEV platforms, infrastructure partnerships, and entering new markets. Gaining back the lead in BEV uptake is not just in tune with future regulatory paths but it is also crucial for winning the luxury electric vehicle race.

4.5. SHAREHOLDER STRUCTURE

The shareholder structure of Mercedes-Benz Group AG depicts a strategically diversified ownership structure that combines international partnerships with long-term investment

interests. The company had close to 963 million shares outstanding as of December 13, 2024, with no treasury shares held by the group (Mercedes-Benz Group – Investor Relations). This number represents the entire amount of equity available on the market, which supports the group's liquidity and openness to public capital markets.

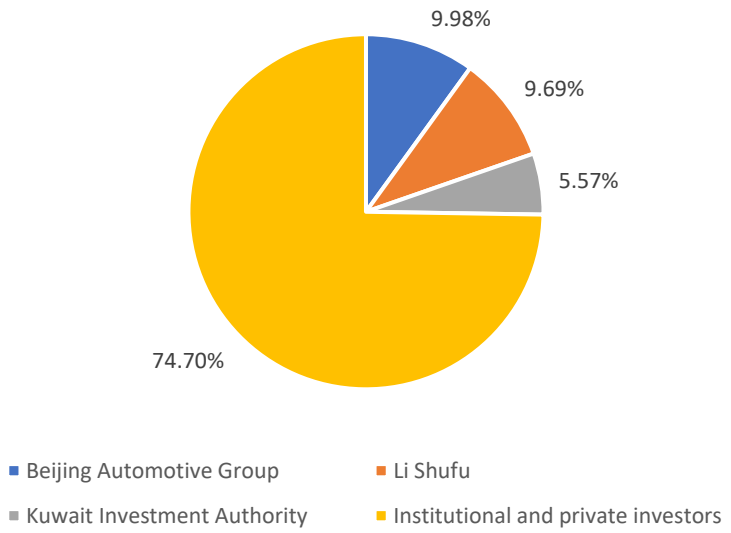

Figure 4. 6 - Shareholder structure of Mercedes-Benz Group AG

Source: Mercedes-Benz Group AG MarketScreener (2025)

The ownership structure encompasses state-supported entities and private stakeholders who have influence as well as institutional and private investors. The diversified ownership structure not only improves the group's global stability but is also a clear indication of its strong commitment to political and industrial systems in the global arena.

Beijing Automotive Group Co., Ltd. (BAIC), a leading state-run Chinese enterprise, owns a 9.98% stake in the company. BAIC is a partner in the local market for vehicle manufacturing and distribution joint ventures with Mercedes-Benz in China, thus it carries both a financial and operational role. This investment not only represents the local industrial partnership but also enables continuous cooperation for the two parties across one of Mercedes-Benz's most important markets, i.e. China.

The founder and chairman of Geely Holding Group, Li Shufu who is also a shareholder in the Company, holds a 9.69% interest in the Company via Tenaciou3 Prospect Investment Limited. Being one of the largest private investors in the company, his shareholding makes him so. Li's investments reflect the strategic bond between the European and Chinese automotive sectors for their electrification, mobility, innovation, and connectivity projects since he is always working to link the two regions. The smart brand joint venture between Geely and Mercedes-Benz Cars along with Geely's diverse automotive portfolio that includes Volvo Polestar and

Lotus demonstrates that Li's investment in Mercedes-Benz could generate strategic benefits and industrial advantages.

The Kuwait Investment Authority (KIA), one of the longest-running sovereign wealth funds in the world, holds 5.57% of the group. KIA continues its commitment to Mercedes-Benz since this financial institution is stable and therefore can provide continuous support. The ongoing business partnership between the two parties strengthens investor confidence in both the company's current financial situation and its future prospects.

Institutional and individual investors jointly have 74.76% of the company shares. The investor base is made up of mutual funds and pension funds together with individual investors who hold shares across different international markets. The diversified shareholder base not only keeps high market liquidity along with strong oversight, but it also exposes the company to changing standards for sustainability and governance as well as financial performance.

The ownership structure of Mercedes-Benz Group AG illustrates a healthy relationship between industrial investment and sovereign capital, as well as private business and public shareholder participation.

4.6. SHARE PRICE AND DIVIDEND PERFORMANCE

Since its initial public offering in 1993 Mercedes-Benz Group AG under its previous name Daimler AG has seen major swings in its stock market value. The highest point in company stock history occurred when the price reached approximately €93 on May 7th 1998. The stock price experienced a major drop during the worldwide financial crisis when it reached approximately €22 in 2009. The stock price has demonstrated stability since the crisis by reaching pre-crisis levels and it has sustained this pattern of stability. In 2020 due to pandemic, there was another sharp decline reached approximately €19, followed by a good recovery by 2021. Over the following years the price continued to oscillate, reaching at the end of June 2025 approximately €49.

Figure 4. 7 – Mercedes-Benz Group AG share price performance (1993-2025)

Source: Google Finance Mercedes-Benz Group Price (2025)

The company raised its dividend per share from €0.90 in 2019 up to €5.30 during the last five financial years. The rising dividend demonstrates the company's strong financial performance and its focus on shareholder value. The company cut its dividend payment to €4.30 per share during 2024 because of market difficulties in China, still, the dividend performance over the last years shows the company's dedication in providing positive shareholder returns.

The stock performance of Mercedes-Benz Group AG has shown vulnerability to worldwide economic downturns while also demonstrating recovery resilience throughout different economic cycles. The company demonstrates its shareholder value commitment through steady dividend payments as it adjusts to market conditions to maintain financial stability.

5. METHODOLOGY

5.1. INTRODUCTION

The use of the FCFF method is particularly suitable for valuing Mercedes-Benz, given the company's current strategic and financial context, in this sense we will be using this method to evaluate Mercedes Benz Cars. As the firm undergoes a significant transformation, from a volume-based automaker to a value-oriented luxury brand with a growing EV portfolio, its capital structure is likely to evolve, with varying levels of debt financing needed to support high investment in electrification, digitalization, and global production shifts. In this context, the FCFF approach offers a major advantage as it enables valuation based on cash flows generated by the firm's operations before interest and debt repayments, thus avoiding the complexity of projecting future debt issuance or repayments. This characteristic of FCFF is especially relevant for Mercedes-Benz, as the firm continues to invest in high-capex projects, expand strategic partnerships (such as the smart joint venture with Geely), and optimize its financing mix. Moreover, by allowing the use of the weighted average cost of capital ("WACC") to discount future cash flows, the FCFF method provides a consistent and reliable framework for estimating enterprise value, even when equity cash flows may be volatile or temporarily negative due to heavy debt repayments. Considering the above, we can conclude that this is a particularly robust tool for capturing the intrinsic value of Mercedes-Benz amid its ongoing transformation.

