Lisbon School of Economics & Management
Universidade de Lisboa

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PROJECT

CASE STUDY ON BMW AG: ROAD TO 2030 ELECTRIFICATION

ALEXANDER TALIKINE

JUNE 2025

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SUPERVISOR:
VICTOR MAURÍLIO SILVA BARROS

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Abstract

This thesis begins with a case study analyzing BMW AG (BMW.DE), a global leader in the premium automotive and motorcycle industry. BMW operates through three primary segments: i) Automotive, ii) Motorcycles, and iii) Financial Services. The focus of the case study is BMW's current electric vehicle (EV) strategy and the exploration of two additional potential future scenarios, each reflecting varying levels of EV adoption by 2030. Specifically, the analysis considers BMW's stated goal of achieving 50% EV sales by 2030, as well as alternative scenarios targeting 40% and 60% adoption. These scenarios are assessed based on financial performance, strategic positioning, and market risks, with the aim of identifying the optimal path forward. Managers at BMW face a critical dilemma: how to balance the need for aggressive EV expansion with profitability, capital allocation constraints, and the uncertainty of regulatory and consumer trends. The case study combines both quantitative and qualitative reasoning to support BMW's strategic decision-making in a rapidly changing automotive industry.

Following this, an Equity Research report on BMW is presented. This report issues a Buy recommendation for BMW, with a YE2025 price target of €91.56/Sh. To value the company, a Sum-of-the-Parts model was used where a Discounted Cash Flow analysis, based on FCFF for the Industrials segment, and FCFE for the Financial Services segment, was conducted. This valuation represents an annualized upside potential of 26.2% compared to its closing price on May 28th, 2025 at €79.74/Sh., with a high-risk classification. To underline this target other valuation methods were performed, such as a FCFF integrated approach or a Dividend Discount Model.

JEL classification: G10; G32; G34
Keywords: BMW AG; Automotive; EV; Equity Research; Valuation, M&A

Disclosures and Disclaimers

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Alexander Talikine, 30th June 2025

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Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	0%≤	>0% & ≤10%	>10% & ≤20%	>20% & ≤45%	>45%
Medium Risk	-5%≤	>-5% & ≤5%	>5% & ≤15%	>15% & ≤30%	>30%
Low Risk	-10%≤	>-10% & ≤0%	>0% & ≤10%	>10% & ≤20%	>20%

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Glossary

A	**AG**	Aktiengesellschaft
	AI	Artificial Intelligence
B	**BEV**	Battery Electric Vehicle
	BMW	Bayerische Motoren Werke Aktiengesellschaft
	Bn	Billion(s)
C	**CAGR**	Compound Annual Growth Rate
	CapEx	Capital Expenditures
	CAPM	Capital Asset Pricing Model
	CCO	Chief Commercial Officer
	CEO	Chief Executive Officer
	CFO	Chief Financial Officer
	CHRO	Chief Human Resources Officer
	CIO	Chief Information Officer
	COGS	Cost of Goods Sold
	COO	Chief Operating Officer
	CTO	Chief Technology Officer
	CO_2	Carbon Dioxide
D	**DCF**	Discounted Cash Flow
	DDM	Dividend Discount Model
	DIO	Days Inventory Outstanding
	DPO	Days Payable Outstanding
	DSO	Days Sales Outstanding
E	**EBIT**	Earnings Before Interest and Taxes
	EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
	EPS	Earnings Per Share
	EV	Electric Vehicle
F	**F**	Forecast (as in 2025F)
	FCFE	Free Cash Flow to Equity
	FCFF	Free Cash Flow to the Firm
	FY	Fiscal Year
G	**G**	Long-run sustainable growth rate
	GDP	Gross Domestic Product
I	**IBS**	Intelligent Battery Sensor
	ICE	Internal Combustion Engine
	IoT	Internet of Things
M	**Mn**	Million(s)
	MRP	Market Risk Premium
	MWh	Megawatt Hour
O	**OEM**	Original Equipment Manufacturer
P	**PHEV**	Plugin Hybrid Electric Vehicle
	PT	Price Target
R	**R&D**	Research and Development
	Rf	Risk-free Rate
	ROA	Return on Assets
	ROCE	Return on Capital Employed
	ROE	Return on Equity
	ROIC	Return on Invested Capital
S	**SaaS**	Software as a Service
	SG&A	Selling, General, and Administrative Expenses
T	**TP**	Target Price
	TV	Terminal Value
U	**UI**	User Interface
	U.S.	The United States of America
	UX	User Experience
W	**WACC**	Weighted Average Cost of Capital
	WLTP	Worldwide harmonized Light vehicles Test Procedure
Y	**YE**	Year End (as in YE2025)
	YoY	Year over Year

Alexander Talikine

June 2025

1. Case Study - The Road to 2030: BMW's Electrification Dilemma

The Executive Dilemma

Oliver Zipse leaned back in his chair, the Munich skyline glowing beyond the glass walls of BMW's corporate headquarters. The city was quiet, but inside the boardroom, the pressure was mounting. The Neue Klasse, the company's next-generation all-electric platform, was nearing launch. Internally, people didn't just see it as a car, it was a symbol of the company's reinvention. Publicly, Zipse had positioned it as a breakthrough:

| "The NEUE KLASSE is much more than just a single car," he had declared. "It is a completely new generation of BMW models, all of them fully electric, digital, and built on a clear commitment to sustainability." |

The question now was not if BMW would go electric. It was how far, how fast, and at what cost. But the future he envisioned was anything but certain.

Global EV adoption is accelerating. New regulatory targets in Europe and the U.S. push automakers toward zero-emission fleets. Chinese EV makers, such by BYD, NIO, and others, are gaining momentum across international markets. At the same time, the path to electrification had become increasingly entangled with geopolitics, trade tensions, battery raw material constraints, and inflationary pressures.

BMW had long positioned itself on strategic flexibility, developing multi-powertrain platforms, balancing ICE, hybrid, and EV offerings across regions. But now, that balance was under pressure some executives pushed to double down on EVs, shifting more of global sales to electric models by 2030. Others urged caution, maintaining PHEVs and ICE in parallel to hedge against uncertainty. Zipse had often walked the line between bold vision and pragmatic realism:

| "We must be careful," he had warned, "because full electrification increases our dependency on very few countries. The transition must be ambitious - but also resilient." |

Now, with the Neue Klasse set to define the next decade of BMW's product architecture, the company stands at a strategic turning point. Should it accelerate its transformation and fully commit to an aggressive EV future and potentially reshape its business model entirely? Should it continue its current path, targeting 50% electric vehicles by 2030, and balance growth with caution? Or should it play it safe, extend ICE and PHEV development, and wait for the dust to settle?

BMW: A Brand in Transition

BMW's DNA: Precision, Performance, and Bavarian Heritage

BMW's legacy is deeply rooted in innovation, precision engineering, and the pursuit of driving excellence. Founded in 1916 as an aircraft engine manufacturer, BMW evolved through motorcycle

production into a global automotive icon known for performance and luxury. Its blue-and-white roundel, often linked to its aviation roots, has come to symbolize quality, innovation, and Bavarian heritage. Milestone models like the 328 Roadster, the 2002, and the 3 Series shaped the brand's identity, blending sportiness with elegance. A strong motorsport focus and the creation of the M-Division further established BMW's reputation for performance. Over time, BMW's design philosophy, technical innovation, and global presence have balanced tradition with forward-thinking evolution. Today, the brand faces a new challenge: how to carry this performance-driven identity into the electric era, without losing what made BMW iconic in the first place.

BMW's Business Model Overview

BMW operates a vertically integrated business model focused on premium mobility, including Automotive, Financial Services, and Motorcycles. The Automotive segment, which includes BMW, MINI, and Rolls-Royce, contributed 75% of revenue in FY2024, reflecting the company's core strength in vehicle production across ICE, PHEV, and BEV models. Financial Services added 23% of revenue, supporting customer loyalty and stable cash flows through leasing and financing. Electrification momentum continued, with over 426,000 fully electric vehicles sold (+13.5% YoY), making up 17.4% of total deliveries. BMW maintains a strong global presence, with China (29.2%), the U.S. (16.3%), and Germany (10.8%) as key markets. Its production network spans 30+ plants across 15 countries, supported by over 150,000 employees. In 2024, BMW also began shifting to a direct-to-consumer agency sales model in Europe, starting with MINI, to strengthen pricing transparency and customer relationships.