5.1.1. Free Cash Flow to The Firm

FCFF represents the cash flow generated by a company's operations that is available to all providers of capital (both debt and equity) after the firm has paid its operating expenses, taxes, and made the necessary investments in working capital and fixed assets (Damodaran, 2012; Koller et al., 2020). In other words, it is the residual cash flow before any debt payments, often referred to as unlevered free cash flow, since it excludes the impact of financing costs and reflects cash available to both creditors and shareholders (Brealey et al., 2020). FCFF is a fundamental metric in discounted cash flow valuation as by discounting expected FCFF at the appropriate discount rate (typically the WACC), analysts can estimate the enterprise value of the firm (Damodaran, 2012).

(5.1)

$$FCFF = EBIT \times (1 - Tax\ Rate) + Depreciation - Capiral\ Expenditures - \Delta Working\ Capital$$

5.1.1.1. Weighted Average Cost of Capital

The WACC is the overall required rate of return on a firm's capital, calculated as the weighted average of the cost of equity and the after-tax cost of debt, with the weights reflecting the proportion of each cost in the company's capital structure (Brealey et al., 2020). In essence, WACC represents the composite cost of financing for the firm – it is the return that the company must earn on its assets to satisfy both its equity investors and its lenders (Damodaran, 2012). WACC is commonly used as the discount rate in valuation models (when using FCFF), serving as the hurdle rate that projects and investments must exceed to create value, since it reflects the opportunity cost for the firm's providers of capital (Koller et al., 2020).

(5.2)

$$WACC = \frac{E}{D+E} \times R_e + \frac{D}{D+E} \times R_d \times (1-T)$$

Where:

- E = Market value of equity
- D = Market value of debt
- Re = Cost of equity
- Rd = Cost of debt
- T = Corporate tax rate

5.1.1.2. Cost of Debt

The cost of debt is defined as the rate of return that a company must offer to its debt holders, effectively the interest rate the firm pays on its borrowings, to compensate them for the default risk and time value of money (Damodaran, 2012). This cost is often measured by the yield to maturity on the firm's existing long-term debt or estimated by adding a credit spread (reflecting default risk) to the risk-free rate (Brealey et al., 2020). In the context of WACC, the cost of debt is used on an after-tax basis (i.e. *cost of debt × (1 – tax rate)*) because interest expenses are tax-deductible, so the effective cost to the firm is lower than the nominal interest rate paid to bondholders (Koller et al., 2020).

(5.3)

$$After-tax\ Cost\ of\ Debt = R_d \times (1-T)$$

Where:

- Rd = Pre-tax cost of debt (e.g., yield to maturity)
- T = Tax rate

5.1.1.3. Cost of Equity

The cost of equity is the expected rate of return required by a company's common shareholders as compensation for investing in equity and bearing the associated risk (Damodaran, 2012). It reflects the shareholders' opportunity cost of capital and is often estimated using the Capital Asset Pricing Model ("CAPM") which we will be using. Under CAPM the cost of equity equals the risk-free rate plus the company's beta multiplied by the market risk premium (Brealey et al., 2020), in other words, the cost of equity represents the return that equity investors demand, given the firm's systematic risk, and it serves as the appropriate discount rate for free cash flows to equity or for evaluating equity-financed projects (Koller et al., 2020).

(5.4)

$$R_e = R_f + \beta \times (R_m - R_f)$$

Where:

- Re = Cost of equity
- Rf = Risk-free rate
- β = Equity Beta
- Rm = Expected return of the market
- Rm−Rf = Market risk premium

5.1.1.4. Beta

Beta is a measure of an asset's systematic risk relative to the overall market portfolio (Brealey et al., 2020). In the CAPM framework, beta quantifies the sensitivity of the asset's returns to movements in the broader market's returns: a beta of 1.0 indicates the asset has average market risk (moving in line with the market), a beta above 1.0 indicates higher-than-average volatility (the asset is riskier than the market), and a beta below 1.0 indicates lower volatility (the asset is less risky than the market) (Brealey et al., 2020). Essentially, beta captures how much risk an individual stock contributes to a well-diversified portfolio; the higher the beta, the greater the stock's required return will be, as investors demand more compensation for the higher systematic risk (Damodaran, 2012).

(5.5)

$$\beta = \frac{Cov\ (R_i, R_m)}{Var\ (R_m)}$$

Where:

- Ri = Return of the individual asset
- Rm = Return of the market portfolio

5.1.1.5. Market Risk Premium

The market risk premium (also known as the equity risk premium) is the expected excess return of the market portfolio over the risk-free rate (Brealey et al., 2020). It represents the additional return that investors require for taking on the average risk inherent in the equity market, as opposed to investing in risk-free assets. Essentially, it is the compensation for bearing systematic market risk (Damodaran, 2012). According to Fernandez (2021), the estimation of the market risk premium should consider both historical evidence and current market conditions, emphasizing that the premium may vary depending on economic context and investor perceptions. The market risk premium is a key input in models like CAPM for determining the cost of equity: it is typically estimated from historical data or implied by current market valuations, and a higher assumed market risk premium will lead to a higher estimated cost of equity for stocks (Koller et al., 2020).

(5.6)

$$Market\ Risk\ Premium = E(R_m) - R_f$$

Where:

- E(Rm) = Expected return of the market portfolio
- Rf = Risk-free rate

6. COMPANY VALUATION ASSUMPTIONS

In this section, the value of Mercedes-Benz Group is determined using the methods that have been explained earlier in the chapter. The main investigation will employ a DCF method, especially the FCFF model, but will also include relative valuation techniques based on market multiples to give a more ample view by comparing the group with its sector peers.

Before yielding the outcomes of the valuation, it is of utmost importance to identify the assumptions on which the estimations of the financial situation are based. This set of assumptions is designed to capture not only a macroeconomic environment but also specific developments in the automotive industry, where the Mercedes-Benz brand is active.

In the same vein, the choice of the Weighted Average Cost of Capital ("WACC") and the Terminal Growth Rate ("TGR") will be presented, since these intangibles influence the discounting process and the calculation of the terminal value. A sensitivity test will be carried out as well, in order to explore the range of company's equity value that may be generated by the changes in said inputs.