Financially, BMW faced headwinds in FY2024 due to macroeconomic pressures, delivery halts, and weaker Chinese demand. Group revenues declined to €142.4Bn (–8.4% YoY), while EBIT margin fell to 8.1% (from 11.9% in FY2023). Net income dropped 37% to €7.7Bn. The Automotive segment saw EBIT fall 39% to €7.9Bn, with margin narrowing to 6.3%. ROIC declined to 4.4% (from 7.8%), and the debt-to-equity ratio rose to 1.87, reflecting higher long-term liabilities.

Shift Begins: From ICE to Neue Klasse

BMW is entering a transformation phase as it pivots from its legacy in internal combustion engines toward an electrified and digital future. This transition is supported by the Neue Klasse platform, set to launch in 2025. It represents more than technological advancement, it signals a fundamental redefinition of BMW's brand and business model. Long known for performance engineering and its "Ultimate Driving Machine" ethos, BMW now faces the strategic challenge of translating that identity into a world defined by software, sustainability, and silent drivetrains. The Neue Klasse will serve as a litmus test: can heritage empower reinvention, or will it constrain it?

BMW's Neue Klasse is not just a new line of cars, it is a big part of the biggest change the company had in years. Built on an entirely new vehicle architecture, it reimagines nearly every aspect of the business: from design and engineering to production systems, customer experience, and sustainability practices. It embodies BMW's three strategic pillars for the future: electrification, digitalization, and circularity. CEO Oliver Zipse has framed the moment as a generational shift, likening it to the early 1960s, when BMW first introduced the original Neue Klasse to reinvent itself in a time of change. The 2025 relaunch carries a similar ambition, but in a far more complex and uncertain environment.

With innovations such as 800-volt fast charging, a fully integrated battery design, and the immersive Panoramic Vision interface, the Neue Klasse signals BMW's commitment to redefining premium mobility for the electric era. Production will begin with a sedan and an SUV in the 3 Series segment, with six models planned over 24 months. Yet the strategic significance goes beyond product launches, it raises fundamental questions about pace, scale, identity, and risk. The company must now deal with a volatile external environment and navigate transition risks that could shape the success or failure of its next chapter.

Navigating Transition Risk: Strategic Exposure in an Uncertain Environment

As BMW commits to an electric future with the Neue Klasse, the core challenge is no longer if the transition will happen, but how fast and at what strategic cost. The EV shift is shaped not only by technology but also by volatile policy, global competition, and shifting consumer expectations.

According to Benjamin Wiest, automotive expert at strategy consulting firm Oliver Wyman, the industry's direction is unmistakable: "The future is clearly electric" - a sentiment reinforced by developments at Auto Shanghai 2025. Benjamin Wiest adds that while alternative solutions like e-fuels and hydrogen are often discussed, their role in passenger vehicles is extremely limited in the foreseeable future. "The internal combustion engine is a phase-out model. Yet e-fuels will, at best, be a niche solution in aviation and shipping," he explains. E-fuels face big challenges. Their production is still extremely energy-intensive and costly. Scaling to the quantities needed for widespread automotive use is unlikely in the near to medium term. Even if industrial production becomes more viable, most experts agree that e-fuels would be more effectively allocated to hard-to-decarbonize sectors like aviation and shipping, where viable electric alternatives are not yet available. As BMW accelerates its EV transition, it must contend with a multi-dimensional risk environment spanning international trade policy, supply network vulnerabilities, shifting consumer sentiment, and regulatory uncertainty, each with the potential to shape strategic outcomes.

Tariffs Policies

One of the most current disruptive risks is the rising threat of tariffs and global trade tensions. These measures affect not only fully assembled vehicles but also critical raw materials such as steel and aluminum, creating deep uncertainty across the entire value chain. BMW's operations in the U.S. exemplify this exposure: the company is hit both when exporting vehicles and when importing materials for local production. The situation is further complicated by the growing unpredictability of trade relations, not just between the EU and the U.S., but also with Canada, Mexico, and other key partners. For highly globalized manufacturers like BMW, these tensions can quickly undermine even the most well-crafted strategies. Toyota, for instance, recently issued a tentative forecast for a 21% drop in operating profit in fiscal year 2025/26, attributing part of the decline to the anticipated impact of U.S. tariffs - estimated at ¥180 billion ($1.2 billion) for just two months (Keohane, Inagaki, 2025). The unpredictability of U.S. tariffs has made long-term strategic planning increasingly difficult for global OEMs. As automotive expert Thomas Schiel from Oliver Wyman observes, "Tariffs are increasingly displacing strategy. We are now seeing OEMs like Mercedes stop providing forward guidance altogether."

The China Challenge

BMW faces intensifying pressure in China, where the volumes of German OEMs are drastically declining amid growing consumer preference for domestic brands. Local players like BYD and NIO are quickly gaining market share, driven by faster development cycles (Altenburg, Corrocher, Malerba, 2022), advancements in battery technology (such as near-instant charging), and innovations in AI, connectivity, sensors, autonomous driving, and digital features specifically adapted to local consumer preferences. German brands are suffering huge image losses in the Chinese market, as they fall behind in "China Speed" and often fail to meet changing customer expectations. BMW's Neue Klasse could be a turning point, but with only two models initially planned, it may be insufficient to secure a meaningful recovery in market share. Meanwhile, the first wave of Chinese OEMs expanding into Europe has stalled - not due to product weaknesses, but because of limited brand trust, inadequate service infrastructure, and regulatory uncertainty such as potential import tariffs. However, as Benjamin Wiest points out once a leading Chinese manufacturer overcomes these barriers, competitive intensity in the European volume and mid-range segments could rise sharply.

Supply Chain

Another layer of uncertainty in BMW's transition lies in supply chain and production-related risks. While the global semiconductor shortage has faded from headlines, it remains a pressing issue - particularly for legacy chips essential to basic vehicle functionality. Investment across the industry has increasingly shifted toward high-performance chips for advanced applications like autonomous driving, leaving production capacity for older chips lagging behind. In fact, legacy semiconductors still make up the overwhelming majority of automotive chip demand, yet their global output is growing at a far slower pace (Shivakumar, Wessner, & Howell, 2023). This imbalance raises the risk of renewed shortages in the coming years. Thomas Schiel from Oliver Wyman warns, "We could very well see another semiconductor crisis on the horizon," underlining the structural fragility in the chip supply industry. At the same time, BMW's Neue Klasse faces high execution risk in its production ramp-up - particularly in China, where early missteps could result in lost momentum and market share. Meanwhile, the pressure

to localize supply chains is mounting in response to geopolitical uncertainty and cost pressures. While localization may offer resilience, it also comes with high investment costs and new operational complexity. Strategic partnerships and proactive supplier engagement are increasingly shifting from option to necessity.

Brand Image

A more subtle but no less critical risk lies in the tension between BMW's premium brand identity and the need for scale in the electric era. The company has long positioned itself around driving dynamics, quality, and exclusivity, a strategy that has defined its global appeal. However, the shift to EVs introduces new pressures: achieving cost competitiveness in electric mobility often requires higher volumes and broader market reach. This creates a strategic dilemma. As Benjamin Wiest, one of the interviewed experts, notes: "Scale effects require volume, but that inherently clashes with an exclusive brand promise." BMW's earlier experience with the i3, an innovative yet polarizing vehicle, highlighted the branding risks of straying too far from its core DNA. As the company moves forward, preserving the emotional identity behind "Freude am Fahren" ("Sheer Driving Pleasure") in the EV era, through performance, design, and user experience, will be critical to avoid brand dilution and maintain coherence.