At Last but not least, a relative valuation will be conducted, wherein a peer group will consist of companies which have the same sector of operations and which have similar operational characteristics. The aim is to compare Mercedes-Benz's valuation with the industry standards and also to check if the results obtained using the DCF model are consistent.

6.1. FREE CASH FLOW DRIVERS

6.1.1. Revenues

6.1.1.1. Mercedes-Benz Cars

Table 6. 1 - Mercedez-Benz Cars Historical Analysis

Volume analysis (hist)	2021	2022	2023	2024
Top-end vehicles	242,520	266,458	235,687	210,059
Core vehicles	819,280	906,542	787,561	870,942
Entry vehicles	610,300	595,900	618,860	534,792
Top-end eletrified vehicles	62,080	61,742	92,581	71,433
Core eletrified vehicles	209,720	210,058	309,362	296,177

Unit price analysis (hist)	2021	2022	2023	2024
Top-end vehicles	104,485	113,851	113,070	113,291
Core vehicles	41,794	45,540	45,228	45,317
Entry vehicles	29,256	31,878	31,660	31,722
Top-end eletrified vehicles	112,844	122,959	122,116	122,355
Core eletrified vehicles	58,512	63,756	63,319	63,443

To project Mercedes-Benz Car's future revenues, the starting point was the historical breakdown of vehicle sales by category. The company provides data on the number of cars sold in three distinct segments: Top-End, Core, and Entry. Additionally, the total number of electrified vehicles sold (regardless of segment) is also disclosed. However, no direct segmentation is available within the electrified vehicle category. To estimate the number of electric vehicles in the Top-End and Core segments, a proportional allocation method was employed. Specifically, the ratio of Top-End to total premium vehicles (Top-End + Core) was calculated and applied to the total number of electrified units sold, thereby estimating the number of electric Top-End and Core vehicles.

For the year 2020, detailed segmentation was not available. In this case, the 2021 distribution ratios were used as a proxy to estimate the breakdown of total vehicles sold across the five defined categories: Top-End, Core, Entry, Electrified Top-End, and Electrified Core. This methodology enabled the reconstruction of a consistent historical dataset from 2021 to 2024.

With this segmentation in place, historical revenues were then allocated to each category, allowing for the calculation of an average selling price ("ASP") per vehicle by segment. The ASP of Core vehicles served as the reference point, from which the prices of other categories were derived using fixed multiples: 0.7 for Entry, 2.5 for Top-End, 2.7 for Electrified Top-End, and 1.4 for Electrified Core. This approach ensured internal consistency and allowed for the estimation of historical and, subsequently, projected revenues across each product category.

Table 6. 2 - Mercedez-Benz Cars Projections

Volume analysis (proj)	2025	2026	2027	2028	2029
Top-end vehicles	199,556	189,578	178,203	167,511	155,785
Core vehicles	827,395	786,026	738,864	694,532	645,915
Entry vehicles	508,052	477,569	444,139	408,608	367,747
Top-end eletrified vehicles	80,720	90,406	99,447	107,403	115,995
Core eletrified vehicles	349,488	405,406	462,163	517,623	569,385

Unit price analysis (proj)	2025	2026	2027	2028	2029
Top-end vehicles	116,690	120,191	123,797	127,510	131,336
Core vehicles	46,223	47,147	48,090	49,052	50,033
Entry vehicles	31,722	31,722	31,722	31,722	31,722
Top-end eletrified vehicles	129,696	137,478	144,352	151,569	157,632
Core eletrified vehicles	65,981	68,620	70,679	72,799	74,255

The projections for 2025–2029 are based on expected trends in both volume and pricing per vehicle category. From a broader perspective, the assumptions reflect a moderate economic environment, where inflation is expected to ease and premium demand remains relatively resilient. At the same time, the automotive industry is undergoing a structural shift, with electrification accelerating due to regulatory pressure and evolving consumer preferences.

These factors support the expectation of a decline in ICE vehicle sales and sustained growth in EV segments, particularly in the top-end and core categories.

Mercedes-Benz has undergone a major revamp to be known as a luxury car manufacturer that is more focused on high-end cars with higher margins and electrified mobility. The company has publicly declared its goal to become "electric-only, if the market allows" by the end of the decade. Its capital allocation also shows this commitment, with investments mainly in electrification, digitalization, and the development of premium products.

In line with this, the entry segment has slowly faded out, while the top-end and electrified core models have become the backbone of the group's future strategy. This reposition supports the sale decline in ICE entry and core models that are forecasted, as well as the rise of EVs, especially in the premium categories.

As far as the price is concerned, the outline is based on continuous differentiation throughout the segments, which is in line with the brand's strategic focus. A historical price ratio was utilized for developing a relative structure where the most expensive cars were set at 2.5× the core segment, the lowest at 0.7×, the core electrified at 1.4×, and the top-end electrified at 2.7×. Furthermore, they assumed that depending on the segment, the next years would see prices rise up to 6.0% yearly.

If the premium categories are focused on, they are said to take advantage of better pricing power which will be backed up by the innovation, exclusivity, and brand equity that help price stick. On the other hand, the entry segment seems to have more price competition, less focus on strategy, and this is shown in a more conservative or even slightly negative price trend during the period of the forecast.

Overall, the revenue projections reflect the company's transition toward a more focused and profitable product mix, in line with both external trends and internal strategic priorities.

6.1.1.2. Mercedes-Benz Vans

Table 6. 3 - Mercedez-Benz Vans Historical Analysis

Volume analysis (hist)	2021	2022	2023	2024
Non-eletrified vans	372,400	400,300	305,602	261,976
Eletrified vans	13,800	15,000	22,666	19,516

Unit price analysis (hist)	2021	2022	2023	2024
Non-eletrified vans	37,616	40,866	60,142	66,782
Eletrified vans	52,663	57,213	84,199	93,495

To project future revenues for Mercedes-Benz Vans, historical sales were segmented into two categories: electric and non-electric vans. As the company reports total van sales and separately discloses the number of electric units sold, no further allocation across subcategories was necessary. The only exception was the year 2020, for which no electrification breakdown was available. In that case, the share of electric vans was estimated using a slightly lower percentage than the one observed in 2021, reflecting the earlier stage of electrification.

Based on this segmentation, historical revenues were allocated to each category, allowing for the calculation of the ASP. The ASP for non-electric vans served as the baseline (1.0x), while electric vans were assumed to carry a premium, priced at 1.4 times the ASP of non-electric units. This ratio-based approach enabled a consistent estimation of both historical and projected revenues per category.

Table 6. 4 - Mercedez-Benz Vans Projections

Volume analysis (proj)	2025	2026	2027	2028	2029
Non-eletrified vans	230,539	207,485	188,811	177,483	170,383
Eletrified vans	29,274	39,520	49,400	56,810	65,331

Unit price analysis (proj)	2025	2026	2027	2028	2029
Non-eletrified vans	67,450	68,125	68,806	69,494	70,189
Eletrified vans	92,560	92,097	92,097	92,558	93,483

The projections for Mercedes-Benz Vans were predicated upon the differentiated performance of electric and non-electric motors. The volume of non-electrified vans was forecasted gradually to go down from 2025 to 2029 in accordance with the general transfer from internal combustion engines and the rise of regulatory pressure in Europe. The decline in non-electrified van sales was only partially compensated for by small price increases (1% per year), which were helped by the sustained demand in some logistics and commercial segments in which vans are mostly used.

On the other hand, electric van volumes were estimated to increase greatly over the forecast period. This was influenced by regulations incentives, increased customer acceptance, and the company's growth in the electric van segment. The price trend for electric vans was less aggressive and mirrored the party of competition and anticipated battery cost cuts, thus affecting electric van prices to fluctuate slightly within the range of -1% and 1% every year.

This dual trajectory reflects the company's strategic transition toward electric mobility while maintaining a gradual ramp-down of its legacy product base.

6.1.1.3. Mercedes-Benz Mobility

Mercedes-Benz Mobility, the segment responsible for the group's financing and leasing operations, represents a complementary source of revenue alongside vehicle sales. Given the stability and predictability typically associated with this business line, revenue projections were based on historical performance. In this case, a conservative approach was adopted by applying the average historical decline of 3.5% per year, reflecting recent downward trends observed in the segment's revenue over the past years.

6.1.2. General costs and EBITDA margin

To project the cost structure, the main expense lines namely Cost of Sales, Selling Expenses, General Administrative Expenses, Research and Non-Capitalized Development Costs and Other Income/Expenses were projected as a percentage of revenue, with targeted improvements applied to reflect anticipated operational efficiencies. These adjustments are supported by Mercedes-Benz Group's announced strategic investments in advanced manufacturing technologies, digital transformation, and the transition toward a more streamlined, high-margin product portfolio.

Table 6. 5 - Projections on the Operational Efficiency of MBGROUP, in EUR

	2025	2026	2027	2028	2029
MBGROUP | Total revenue	147,001	149,611	151,912	154,692	156,955
MBGROUP | Gross Margin	28,913	30,026	31,104	32,425	33,040
MBGROUP | EBITDA	19,682	22,057	24,640	27,583	29,352
MBGROUP | EBIT	14,005	15,253	16,538	18,160	18,511

In particular, the company's focus on electrification, software-defined vehicles, and platform consolidation is expected to yield productivity gains and cost savings over time. As a result, a gradual improvement in profitability was projected: the gross margin increases from 19.6% to 21.1%, the EBITDA margin from 14.0% to 18.7%, and the EBIT margin from 9.5% to 11.8% throughout the projection period.

Depreciation expenses were allocated across relevant cost lines and estimated based on the gross value of fixed assets at the beginning of each year, adjusted for net capital expenditures. The depreciation rates were derived from the average useful life assumptions disclosed in the company's most recent annual report, ensuring alignment with Mercedes-Benz's accounting policy and investment profile.

Reconciliation items were estimated by applying historical ratios of reconciliation revenue and expenses relative to total group revenue, ensuring consistency within the consolidated financial outlook.

6.1.3. Capital Expenditures Variation

The projected Capital Expenditure Variations reflect Mercedes-Benz Group's strategic transition toward electric mobility, software-defined vehicles, and enhanced production

flexibility. Rather than presenting absolute Capex levels, the table below captures the year-over-year increases in spending relative to the prior year. Between 2025 and 2029, the annual increase in total Capex is expected to rise from 11.2 billion EUR in 2025 to a peak variation of 15.8 billion EUR in 2027, remaining at that elevated level through 2029. This upward trend mirrors the company's long-term commitment to technological leadership and sustainable growth.

Table 6. 6 - Capital Expenditures Projections, in millions of EUR

	2025	2026	2027	2028	2029
Tangible Assets Capex	5,116	5,769	7,160	7,004	6,053
Intangible Assets Capex	5,471	6,309	7,925	8,077	8,995
Right-of-use Assets Capex	655	665	675	690	705
Capital Expenditures	**11,242**	**12,742**	**15,760**	**15,772**	**15,753**

The increase in Capex is driven by several key initiatives such as, the expansion of the electric vehicle portfolio, the development of the proprietary MB.OS, the restructuring of the manufacturing footprint to support EV production, and continued investments in digitalization and autonomous technologies. These efforts are capital intensive, especially in the earlier years of deployment.

Tangible assets capex reflects investments in plant, machinery, and tooling for new EV models. Intangible assets capex, growing more sharply, relates mainly to software development, digital services, and the MB.OS platform. Right-of-use asset capex remains relatively stable and modest, reflecting leased facilities and fleet operations. The projections above presented were calculated based on the projected revenue, growing consistently with the Group's projected revenue.

The projected trajectory aligns with publicly disclosed investment plans, including the commitment of more than €60 billion in Capex and Research and Development ("R&D") between 2022 and 2026. The persistent level of Capex through 2029 reflects the longer period necessary for the complete implementation and growth of these strategic projects.

6.1.4 Working Capital Variations

The projections for Working Capital components namely Inventories, Trade Receivables, Trade Payables, Other Current Assets and Other Current Liabilities were made using an operating cycle approach. Historical averages of working capital days were calculated and kept constant throughout the projection period: Days Inventory Outstanding at 79 days, Days Sales Outstanding at 20 days, and Days Payables Outstanding at 34 days. These ratios were applied to projected Revenues (for receivables) and Cost of Sales (for inventories and payables) to estimate future balances.