Regulation

A company's strategic decisions are increasingly shaped by a highly dynamic regulatory landscape. In the European Union, regulatory uncertainty persists, as demonstrated by the recent shift in CSRD compliance deadlines from 2026 to 2027 and 2028. The sudden end of Germany's EV subsidy program in December 2023 - previously offering up to €6,000 per vehicle - led to a 37% drop in EV sales from July 2023 to July 2024 (Crownhart, 2024), showing how abrupt policy changes can undermine consumer confidence and market stability. At the same time, the EU's strict CO_2 fleet emission targets expose automakers to fines of €95 per gram of CO_2 exceeded per vehicle, posing a direct financial risk if compliance falters. Experts (Wiest, Schiel, 2025) caution that such drastic policy changes can undermine progress toward EV adoption and climate goals, as consumers and automakers face a market in flux. In the United States, uncertainty looms over the future of the Inflation Reduction Act (IRA), with potential changes under President Trump's leadership. The IRA, which has been a critical driver of EV adoption in the U.S. through tax credits and incentives, could face challenges or be rolled back if Trump's administration reasserts its influence on energy and climate policy. This creates further regulatory instability for OEMs, who rely on such incentives for their U.S. operations.

In contrast, China offers a more stable and supportive regulatory environment for electric vehicles. The Chinese government has extended its purchase tax exemption policy for new energy vehicles (NEVs) until the end of 2027. This policy provides relevant tax breaks, with exemptions up to ¥30,000 ($4,170) per vehicle for purchases made in 2024 and 2025, and a halved exemption of up to ¥15,000 for 2026 and 2027. Such clear and long-term incentives create a predictable environment that encourages investment and consumer adoption. As Thomas Schiel from Oliver Wyman observes, "In China, the regulatory environment is not only stable but also strategically aligned to accelerate the EV transition." This regulatory clarity provides Chinese OEMs with a competitive advantage, while global players like BMW must navigate increasingly complex and diverging frameworks.

Demand

Demand for electric vehicles continues to show notable potential in both the U.S. and Europe - provided that price points, user experience, and charging infrastructure align with consumer expectations. However, according to Benjamin Wiest, current market conditions in Europe suggest a softening in demand, driven by high EV prices, reduced subsidies, uncertainty around residual values, and the often overstated concern over charging accessibility - a perception not fully supported by data, as for example nearly one in four public charging stations in Germany is barely used at all (Wutzer, 2025). In China, the situation is even more critical - if BMW's Neue Klasse platform fails to deliver on par with local competitors technologically, the brand risks losing further market share. Chinese OEMs are aggressively filling gaps left open by German automakers, especially in the mid-size segment (vehicles priced under €40,000–50,000), which has long been underserved by legacy players. Mercedes-Benz, for example, has seen its premium EV strategy falter in China, with the EQS facing poor sales despite significant price cuts of up to $33,000. The vehicle's design, which prioritizes

aerodynamics over rear-seat comfort (a key consideration for Chinese buyers) combined with stronger local competition, has left the model underperforming, highlighting the broader difficulty traditional premium brands face in adapting to China's fast-moving EV market.

How Competitors Are Navigating the Shift

Key competitors are pursuing divergent strategies as they respond to demand volatility, policy shifts, and changing consumer expectations - with their financial positions detailed in Appendix 9.

Mercedes-Benz, for example, is undergoing its largest-ever product and tech campaign, including the launch of an all-electric E-Class and a gradual departure from its EQ sub-brand following underwhelming EQE and EQS sales. With profitability under pressure, the company is shifting production toward lower-cost regions and aiming to re-establish double-digit margins, supported by a split platform approach for ICE and EV models.

Audi, on the other hand, is doubling down on electrification with €28 billion in planned investment and a global production overhaul. Its strategy is particularly focused on China, where Audi is not only building a new EV plant but also rebranding to better align with local consumer preferences and strengthen its market relevance. Parallel to vehicle development, Audi is advancing its charging infrastructure through high-end fast-charging solutions and partnerships like IONITY.

Meanwhile, Tesla's position is under strain. A 71% drop in Q1 2025 profit, slowing deliveries, and increasing price competition have led the company to pivot toward its next strategic chapter: robo-taxis and a low-cost $25,000 vehicle platform. While it remains a benchmark for technology and scale, its grip on the premium EV segment is visibly loosening.

Chinese players, especially BYD, continue to expand aggressively. BYD has overtaken global EV sales leadership through full vertical integration, strong hybrid offerings, and fast global rollout, including a new European plant. NIO is advancing with a dual-brand approach and battery-swapping tech, while XPeng is gaining traction with affordable, tech-heavy models like the G6. Geely, too, is ramping up EV and hybrid production as it looks to export its "Smart Geely 2025" platform.

Pathways to 2030: EV Adoption Scenarios

To navigate increasing regulatory pressure, shifting consumer preferences, and intensifying global competition, BMW must define a clear electric vehicle strategy for 2030. While progress has been made in electrification, critical decisions remain. Senior leadership is evaluating three strategic pathways, each reflecting a different EV share of global sales by 2030: 40%, 50%, and 60%. These scenarios differ in investment levels, operational transformation, and regulatory alignment.

The 40% scenario focuses on maintaining a diverse portfolio of ICE and hybrid vehicles. This may help preserve margins in traditional segments but raises concerns about compliance with tightening regulations, particularly in the EU. The pace and regional variation of EV adoption are crucial to this path's viability.

The 50% scenario represents BMW's current strategy, a balanced transition combining steady EV growth with continued strength in legacy offerings. It emphasizes disciplined capital allocation and ongoing innovation across both ICE and EV lines to adapt progressively to regulatory and market changes.

The 60% scenario aims for leadership in the EV market, aligning strongly with regulatory ambitions and anticipating deeper shifts in consumer demand, especially in China and the EU. This pathway requires earlier and more extensive transformation across manufacturing, supply chains, and R&D, but also involves higher costs, execution risks, and strategic inflexibility.

Each scenario involves trade-offs among compliance, competitiveness, profitability, and brand positioning. The choice will fundamentally shape BMW's identity and resilience over the next decade.

Financial Implications

Each EV scenario carries distinct financial implications in terms of profitability, capital intensity, and long-term positioning.

In the 40% EV scenario, BMW is expected to maintain a strong financial foundation by leveraging the profitability of its ICE and hybrid portfolio. By 2025, gross profit margin is projected at 16.79%, EBIT margin at 8.35%, and net profit margin at 5.25%, improving steadily to 18.93%, 10.98%, and 7.64% by 2030. Returns also strengthen over time, ROE rises from 8.23% to 11.39%, and ROIC from 4.27% to 5.96%. CapEx remains low and stable at 5.20%, while R&D intensity declines from 4.81% to 4.41%, supporting strong free cash flow and a consistently high payout ratio of 60%. Liquidity remains healthy, with a stable current ratio (1.19x by 2030). However, while this path supports short- and medium-term financial health, it risks falling behind in markets with aggressive emissions targets or fast EV adoption. Over time, the strategy may limit growth and expose BMW to regulatory penalties or market share loss in electrified segments.

The 50% EV scenario represents a balanced transition strategy. BMW is set to achieve steady financial performance while managing transformation risk. By 2025, gross margin is forecasted at 16.63%, EBIT at 8.19%, and net margin at 5.15%, increasing to 18.13%, 10.18%, and 7.09% by 2030. ROE improves from 8.18% to 11.04%, and ROIC from 4.34% to 5.81%, suggesting solid capital efficiency. R&D remains stable around 5.3% of sales, while CapEx falls from 6.20% to 5.70% in 2030. The dividend payout ratio rises from 55% to 60%, reflecting a strong balance between reinvestment and shareholder returns. Still, the middle path brings strategic ambiguity, 50% electrification may overshoot demand in slower-adopting regions, straining resources without sufficient market pull. Alternatively, if global EV acceleration exceeds expectations, BMW may appear hesitant and under-scaled. This scenario limits volatility but may also dilute BMW's competitive edge over time.

The 60% EV scenario positions BMW for aggressive EV growth, especially in China and the EU, and anticipates future regulatory tightening. By 2025, gross margin is expected at 16.16%, rising to 18.96% by 2030. EBIT improves from 7.72% to 11.01%, and net margin from 4.53% to 7.44%. ROE climbs from 7.33% to 11.65%, with ROCE reaching 22.0% by 2030. While these metrics reflect strong long-term earnings potential, they come with significantly higher R&D (5.68% in 2025) and CapEx investments (6.20%), which pressure near-term profitability and constrain cash flow. The dividend payout ratio is reduced to 50% to support reinvestment. Despite its growth orientation, this scenario presents meaningful risks. Execution complexity is high, requiring large-scale transformation of BMW's manufacturing footprint, supply chain, and talent base. The capital commitment reduces financial flexibility and raises BMW's exposure to global EV demand fluctuations, technology risk, and policy volatility. Furthermore, a sharp switch to EVs may alienate traditional ICE customers and strain brand identity in markets less prepared for electrification. If EV infrastructure or consumer readiness underdelivers, the anticipated volume growth may not materialize as projected, amplifying operational and financial strain. While this strategy may provide the greatest long-term value, it demands higher tolerance for volatility, slower cash returns, and strategic rigidity.

A summary overview of all crucial financial ratios and projections across scenarios is included in Appendix 1.

Stress Test

To evaluate the strategic implications of BMW's transition options, each proposed electrification path, targeting 40%, 50%, or 60% BEV share by 2030, was stress-tested under a range of external scenarios. These included both adverse and favorable macroeconomic and regulatory environments. This structured analysis allows for an assessment not only of the base case viability of each strategy, but also of their resilience or vulnerability under conditions of strong external pressure or upside potential.

In the worst-case scenario, assumptions reflect a 10% decline in total EV volume relative to the base case, driven by weakening global demand (notably in China), the rollback of regulatory incentives (e.g., a weakened IRA in the U.S. or reduced EU subsidies), and tighter fleet emission targets that increase compliance costs. Additionally, rising raw material prices and geopolitical frictions (e.g., tariffs) further compress EBIT margins - particularly for scenarios with lower EV penetration that face heavier transition costs.

The best-case scenario, by contrast, assumes a 10% uplift in volume as a result of stronger consumer demand, supportive regulatory developments (e.g., extended subsidies, relaxed fleet targets), and easing input costs. These dynamics expand EBIT margins, especially for higher-EV strategies that benefit from economies of scale, improved utilization, and stronger alignment with policy.

Valuation outcomes were derived using a DCF SoP model, with volume and EBIT margin as the two stress-tested inputs. The resulting valuation ranges are presented in the Appendix 8 and serve as a critical input for evaluating the relative attractiveness and resilience of each strategic option.

The Path Forward: Evaluating the Options

Each of these scenarios presents distinct opportunities and challenges. BMW must weigh factors such as consumer demand for electric vehicles, the pace of global electrification, competition, and government regulations. The decisions made today will determine BMW's ability to remain a leader in the automotive industry, while also fulfilling its commitment to sustainability and innovation.

Decision Time – Q&A

1. How can BMW regain competitiveness in the Chinese EV market?
2. What are the strategic trade-offs associated with each EV transition pathway (40%, 50%, 60%)?
3. How would each scenario be perceived by key stakeholders: investors, employees, governments, customers?
4. Which of the three EV scenarios would you recommend the Board of Management pursue as BMW’s strategic path to 2030, and why?

2. Teaching Notes

2.1 Expectations and Goals of the Case Study

This case study challenges students to critically evaluate BMW's strategic positioning in the rapidly evolving EV market. The central task is to assess three distinct EV transition pathways, 40%, 50%, and 60% EV sales share by 2030, and determine which scenario offers the most compelling balance between financial sustainability, operational feasibility, and long-term competitiveness.

Students should be able to identify and analyze the complex risk linkages influencing each scenario. This includes recognizing how external factors, such as ongoing tariff pressures affecting key raw materials like steel, supply constraints on critical components such as semiconductors, and shifting regulatory landscapes, can impact production, capital requirements, and overall strategic outcomes.

A strong response should demonstrate a clear grasp of how these factors intersect. Students should articulate the risks each scenario entails and argue credibly why a given pathway may be optimal under specific assumptions. The case encourages moving beyond pure financial comparisons to adopt a decision-maker's perspective, balancing risk, timing, capital allocation, and stakeholder expectations in a fast-changing environment.

2.2 The 40% Scenario

The 40% scenario represents a conservative, margin-preserving path in which BMW maintains a strong reliance on ICEs, especially in regions where EV adoption progresses slowly. This scenario assumes a volume decline of approximately 2% in FY2025-28, and a sharper decline of around 4% in FY2029-30 compared to the base case 50% scenario. This volume decline reflects the high likelihood that BMW would lose out on EV market share growth to more aggressive competitors.

Capital expenditure is driven mainly by property, plant, and equipment (PPE) investments, which are reduced to about 5% of sales, reflecting the lower scale of EV production ramp-up. R&D spending is forecasted at 5.5% of sales between FY2025 and FY2028, before reaching 5% in FY2029-30. Because of the slower pace of electrification under the 40% EV share scenario, BMW is expected to incur CO_2 fleet emission fees of approximately €413Mn in FY2025, reflecting the financial impact of falling short of tightening regulatory emissions targets.

Financially, this scenario supports a stable FCF margin between 5.5% and 6% through 2030, enabling a consistent dividend payout ratio of 60%, since fewer investments are needed to support transformation. EBIT margins improve gradually, reaching approximately 11%, and ROIC nearing 6% by 2030. The DCF SoP valuation derived from this scenario results in a share price estimate of €107.08Sh.

Strategically, while this approach minimizes near-term execution risk and protects margins, it exposes BMW to several key challenges. The reliance on ICE and hybrids risks falling out of step with tightening regulations in key markets, potentially resulting in increased compliance costs and limited market access. Tariff pressures on raw materials such as steel, accounting for a large share of vehicle weight (Figure 8 in Appendix C) may increase production costs, squeezing margins even in ICE models. Additionally, slower EV adoption may erode BMW's brand relevance as competitors advance in electric mobility, creating long-term risks to competitiveness and market share.

2.3 The 50% Scenario

The 50% scenario aligns closely with BMW's current strategic plan, reflecting a balanced approach to the EV transition. Volume forecasts are based on detailed regional market developments and per-model projections, with 2025 volumes consistent with BMW's own guidance. Margins are expected to improve

modestly but remain stable due to ongoing investment demands in CapEx and R&D. The EBIT margin is projected to stay within BMW's target range of 8-10%, balancing the costs of transformation with operational efficiency. CapEx are maintained at approximately 5.7–6.2% of sales, while R&D spending holds steady near 5.3%, supporting continued innovation and platform development. Dividend payout ratios gradually increase from 55% (FY2025-2029) to 60% (FY2030), reflecting confidence in steady FCF (ranging between 4-5% of sales) generation despite the ongoing transformation. The DCF SoP valuation under this scenario suggests a share price of €91.56.

However, this scenario carries a set of risks tied to its moderate approach. Maintaining a dual portfolio of ICE and EV vehicles increases operational complexity and could dilute focus and resource allocation. The pace of EV adoption may accelerate beyond projections, putting BMW at risk of losing ground to more aggressive competitors who scale faster. Conversely, if EV demand slows due to shifts in consumer behavior, regulatory changes, or economic pressures, ongoing investments in EV platforms could lead to underutilized capacity and margin pressure. External risks such as tariff volatility on raw materials (e.g., steel), potential semiconductor shortages impacting production ramp-ups, and regulatory uncertainty, especially regarding CO_2 fleet penalties and subsidies, remain relevant. Furthermore, the scenario requires careful management of brand positioning to avoid confusion among customers and stakeholders, as the company balances legacy products with emerging EV offerings.