Other Current Assets and Other Current Liabilities were projected based on their historical relationship to total Revenues, maintaining consistent proportionality over time. The table below presents the variation of the working capital regarding the previous year:

Table 6. 7 - Working Capital Projections, in millions of EUR

	2025	2026	2027	2028	2029
Inventories	(188)	330	269	322	363
Trade Receivables	1,127	144	127	153	125
Other Current Assets	423	71	63	76	62
Trade Payables	171	(141)	(115)	(138)	(155)
Other current liabilities	154	(60)	(53)	(64)	(52)
Changes in Working Capital	**1,686**	**344**	**291**	**349**	**342**

The significant variation in 2025 derives and is easily explained by the difference between the historical averages of working capital days (which was calculated) and the working capital days used in 2024.

This approach ensures a good mix between operational activity and working capital dynamics, allowing assumptions to evolve in line with the business's scale. Over the projection period, working capital movements remain relatively modest and stable. Inventory levels increase gradually in line with expected production volumes, while receivables grow moderately, reflecting revenue expansion. Although payables also increase, their growth is not sufficient to fully offset the rise in current assets, resulting in a net working capital requirement.

Overall, the projected working capital profile supports a smooth cash conversion cycle, with no significant liquidity shocks expected, while reflecting the scale and operational intensity of Mercedes-Benz's strategic growth trajectory.

6.2. DISCOUNTED CASH FLOW MODEL

6.2.1. Cost of Capital

The WACC was calculated by combining the Cost of Equity and the Cost of Debt, weighted according to the company's capital structure. The Cost of Equity itself, was estimated using the CAPM.

The risk-free rate was proxied by the yield on the German 10-year government bond, which stood at 2.53% as of April 17, 2025, according to Trading Economics.

The equity risk premium, representing the additional return investors expect for taking on the risk of investing in the stock market over a risk-free government bond, was derived from data provided by the NYU Stern School of Business. Given Mercedes-Benz's global operational footprint, a weighted average of the equity risk premiums for the relevant regions was applied to reflect its specific risk exposure.

Lastly, the company's systematic risk, represented by the respective Equity beta, was sourced from Yahoo Finance as of April 17, 2025.

Table 6. 8 - Equity Risk Premium and Cost of Equity

Equity Risk Premium	Weight	ERP	%
Europe Revenue	34.7%	5.3%	1.8%
North America Revenue	22.8%	4.3%	1.0%
Asia Revenue	25.4%	8.9%	2.3%
Other markets Revenue	17.1%	8.9%	1.5%

Cost of Equity	2024
Risk-free rate in EUR	2.53%
Market Risk Premium	6.59%
Beta Levered	1.0
Cost of Equity	**9.12%**

The Cost of Debt was determined as a proxy based on the weighted average Yield to Maturity of Mercedes-Benz Group bonds with issuance volumes above 1 million, as reported on TradingView on April 17, 2025.

As a result, a pre-tax cost of debt of 4.82% was applied. To account for the tax shield, the after-tax Cost of Debt was calculated by applying the effective tax rate of 28.7%, which is the average Corporate Income Tax that the company has supported over the last four years.

Table 6. 9 - Cost of Debt

	2024
Pre-tax Cost of Debt	4.82%
Corporate Income Tax	28.70%
After-tax Cost of Debt	**3.44%**

The market value of equity was calculated by multiplying the number of outstanding shares by the current share price. As of April 17, 2025, the share price was EUR 50.39, and the number of shares outstanding was approximately 962.9 million, resulting in a market equity value of EUR 48 521 million. The market value of debt corresponded to the company's financial debt at the end of 2024, which stood at EUR 112.8 billion. Based on these values, the company's enterprise value was apportioned as 70% debt and 30% equity. Mercedes-Benz Group's official disclosures indicate that the company operates with a high proportion of debt financing (on the order of 70%) relative to equity (30%), consistent with its large financing business.

With all necessary inputs estimated, the WACC was calculated using the standard weighted average formula combining the cost of equity and the after-tax cost of debt according to their respective weights in the capital structure.

Table 6. 10 - Weighted Average Cost of Capital

WACC	2024
Cost of Equity	9.12%
Cost of Debt	3.44%
Equity / (Debt + Equity)	30%
Debt / (Debt + Equity)	70%
WACC	**5.15%**

6.2.2. Valuation

The input variables necessary to calculate FCFF were discussed in the previous chapter. After determining EBIT in the Income Statement, non-cash operational expenses must be adjusted by adding back the depreciation and amortization of both intangible and tangible assets, resulting in EBITDA.

Next, it is crucial to account for the required investments in operational assets, specifically working capital, and necessary Capex in both intangible and tangible assets. Therefore, increases in working capital and Capex made during the year are subtracted from EBITDA. Additionally, corporate taxes based on EBIT must be computed and subtracted.

Table 6. 11 - Free Cashflow to the Firm Projections, in millions of EUR

FCFF	2025	2026	2027	2028	2029	2030
(+) EBIT	14,005	15,253	16,538	18,160	18,511	19,066
(+) D&A	5,677	6,805	8,102	9,423	10,842	11,167
(-) Working capital	(1,686)	(344)	(291)	(349)	(342)	(352)
(-) Capital Expenditures, net	(11,242)	(12,742)	(15,760)	(15,772)	(15,753)	(16,226)
(-) Taxes paid	(4,020)	(4,377)	(4,747)	(5,212)	(5,313)	(5,472)
Free cash flow	**2,734**	**4,594**	**3,843**	**6,251**	**7,944**	**8,183**

After estimating the FCFF, the Terminal Value is computed using the Gordon Growth Model, which requires a perpetual growth rate. Given that Mercedes-Benz Group operates in a mature and capital-intensive industry with moderate long-term growth prospects, a perpetual growth rate of 3% was applied. This assumption reflects the long-term expected growth of the global automotive market, aligned with inflation and GDP trends in developed economies, where Mercedes-Benz generates the bulk of its revenues. Additionally, this rate captures the structural maturity of the internal combustion engine market, partially offset by the company's ongoing transition towards electric mobility and software-driven services, which may sustain modest growth beyond the explicit projection period.

The terminal value was calculated based on the FCFF of 2030 using the following formula:

(6.1)

$$VC_n = \frac{FCFF_{n+1}}{WACC - g}$$

Once all projected cash flows and the terminal value are determined, the next step is to calculate the present value of these cash flows. Summing the present value of projected FCFF and the terminal value gives the enterprise value.

(6.2)

$$Enterprise\ Value = \sum_{t=1}^{n} FCFF_t\ /(1+r)^t + TV/(1+r)^t$$

This results in an enterprise value of approximately 172 billion EUR.