2.4 The 60% Scenario

The 60% scenario represents a bold and ambitious shift toward EV leadership, assuming BMW captures greater market share through an expanded EV offering. Volumes are projected to grow by approximately 2% above the base case through 2030, reflecting increased penetration in the EV segment. Margins are expected to gradually improve despite the higher investment intensity: automotive EBIT margin rises from around 6% in FY2025 to 7.5% by FY2028, with scale effects driving a more higher margin uplift to 9.5% by FY2030.

CapEx (PPE) are raised to 6% of sales from FY2025 to FY2027, before declining to 5.5% through FY2030. R&D spending intensifies to 6.5% of sales in FY2025-2027, then moderates slightly to 6% from FY2028 onward, supporting fast technology development and product rollout. The dividend payout ratio is conservatively set at 50%, at the lower bound of BMW's policy, reflecting the need to retain cash for ongoing investments. The DCF SoP valuation under this scenario results in a share price of approximately €108.50/Sh., reflecting the higher long-term growth potential.

However, the ambitions come with substantial risks. Execution complexity increases notably across manufacturing, supply chain, and talent acquisition. There is heightened exposure to global demand volatility. If consumer adoption or infrastructure development fails to meet expectations, BMW may face stranded assets and underutilized capacity. The scenario is particularly sensitive to geopolitical and regulatory uncertainties, if key markets like China do not perform as projected, or if trade tensions disrupt material and component supplies, growth could be severely constrained. A critical concern is the availability of key components, such as semiconductors, scaling production to meet a 60% EV target demands sufficient chip supply, including legacy chips, which remain in tight global supply. Tariffs on raw materials, especially steel, could increase costs and compress margins. Brand risk is also notable, as a fast turn to EVs might alienate traditional customers in regions slower to electrify. This scenario requires a high tolerance for risk and a strong commitment to transformation, balancing near-term financial pressure against potential long-term competitive advantage.

3. Q&A from Case Study

3.1 Question 1: How can BMW regain competitiveness in the Chinese EV market? (15 minutes)

China remains BMW's most important single market, accounting for nearly 30% of its global vehicle sales in FY2024, showing the strategic urgency of maintaining competitiveness in the region especially in the fast-growing EV segment. However, BMW has been losing ground to local competitors like BYD, NIO, and XPeng, whose ability to innovate rapidly, price aggressively, and meet changing local tastes has reshaped consumer expectations. To regain its position, BMW must adopt a multi-pronged strategy that focuses on localization, speed, and product-market fit:

First, repositioning the brand is essential. BMW's image in China has lagged behind that of rivals who have focused on digitization, technology, and customer experience innovation. A targeted rebranding initiative, potentially through a new sub-brand or China-specific model line, would help align BMW with the design, interface, and smart connectivity expectations of Chinese EV buyers, similar to how Audi introduced China-tailored offerings to refresh its local perception.

Second, BMW needs to accelerate product development cycles to match the "China speed" of domestic competitors. While traditional German engineering focuses on multi-year development timelines, Chinese EV makers are rolling out new models or updates every 18-24 months. This agility is important in a market where trends shift rapidly. BMW can achieve this by simplifying its development process, localizing platform decisions, and employ Chinese R&D teams with greater autonomy.

A third priority is strategic partnerships. Deepening collaborations with Chinese companies, whether in battery technology (e.g., CATL), smart driving systems, or digital ecosystems, can help BMW reduce development costs and improve time-to-market. These alliances also enhance regulatory navigation and localization of features, which are increasingly essential as policy and consumer tech preferences evolve.

In addition, adapting to local consumer needs is critical. Chinese EV buyers place high value on infotainment, AI integration, autonomous features, and flawless mobile connectivity, areas where local OEMs often outshine foreign players. BMW must shift from engineering-led innovation to customer-experience-led design, prioritizing in-car software, user interface quality, and digital services.

Finally, BMW should explore China-specific platforms or products co-developed with local players, which would allow for modular, lower-cost architectures optimized for regional needs. This could help balance the need for speed with the brand's premium standards.

In summary, regaining EV competitiveness in China will require BMW to rethink its approach from the ground up: be local, be fast, and be digitally compelling. With China making up nearly a third of BMW's global volumes, the stakes are high, and the window to act is narrowing.

3.2 Question 2: What are the trade-offs associated with each EV transition pathway (40%, 50%, 60%)? (30 minutes)

BMW's strategic direction over the next decade hinges on the scale and speed of its EV transformation. The three pathways under consideration, targeting 40%, 50%, or 60% EV share by 2030, entail distinct trade-offs between short-term financial performance, regulatory compliance, operational complexity, and long-term competitiveness. Each trajectory brings different implications for capital allocation, product planning, and risk exposure.

The 40% scenario offers several advantages by preserving higher margins from BMW's traditional ICE vehicles and requiring relatively low investment, making it well-suited if EV demand does not grow as quickly as expected, allowing BMW to maintain strong loyalty among its existing customer base,

particularly in regions where electrification is progressing more slowly, such as Eastern Europe, Latin America, and parts of the U.S. By keeping CapEx at around 5% of sales and R&D spending stable at about 5.5%, BMW reduces execution risk while maintaining solid FCF margins between 5.5% and 6%, supporting an EBIT margin gradually rising to 11% by 2030. ROE is increasing from 8.2% in FY2025 to 11.4% by FY2030, underlining consistent value creation (Appendix 10). The scenario enables a higher dividend payout ratio of 60%, rewarding shareholders with reliable returns, while the DCF SoP valuation estimates the share price at €107.08/Sh.

Despite these benefits, this conservative approach comes with notable disadvantages, including lower overall sales volumes and regulatory risks such as facing €413Mn in CO_2 fleet emission penalties in FY2025. If EV adoption accelerates, BMW could fall far behind competitors, which might hurt its brand reputation as consumers and investors may view the company as lagging in innovation. Also, reliance on legacy ICE vehicles exposes BMW to cost pressures from steel tariffs and increasing regulatory burdens over time.

The 50% scenario represents a balanced approach closely aligned with BMW's current guidance, delivering strong financial performance and stable cash flows. This pathway provides vital adaptability, allowing BMW to minimize downside risk by not overcommitting to either ICE or EV technology, an important advantage in a market with uncertain regulations and shifting demand. Financially, the company achieves solid EBIT margins consistently within its target range of 8-10%, while maintaining disciplined CapEx at around 5.7-6.2% of sales and steady R&D investment near 5.3%, supporting ongoing innovation and competitiveness. FCF remains healthy at 4-5% of sales, enabling a confident dividend payout that increases from 55% to 60% by FY2030. ROE shows strong improvement from 8.2% in 2025 to 11 percent in 2030 (Appendix X), signaling sustained value creation for shareholders. The DCF SoP valuation of €91.56/Sh. further reflects market confidence in this steady performance.

On the downside, the scenario's main disadvantage is its middle-ground stance, which risks leaving BMW behind if EV adoption accelerates more rapidly than expected or if ICE demand declines abruptly. Operating dual ICE and EV product lines increases complexity and resource dilution. Furthermore, reliance on subsidies and ongoing semiconductor shortages could lead to production bottlenecks and cost pressures. Lastly, this approach risks brand ambiguity as BMW attempts to serve both traditional and EV customers without fully committing to either.

The 60% scenario positions BMW as a clear EV leader, aiming for higher sales volumes and benefiting from scale efficiencies once peak investments pass. This pathway projects strong returns by FY2030, with ROE reaching 11.7% and EBIT margins improving notably from 6% in 2025 to 9.5% by 2030, reflecting growing profitability as the EV market matures. Heavy investments in CapEx and R&D, peaking at 6% and 6.5% of sales respectively, support rapid product development and capacity expansion. Although the dividend payout is more conservative at 50%, this reflects a prudent approach to retaining cash for growth. The DCF SoP valuation of €108.50/Sh. indicates strong long-term shareholder value potential.

Still, this pathway carries considerable risks. High upfront investments increase financial strain (see liquidity ratios Appendix 10), causing lower margins and returns between FY2025-28, which can be challenging for shareholders in the short term. If EV demand fails to accelerate as expected, BMW could face unused capacity and obsolete assets. Production bottlenecks, especially from semiconductor shortages, pose high risks to scaling efforts. Additionally, competition from cost-effective EVs, particularly from Chinese manufacturers, could force BMW to bear large fixed costs without sufficient sales, similar to challenges experienced by Mercedes with its EQ models. This scenario demands strong market growth and effective execution to succeed.

3.3 Question 3: How would each scenario be perceived by key stakeholders: investors, employees, governments, customers? (10 minutes)

Each scenario would shape how different groups see BMW's future. Investors might view the 40% scenario as a safe bet, offering steady dividends and solid short-term returns, but they could worry that BMW might fall behind as the EV market grows. The 50% option feels like a balanced middle ground, giving investors steady performance with some flexibility to adjust, though some might wonder if it is enough for BMW to really lead in EV innovation. The 60% scenario would likely appeal to investors who

are willing to take more risks for the chance of big rewards and market leadership, but they might also be concerned about the heavy upfront costs and short-term financial hits.

For employees, the 50% and 60% paths could boost morale by showing that BMW is investing in the future and new technology, which helps keep and attract talent. The 40% path might make some employees uncertain about where the company is headed and how committed it is to change, which could affect motivation and loyalty.

Governments and regulators would probably prefer the 60% scenario, since it aligns with their push for cleaner emissions and sustainability. The 50% path is more moderate but still shows progress, while the 40% route might draw criticism for not keeping up with rules and could mean penalties.

Customers would react differently depending on what they want. People who care about the environment and brand-new technology would be drawn to the 50% and 60% options because of the focus on EVs and innovation. Meanwhile, more traditional customers and those in places where EVs are not common yet might prefer the 40% plan, since it keeps familiar ICE cars around longer.

3.4 Question 4: Which of the three EV scenarios would you recommend the Board of Management pursue as BMW's strategic path to 2030, and why? (35 minutes)

Choosing the right EV strategy for BMW through 2030 is far from straightforward. Each of the three scenarios offers its own set of opportunities and risks. Given the scale of transformation the automotive industry is undergoing, it is important to state that there is no right answer. The optimal path depends not only on the financials, but also on market dynamics, regulatory developments, brand positioning, and BMW's ability to perform globally in an increasingly fragmented and competitive environment.

The 40% scenario leans on what BMW already does well: strong ICE margins, efficient capital allocation, and a loyal customer base, especially in regions where electrification is slower. It would likely be welcomed by investors looking for near-term stability and high dividend payouts. However, the downside is clear, BMW could risk falling behind the curve if EV demand accelerates faster than expected. There are also growing regulatory and reputational pressures that could make this approach less viable over time.

On the opposite end, the 60% scenario sets BMW up to be a clear EV leader. It assumes strong EV adoption and positions the company to benefit from scale, innovation, and long-term competitiveness. Financially, it offers promising returns by FY2030, but comes with a lot of short-term pressure. Heavy investments, lower margins, and a more conservative payout ratio may be difficult for shareholders to accept, especially if the EV market doesn't develop as quickly as anticipated. There is also greater exposure to external risks like supply chain bottlenecks, cost competition from Chinese EV makers, and the risk of stranded assets if ICE demand remains stronger than expected.

The 50% scenario, by comparison, stands out as a well-balanced and pragmatic strategy. It reflects BMW's current direction and delivers solid financial performance (stable EBIT margins, healthy ROE, and growing FCF) (Appendix 1 & 10), while keeping investment levels sustainable. It does not lock BMW into one extreme or the other, which is particularly valuable given the uncertainty in global EV demand, infrastructure rollout, and shifting regulation. Maintaining flexibility could prove to be BMW's biggest strength over the next few years. It allows the company to scale up EV production if demand grows quickly, or to lean on ICE revenues if the transition proves slower and more uneven.

Considering the current market, rising geopolitical tensions, policy uncertainty (tariffs), inflationary pressures, and volatile EV demand across regions, the 50% scenario appears to have the right balance between ambition and caution. It is not without its trade-offs, but its mix of financial resilience and strategic agility makes it the most convincing choice for BMW's Board of Management at this point in time.

Appendix A: Case Study Supplementary Materials

Appendix 1: Ratio Summary

Ratios per Scenario								
Ratio	Unit	History	40%		50%		60%	
		2024	2025F	2030F	2025F	2030F	2025F	2030F
Gross Profit Margin	%	16.08%	16.79%	18.93%	16.63%	18.13%	16.16%	18.96%
EBIT Margin	%	8.08%	8.35%	10.98%	8.19%	10.18%	7.72%	11.01%
Net Profit Margin	%	5.39%	5.25%	7.64%	5.15%	7.09%	4.53%	7.44%
ROA	%	2.96%	2.93%	4.59%	2.94%	4.45%	2.63%	4.76%
ROE	%	8.32%	8.23%	11.39%	8.18%	11.04%	7.33%	11.65%
ROIC	%	3.96%	4.27%	5.96%	4.34%	5.81%	4.16%	6.37%
ROCE	%	15.8%	17.2%	21.4%	16.6%	20.0%	15.2%	22.0%
EPS	€	11.62	11.85	19.73	11.82	21.14	10.53	20.64
Payout Ratio	%	51.87%	60.00%	60.00%	55.00%	60.00%	50.00%	50.00%
Current Ratio	x	1.10 x	1.17 x	1.19 x	1.15 x	1.18 x	1.14 x	1.19 x
Quick Ratio	x	0.82 x	0.93 x	0.93 x	0.87 x	0.88 x	0.83 x	0.90 x
R&D to Sales	%	5.37%	4.81%	4.41%	5.26%	5.30%	5.68%	5.31%
CapEx to Sales	%	6.10%	5.20%	5.20%	6.20%	5.70%	6.20%	5.70%
FCF Margin	%	-2.7%	12.4%	5.6%	10.5%	4.9%	7.5%	5.3%

Appendix 2: Automotive EBIT Margin Development

Automotive EBIT Margin							
Scenario	Unit	Forecast					
		2025F	2026F	2027F	2028F	2029F	2030F
40%	%	7.00%	8.50%	10.00%	10.00%	9.50%	9.50%
50%	%	6.50%	7.00%	8.00%	8.00%	8.50%	8.50%
60%	%	6.00%	6.50%	7.00%	7.50%	8.70%	9.50%

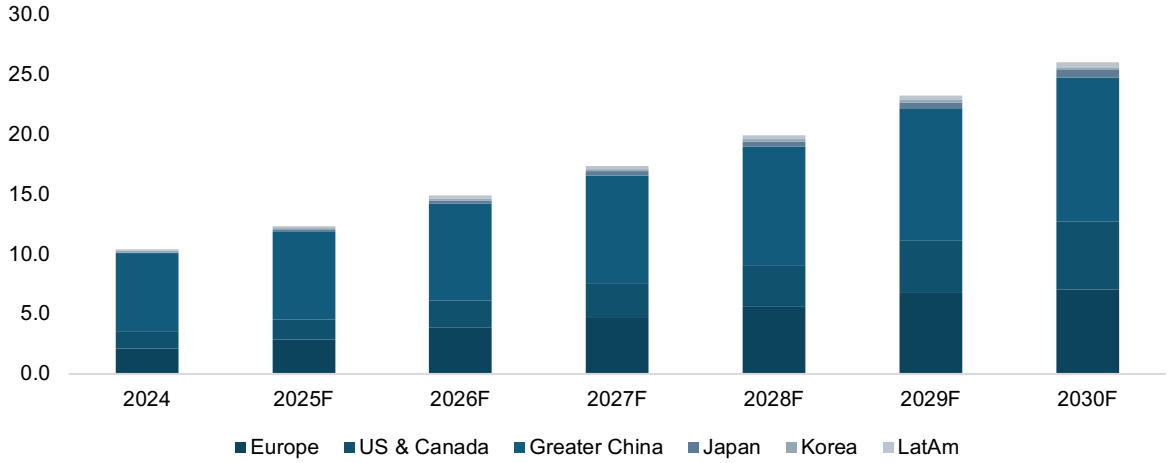
Appendix 3: Income Statement Key Financials