To determine the Equity Value, the net debt (total financial debt minus cash and cash equivalents) is subtracted from the enterprise value. The net debt adjustment reflects the company's actual value attributable to equity shareholders.

While Enterprise Value captures the total value of a business's operational assets and is independent of its capital structure, it incorporates both equity and debt financing. Therefore, it represents the theoretical value of the company to all providers of capital — both debt and equity investors — under the assumption that any acquirer would assume the company's outstanding debt and retain its available cash.

The adjustment for Net Debt serves to remove the claims of debt holders and isolate the residual value that would accrue to equity holders in a full acquisition scenario.

(6.3)

$$Equity\ Value = Enterprise\ Value - Net\ Value\ of\ Market\ Debt$$

Given the financial debt and cash equivalents, Mercedes-Benz Group's net debt adjustment results in an equity value of approximately 74 billion EUR. Having in mind the number of shares outstanding, this result led us to a fair value per share of 79.6 EUR.

6.3. SENSITIVITY ANALYSIS

The Discounted Cash Flow approach is extremely dependent on the perpetual growth rate and the WACC rate. Therefore, it is a good practice to understand how changes in the different inputs used to construct might affect the result generated.

A Sensitivity analysis on WACC and on the growth rate was conducted to understand the impacts that a marginal change in one of these inputs can influence our understanding about the mispricing of the market in relation to Mercedes-Benz Group's stock.

Table 6. 12 - Sensitivity Analysis

Growth rate \ Weighted Average Cost of Capital	4.65%	4.90%	5.15%	5.40%	5.65%
0.50%	83.8	72.5	62.4	53.4	45.2
0.75%	94.3	81.7	70.5	60.6	51.6
1.00%	106.2	92.0	79.6	68.6	58.7
1.25%	119.9	103.8	89.8	77.5	66.6
1.50%	135.7	117.3	101.4	87.6	75.5

If either the WACC or the perpetual growth rate changes, then the estimated stock price of Mercedes-Benz Group varies accordingly. For example, as shown in the table, increasing the growth rate from 1.00% to 1.25% (with WACC at 5.15%) raises the stock value from €79.6 to €89.8, while increasing the WACC from 5.15% to 5.40% (with growth at 1.00%) lowers the value from €79.6 to €68.6.

6.4. MULTIPLES APPROACH

We are now moving into the relative valuation analysis of Mercedes-Benz Group. Although the DCF approach remains the most robust and widely accepted method for estimating a company's intrinsic value, relative valuation serves as a valuable complementary tool. By benchmarking Mercedes-Benz's valuation metrics against those of comparable companies, this method provides an alternative perspective that enhances the overall reliability of the valuation exercise. Just as revenue projections are critical to the integrity of a DCF model, the selection of an appropriate peer group is fundamental to the accuracy of a relative valuation. To ensure a high degree of comparability, only firms operating within the same industry and with similar business models were considered. The peer group, sourced via TradingView, includes prominent automotive manufacturers such as Volkswagen AG, BMW AG, Honda Motor Co., General Motors, Porsche AG, and Ford Motor Company.

Table 6. 13 - Market Multiples

Market multiples	Ticket	Mkt Cap.	P/E	EV/EBITDA
Mercedes-Benz Group AG	MBG	56.40	5.70x	8.71x
Volkswagen AG ST O.N.	VOW	54.10	5.09x	5.01x
BMW AG ST	BMW	53.90	7.24x	7.61x
Honda Motor Co	HMC	48.60	7.96x	7.60x
General Motors Company	GM	45.90	6.87x	4.80x
Porsche AG	P911	43.10	11.75x	4.72x
Ford Motor Company	F	39.70	8.00x	16.65x
	Percentile 25		6.43x	4.78x
	Median		7.60x	6.31x
	Average		7.82x	7.73x
	Percentile 75		8.94x	9.87x

P/E and EV/EBITDA were the multiples selected for this analysis.

- The P/E multiple was selected as it reflects the market's perception of a company's ability to generate net income relative to its share price. It is widely used by equity investors due to its simplicity and direct connection to shareholder returns. The P/E ratio incorporates both operating performance and capital structure effects, making it especially relevant when assessing companies with relatively stable earnings and dividend policies. Furthermore, it provides insight into investor expectations about future earnings growth, risk, and return, and is particularly useful when comparing companies with similar growth profiles within a mature industry such as the automotive sector.

- The EV/EBITDA multiple was used as EBITDA is the closest accounting figure to the actual operating cash flows generated by a company. It excludes non-operational costs such as depreciation, amortization, interest, and taxes, which are not related to the company's core operational performance. This makes EV/EBITDA a valuable metric for comparing the operational efficiency and profitability of companies within the same industry, regardless of their capital structures or tax environments.

By analyzing Mercedes-Benz Group using these valuation multiples and comparing them to its industry peers, we can gain a more comprehensive understanding of its market position and relative value.

Table 6. 14 - MBGROUP Multiples

P/E approach	
Earnings '24	10,409
P/E	7.82x
Equity Value	81,381

EV/EBITDA approach	
EBITDA '24	20,371
EV/EBITDA	7.73x
Enterprise Value	157,502
Net debt	98,287
Equity Value	59,215

Based on the market multiples valuation, Mercedes-Benz Group's equity value shows a wide range depending on the methodology applied. The EV/EBITDA approach results in an equity value of €59.2 billion, whereas the P/E method yields a significantly higher valuation of €81.4 billion. This discrepancy reflects the influence of different financial metrics — EBITDA capturing operational cash flow performance and net income reflecting bottom-line profitability after all costs.

The lower valuation from the EV/EBITDA method may be attributed to Mercedes-Benz's substantial net debt position, which weighs on the equity value despite solid EBITDA generation. Conversely, the P/E approach captures the company's strong earnings in 2024 and suggests a more optimistic market perspective on its profitability.

7. CONCLUSIONS

As the global automotive sector is going through a far-reaching change, triggered by electrification, digitization, and geopolitical changes, European manufacturers, especially the legacy brands like Mercedes-Benz, are still trying to find their way in a complicated and constantly changing competitive environment. The new players such as Tesla and BYD have quickly grabbed the leading positions in the EV revolution. Tesla draws from its early-mover advantage and technological innovation as well as from the fact that it is close to US political and regulatory influence, whereas BYD enjoys the Chinese government's full support for rapid scaling and deep penetration of the market.