IS Key Financials							
Scenario	Unit	Forecast					
		2025F	2026F	2027F	2028F	2029F	2030F
Sales							
40%	€/Mn	147,873	152,309	156,537	161,199	163,308	168,004
50%	€/Mn	150,389	155,162	159,902	165,260	170,657	176,096
60%	€/Mn	152,895	158,167	163,238	168,755	174,304	180,198
Sales Automotive							
40%	€/Mn	125,678	129,990	134,436	139,024	140,792	145,532
50%	€/Mn	128,537	133,232	138,064	143,040	148,129	153,289
60%	€/Mn	131,385	136,451	141,657	147,010	152,476	158,365
COGS							
40%	€/Mn	-123,044	-124,384	-126,249	-130,492	-132,704	-136,203
50%	€/Mn	-125,380	-128,854	-131,702	-136,577	-140,014	-144,175
60%	€/Mn	-128,180	-132,086	-136,188	-140,455	-142,889	-146,031
EBIT							
40%	€/Mn	12,343	15,340	17,791	18,037	17,735	18,448
50%	€/Mn	12,312	13,487	15,436	15,693	17,194	17,925
60%	€/Mn	11,806	13,011	14,018	15,035	17,678	19,845
Net Income							
40%	€/Mn	7,761	10,626	12,379	12,591	12,395	12,843
50%	€/Mn	7,739	9,327	10,727	10,949	12,016	12,477
60%	€/Mn	6,932	8,539	9,264	10,004	11,887	13,413

Appendix 4: Cash, R&D, and CapEx Development

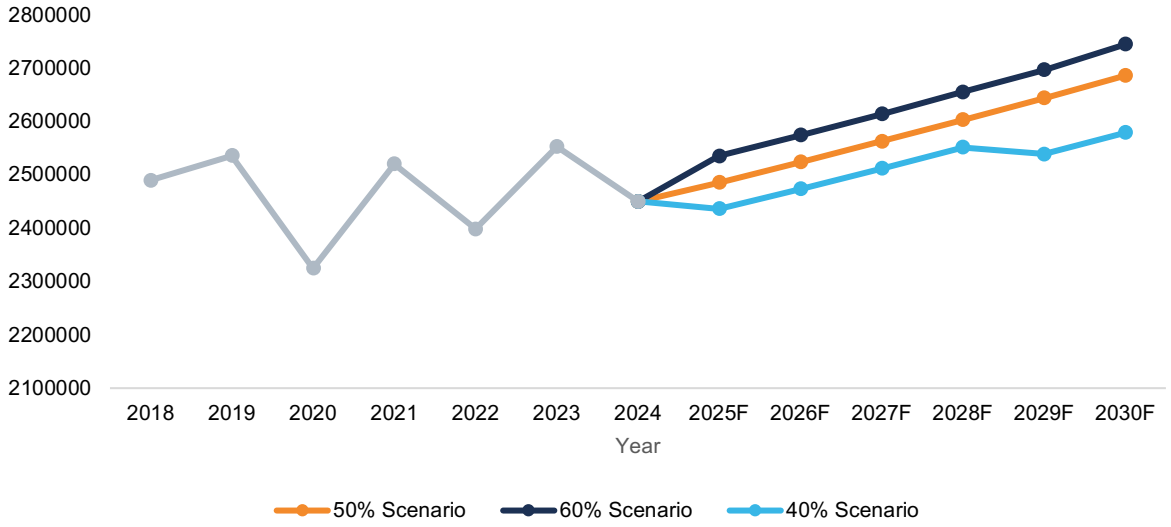
Cash, R&D, CapEx							
Scenario	Unit	Forecast					
		2025F	2026F	2027F	2028F	2029F	2030F
Cash							
40%	€/Mn	26,210	24,653	24,608	25,584	26,740	28,620
50%	€/Mn	20,038	21,187	20,762	21,192	23,114	24,337
60%	€/Mn	16,398	18,061	17,448	19,262	23,106	26,022
R&D							
40%	€/Mn	7,106	7,458	7,641	7,868	7,230	7,417
50%	€/Mn	7,916	8,292	8,519	8,805	9,077	9,341
60%	€/Mn	8,690	9,161	9,426	8,995	9,276	9,564
CapEx							
40%	€/Mn	10,657	10,905	11,244	11,581	11,441	11,742
50%	€/Mn	12,630	12,163	12,576	12,999	13,429	13,823
60%	€/Mn	13,108	13,472	13,950	13,276	13,718	14,147

Appendix 5: Global Electric Vehicle Sales Forecast by Region & Country in Mn Units



Source: Bank of America Global Research 2025

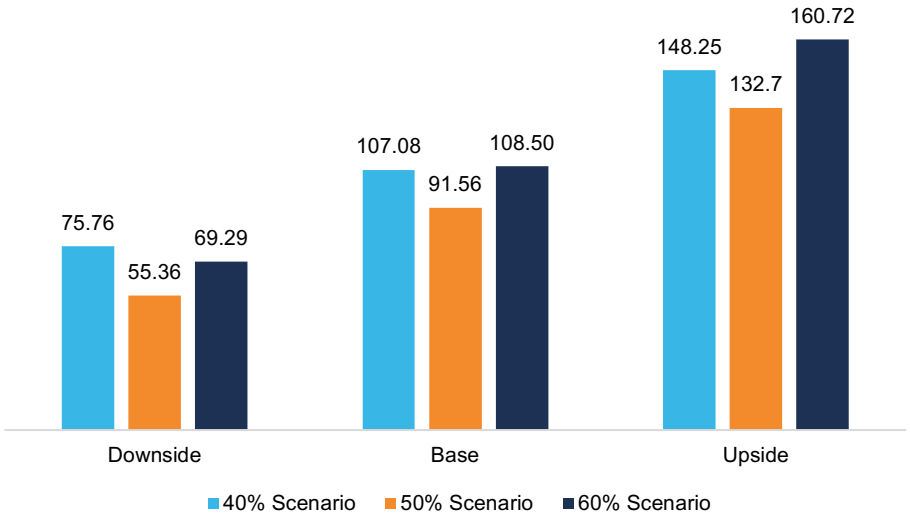
Appendix 6: Volume Forecast



Appendix 7: Valuation Multiples FY 2025

Valuation Multiples					
Scenario	**EV/CapEx**	**EV/R&D**	**EV/Sales**	**EV/EBITDA**	**EV/EBIT**
40%	15.07x	22.61x	1.09x	7.88x	13.01x
50%	11.57x	18.47x	0.97x	6.63x	11.87x
60%	12.58x	18.97x	1.08x	7.53x	13.96x

Appendix 8: Valuation Development in €/Sh.