On the other hand, European automakers operate within a more fragmented regulatory and economic environment, and they must navigate mounting challenges associated with trade tensions and protectionist policies. Ongoing trade wars and geopolitical rivalries risk further disadvantaging European manufacturers in global EV markets, especially in North America and Asia, where policy and industrial support increasingly favor domestic players.

Despite these challenges, Mercedes-Benz maintains a strong competitive foundation. In 2023, it led the global luxury vehicle market in revenue, a testament to the enduring strength of its brand, its engineering heritage, and its global reach. However, recent data on BEV sales suggests a downward trend, raising valid concerns about the company’s pace of transition toward full electrification. While PHEV sales have shown positive momentum, they are widely recognized as a transitional solution rather than a long-term strategic endpoint.

Based on the final share price estimated through our valuation methodologies, our recommendation for investors in Mercedes-Benz Group AG is to buy or hold the stock. The derived intrinsic value of 79.60 EUR significantly exceeds the market reference price of 50.90 EUR as of 30 June 2025, indicating a substantial upside potential when compared with the current market quotations. It is important to note that this analysis does not take goodwill into consideration, as Companies typically pay a premium over the market value of another company to gain control, access synergies, or eliminate competition.

Moreover, the potential undervaluation of the stock, as well as the optimistic outlook implied by the relative valuation multiples, further supports this recommendation. These multiples suggest that the market may not be fully incorporating the company’s future earnings potential and operational resilience into its current valuation. Our P/E multiples approach reached a share price of 85 EUR and our EV/EBITDA multiples approach reached a share price of 61.49 EUR

Despite this favorable assessment, it is important to acknowledge the persistence of macroeconomic uncertainties, particularly those related to trade commerce pressures and ongoing trade war affecting the automotive sector. Therefore, it is recommended that

updated evaluations be conducted periodically to monitor the evolving impact of these external factors on the company's financial performance and market value.

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ANNEX A – MERCEDEZ-BENZ CARS HISTORICAL ANALYSIS

Volume analysis (hist)	Unit	2021	2022	2023	2024
Top-end vehicles	#	242,520	266,458	235,687	210,059
Core vehicles	#	819,280	906,542	787,561	870,942
Entry vehicles	#	610,300	595,900	618,860	534,792
Top-end eletrified vehicles	#	62,080	61,742	92,581	71,433
Core eletrified vehicles	#	209,720	210,058	309,362	296,177

Unit price analysis (hist)	Unit	2021	2022	2023	2024
Top-end vehicles	€	104,485	113,851	113,070	113,291
Core vehicles	€	41,794	45,540	45,228	45,317
Entry vehicles	€	29,256	31,878	31,660	31,722
Top-end eletrified vehicles	€	112,844	122,959	122,116	122,355
Core eletrified vehicles	€	58,512	63,756	63,319	63,443

ANNEX B – MERCEDEZ-BENZ CARS PROJECTIONS

Volume analysis	Unit	2025	2026	2027	2028	2029
Top-end vehicles	#	199,556	189,578	178,203	167,511	155,785
Core vehicles	#	827,395	786,026	738,864	694,532	645,915
Entry vehicles	#	508,052	477,569	444,139	408,608	367,747
Top-end eletrified vehicles	#	80,720	90,406	99,447	107,403	115,995
Core eletrified vehicles	#	349,488	405,406	462,163	517,623	569,385
Top-end growth	*%*	*(5.00%)*	*(5.00%)*	*(6.00%)*	*(6.00%)*	*(7.00%)*
Core growth	*%*	*(5.00%)*	*(5.00%)*	*(6.00%)*	*(6.00%)*	*(7.00%)*
Entry growth	*%*	*(5.00%)*	*(6.00%)*	*(7.00%)*	*(8.00%)*	*(10.00%)*
Top-end eletrified growth	*%*	*13.00%*	*12.00%*	*10.00%*	*8.00%*	*8.00%*
Core eletrified growth	*%*	*18.00%*	*16.00%*	*14.00%*	*12.00%*	*10.00%*

Price analysis	Unit	2025	2026	2027	2028	2029
MBC | Top-end vehicles	€	116,690	120,191	123,797	127,510	131,336
MBC | Core vehicles	€	46,223	47,147	48,090	49,052	50,033
MBC | Entry vehicles	€	31,722	31,722	31,722	31,722	31,722
MBC | Top-end eletrified vehicles	€	129,696	137,478	144,352	151,569	157,632
MBC | Core eletrified vehicles	€	65,981	68,620	70,679	72,799	74,255
Top-end prices growth	*%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
Core prices growth	*%*	*2.00%*	*2.00%*	*2.00%*	*2.00%*	*2.00%*
Entry prices growth	*%*	-	-	-	-	-
Top-end eletrified prices growth	*%*	*6.00%*	*6.00%*	*5.00%*	*5.00%*	*4.00%*
Core eletrified prices growth	*%*	*4.00%*	*4.00%*	*3.00%*	*3.00%*	*2.00%*

ANNEX C – MERCEDEZ BENZ VANS HISTORICAL ANALYSIS

Volume analysis (hist)	Unit	2021	2022	2023	2024
Non-eletrified vans	#	372,400	400,300	305,602	261,976
Eletrified vans	#	13,800	15,000	22,666	19,516

Unit price analysis (hist)	Unit	2021	2022	2023	2024
Non-eletrified vans	€	37,616	40,866	60,142	66,782
Eletrified vans	€	52,663	57,213	84,199	93,495

ANNEX D – MERCEDEZ-BENZ VANS PROJECTIONS

Volume analysis	Unit	2025	2026	2027	2028	2029
Non-eletrified vans	#	230,539	207,485	188,811	177,483	170,383
Eletrified vans	#	29,274	39,520	49,400	56,810	65,331
Non-eletrified vans growth	*%*	*(12.00%)*	*(10.00%)*	*(9.00%)*	*(6.00%)*	*(4.00%)*
Eletrified vans growth	*%*	*50.00%*	*35.00%*	*25.00%*	*15.00%*	*15.00%*

Price analysis	Unit	2025	2026	2027	2028	2029
Non-eletrified vans price	€	67,450	68,125	68,806	69,494	70,189
Eletrified vans price	€	92,560	92,097	92,097	92,558	93,483
Non-eletrified vans price growth	*%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*
Eletrified vans price growth	*%*	*(1.00%)*	*(0.50%)*	*-*	*0.50%*	*1.00%*

ANNEX E – PORJECTIONS ON THE OPERATIONAL EFFICIENCY OF MBGROUP

Operational efficiency	Unit	2025	2026	2027	2028	2029
MBGROUP | Total revenue	€	147,001	149,611	151,912	154,692	156,955
MBGROUP | Gross Margin	€	28,913	30,026	31,104	32,425	33,040
MBGROUP | EBITDA	€	19,682	22,057	24,640	27,583	29,352
MBGROUP | EBIT	€	14,005	15,253	16,538	18,160	18,511
Gross Margin %	*%*	*19.7%*	*20.1%*	*20.5%*	*21.0%*	*21.1%*
EBITDA Margin %	*%*	*13.4%*	*14.7%*	*16.2%*	*17.8%*	*18.7%*
EBIT Margin %	*%*	*9.5%*	*10.2%*	*10.9%*	*11.7%*	*11.8%*

ANNEX F – WORKING CAPITAL PROJECTIONS

Working Capital	Unit	2025	2026	2027	2028	2029
Inventories	€'000 000	(188)	330	269	322	363
Trade Receivables	€'000 000	1,127	144	127	153	125
Other Current Assets	€'000 000	423	71	63	76	62
Trade Payables	€'000 000	171	(141)	(115)	(138)	(155)
Other current liabilities	€'000 000	154	(60)	(53)	(64)	(52)
Changes in Working Capital	**€'000 000**	**1,686**	**344**	**291**	**349**	**342**

ANNEX G – CAPITAL EXPENDITURES PROJECTIONS

Capital Expenditures	Unit	2025	2026	2027	2028	2029
Tangible Assets Capex	€'000 000	5,116	5,769	7,160	7,004	6,053
Intangible Assets Capex	€'000 000	5,471	6,309	7,925	8,077	8,995
Right-of-use Assets Capex	€'000 000	655	665	675	690	705
Capital Expenditures	**€'000 000**	**11,242**	**12,742**	**15,760**	**15,772**	**15,753**

ANNEX H – EQUITY RISK PREMIUM AND COST OF EQUITY

Equity Risk Premium	Weight	ERP	%
Europe Revenue	34.7%	5.3%	1.8%
North America Revenue	22.8%	4.3%	1.0%
Asia Revenue	25.4%	8.9%	2.3%
Other markets Revenue	17.1%	8.9%	1.5%

Cost of Equity	2024
Risk-free rate in EUR	2.53%
Market Risk Premium	6.59%
Beta Levered	1.0
Cost of Equity	**9.12%**

ANNEX I – COST OF DEBT

Cost of Debt	2024
Pre-tax Cost of Debt	4.82%
Corporate Income Tax	28.70%
After-tax Cost of Debt	**3.44%**

ANNEX J – WEIGHTED AVERAGE COST OF CAPITAL

WACC	2024
Cost of Equity	9.12%
Cost of Debt	3.44%
Equity / (Debt + Equity)	30%
Debt / (Debt + Equity)	70%
WACC	**5.15%**

ANNEX K – FREE CASHFLOW TO THE FIRM PROJECTIONS

FCFF	Unit	2025	2026	2027	2028	2029	2030
(+) EBIT	€'000 000	14,005	15,253	16,538	18,160	18,511	19,066
(+) D&A	€'000 000	5,677	6,805	8,102	9,423	10,842	11,167
Depreciation	€'000 000	(3,113)	(3,556)	(4,006)	(4,463)	(4,928)	(5,076)
Amortization	€'000 000	(2,563)	(3,249)	(4,096)	(4,960)	(5,914)	(6,091)
(-) Working capital	€'000 000	(1,686)	(344)	(291)	(349)	(342)	(352)
(Inc.)/Dec. in Inventories	€'000 000	(188)	330	269	322	363	374
(Inc.)/Dec. in Trade receivables	€'000 000	1,127	144	127	153	125	128
(Inc.)/Dec. in Ot. cur. assets	€'000 000	423	71	63	76	62	63
Inc./(Dec.) in Trade payables	€'000 000	171	(141)	(115)	(138)	(155)	(160)
Inc./(Dec.) in Ot. cur. liabilities	€'000 000	154	(60)	(53)	(64)	(52)	(54)
(-) Capital Expenditures, net	€'000 000	(11,242)	(12,742)	(15,760)	(15,772)	(15,753)	(16,226)
TA capex, net	€'000 000	5,116	5,769	7,160	7,004	6,053	6,235
IA capex, net	€'000 000	5,471	6,309	7,925	8,077	8,995	9,265
Right-of-use assets capex, net	€'000 000	655	665	675	690	705	726
(-) Taxes paid	€'000 000	(4,020)	(4,377)	(4,747)	(5,212)	(5,313)	(5,472)
Free cash flow	**€'000 000**	**2,734**	**4,594**	**3,843**	**6,251**	**7,944**	**8,183**

ANNEX L – SENSITIVITY ANALYSIS

Growth rate	Weighted Average Cost of Capital					
	76.5	4.65%	4.90%	5.15%	5.40%	5.65%
	0.50%	83.8	72.5	62.4	53.4	45.2
	0.75%	94.3	81.7	70.5	60.6	51.6
	1.00%	106.2	92.0	79.6	68.6	58.7
	1.25%	119.9	103.8	89.8	77.5	66.6
	1.50%	135.7	117.3	101.4	87.6	75.5

ANNEX M – MARKET MULTIPLES

Market multiples	Ticket	Mkt Cap.	P/E	EV/EBITDA
Mercedes-Benz Group AG	MBG	56.40	5.70x	8.71x
Volkwagen AG ST O.N.	VOW	54.10	5.09x	5.01x
BMW AG ST	BMW	53.90	7.24x	7.61x
Honda Motor Co	HMC	48.60	7.96x	7.60x
General Motors Company	GM	45.90	6.87x	4.80x
Porsche AG	P911	43.10	11.75x	4.72x
Ford Motor Company	F	39.70	8.00x	16.65x
	Percentile 25		6.43x	4.78x
	Median		7.60x	6.31x
	Average		7.82x	7.73x
	Percentile 75		8.94x	9.87x

ANNEX N – MBGROUP MULTIPLES

P/E approach	
Earnings '24	10,409
P/E	7.82x
Equity Value	81,381

EV/EBITDA approach	
EBITDA '24	20,371
EV/EBITDA	7.73x
Enterprise Value	157,502
Net debt	98,287
Equity Value	59,215


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