Appendix 9: Competitors Overview

Competitors Analysis										
Ratio	Unit	2024								
		Volkswagen AG	Mercedes-Benz Group AG	Stellantis N.V.	General Motors Company	Ford Motor Company	Tesla, Inc.	BYD Company Limited	NIO Inc.	Honda Motor Co., Ltd.
Balance Sheet										
Cash and cash equivalents	€/Mn	47,199	18,610	35,392	21,286	27,403	35,316	18,955	4,478	31,769
Property, plant and equipment	€/Mn	70,611	40,908	38,900	51,022	41,440	49,745	38,749	5,128	19,821
Total Assets	€/Mn	632,905	265,010	207,607	270,221	275,471	117,907	103,663	14,239	182,458
Net Debt	€/Mn	206,882	93,544	1,859	105,196	127,974	-22,158	-13,601	-3	30,514
Net Debt Leverage	x	6.09 x	5.59 x	0.17 x	6.09 x	12.51 x	-1.84 x	-0.98 x	0.00 x	1.77 x
Total Debt	€/Mn	254,081	112,798	37,251	126,482	155,377	13,158	5,354	4,476	62,283
Total Equity	€/Mn	182,294	92,625	81,692	60,921	43,306	70,427	24,515	790	77,808
Total Equity	€/Mn	196,731	93,630	82,115	63,353	43,328	71,168	26,293	1,787	79,701
Current Ratio	x	1.13 x	1.36 x	1.09 x	1.13 x	1.17 x	2.03 x	0.75 x	0.99 x	1.43 x
Quick Ratio	x	0.78 x	0.96 x	0.74 x	0.90 x	0.98 x	1.43 x	0.47 x	0.70 x	1.08 x
Total Debt/Equity	%	129%	120%	45%	200%	359%	18%	20%	250%	78%
Income Statement										
Revenue	€/Mn	324,656	145,594	156,878	173,306	171,041	90,323	99,871	8,448	130,463
Gross Profit	€/Mn	56,298	27,023	20,887	21,403	14,375	16,134	19,041	834	28,177
Net Income	€/Mn	11,351	10,207	5,473	5,555	5,436	6,556	5,173	-2,912	7,071
EBITDA	€/Mn	33,969	16,734	10,696	17,280	10,232	12,045	13,940	-2,056	17,235
EBIT	€/Mn	22,918	12,586	6,296	11,760	4,808	7,081	5,916	-2,811	8,826
R&D Expenses	€/Mn	-17,963	-7,585	-5,784	-8,506	-7,397	-4,198	-6,836	-1,676	-5,898
R&D to Sales	%	5.53%	5.21%	3.69%	4.91%	4.32%	4.65%	6.84%	19.84%	4.52%
Fixed Asset Turnover	x	4.74 x	3.59 x	4.42 x	3.60 x	4.27 x	2.02 x	2.74 x	1.75 x	6.38 x
Interest Coverage	x	6.65 x	84.47 x	4.80 x	15.03 x	4.58 x	21.88 x	21.99 x	N/A	23.18 x
Total Asset Turnover	x	0.53 x	0.55 x	0.77 x	0.68 x	0.66 x	0.85 x	1.06 x	0.58 x	0.75 x
Cash Flow										
Capital Expenditure	€/Mn	-17,202	-4,039	-11,060	-10,013	-8,029	-10,487	-12,512	-1,175	-2,227
CapEx to Sales	%	5.30%	2.77%	7.05%	5.78%	4.69%	11.61%	12.53%	13.91%	1.71%
Profitability										
ROA	%	2.32%	2.98%	1.92%	2.88%	1.16%	4.19%	3.93%	-12.15%	3.17%
ROE	%	6.42%	11.17%	6.72%	8.91%	13.45%	10.42%	23.82%	-103.95%	9.65%
Gross Profit Margin	%	17.34%	18.56%	13.31%	12.35%	8.41%	17.86%	19.07%	9.88%	21.60%
Net Income Margin	%	3.50%	7.01%	3.49%	3.21%	3.18%	7.26%	5.18%	-34.47%	5.42%
EBITDA Margin	%	10.46%	11.49%	6.82%	9.97%	5.98%	13.34%	13.96%	-24.34%	13.21%
EBIT Margin	%	7.06%	8.65%	4.01%	6.79%	2.81%	7.84%	5.92%	-33.28%	6.77%
Per Share Information										
Dividends per Share	€	6.36	4.30	0.68	0.44	0.55	N/A	0.17	N/A	0.43
Basic EPS	€	21.39	10.19	1.86	5.96	1.37	2.06	0.59	-1.42	1.44

Appendix 10: Detailed Ratio Analysis

Ratio Analysis 50% (Base)										
Ratio	Unit	History			Forecast					
		2022	2023	2024	2025F	2026F	2027F	2028F	2029F	2030F
Profitability Ratios										
Gross Profit Margin	%	17.23%	19.09%	16.08%	16.63%	16.96%	17.64%	17.36%	17.96%	18.13%
EBITDA Margin	%	15.82%	17.66%	14.16%	14.66%	14.87%	15.86%	15.70%	16.27%	16.35%
EBIT Margin	%	9.82%	11.89%	8.08%	8.19%	8.69%	9.65%	9.50%	10.07%	10.18%
Net Profit Margin	%	13.03%	7.82%	5.39%	5.15%	6.01%	6.71%	6.63%	7.04%	7.09%
ROA	%	7.80%	4.89%	2.96%	2.94%	3.57%	4.05%	4.07%	4.38%	4.45%
ROE	%	21.33%	13.58%	8.32%	8.18%	9.55%	10.59%	10.42%	11.00%	11.04%
ROIC	%	6.10%	7.12%	3.96%	4.34%	4.68%	5.30%	5.31%	5.70%	5.81%
EPS Common Stock	€	27.31	17.67	11.62	11.82	14.57	17.12	17.76	19.87	21.14
Liquidity Ratios										
Current Ratio	x	1.09 x	1.09 x	1.10 x	1.15 x	1.15 x	1.14 x	1.15 x	1.17 x	1.18 x
Quick Ratio	x	0.20 x	0.20 x	0.22 x	0.87 x	0.87 x	0.86 x	0.86 x	0.87 x	0.88 x
Efficiency Ratios										
Total Asset Turnover	x	0.60 x	0.62 x	0.55 x	0.57 x	0.59 x	0.60 x	0.61 x	0.62 x	0.63 x
Receivables Turnover	x	44.65 x	37.52 x	40.70 x	45.97 x	41.19 x	41.17 x	41.22 x	41.21 x	41.19 x
Inventory Turnover	x	6.57 x	5.75 x	4.97 x	5.33 x	5.57 x	5.53 x	5.56 x	5.50 x	5.51 x
Payables Turnover	x	11.39 x	10.48 x	9.60 x	10.39 x	10.30 x	10.29 x	10.31 x	10.30 x	10.27 x
Solvency Ratios										
Interest Coverage Ratio	x	55.77 x	28.17 x	20.09 x	34.67 x	38.45 x	46.84 x	50.43 x	51.77 x	43.15 x
Total Debt to Shareholder's Equity Ratio	x	1.79 x	1.76 x	1.87 x	1.70 x	1.66 x	1.59 x	1.55 x	1.50 x	1.46 x
Equity Multiplier	x	2.70 x	2.70 x	2.82 x	2.65 x	2.61 x	2.54 x	2.49 x	2.44 x	2.40 x
Debt to Capital Ratio	%	63.0%	63.0%	64.5%	62.2%	61.6%	60.6%	59.8%	58.9%	58.2%
Industry Specific Ratios										
Vehicle Sales Growth Rate	%	10.15%	2.34%	-8.37%	1.47%	1.54%	1.56%	1.58%	1.57%	1.59%
R&D to Sales	%	4.64%	4.85%	5.37%	5.26%	5.34%	5.33%	5.33%	5.32%	5.30%
CAPEX to Sales	%	6.35%	7.00%	8.57%	8.40%	7.84%	7.86%	7.87%	7.87%	7.85%
CAPEX to Sales (excl. capit. R&D)	%	4.37%	5.32%	6.10%	6.20%	5.70%	5.70%	5.70%	5.70%	5.70%
ROCE	%	21.9%	27.3%	15.8%	16.6%	17.4%	19.3%	18.8%	19.8%	20.0%

Ratio Analysis 40%										
Ratio	Unit	History			Forecast					
		2022	2023	2024	2025F	2026F	2027F	2028F	2029F	2030F
Profitability Ratios										
Gross Profit Margin	%	17.23%	19.09%	16.08%	16.79%	18.33%	19.35%	19.05%	18.74%	18.93%
EBITDA Margin	%	15.82%	17.66%	14.16%	13.78%	15.54%	16.86%	16.68%	16.21%	16.31%
EBIT Margin	%	9.82%	11.89%	8.08%	8.35%	10.07%	11.37%	11.19%	10.86%	10.98%
Net Profit Margin	%	13.03%	7.82%	5.39%	5.25%	6.98%	7.91%	7.81%	7.59%	7.64%
ROA	%	7.80%	4.89%	2.96%	2.93%	4.05%	4.67%	4.67%	4.51%	4.59%
ROE	%	21.33%	13.58%	8.32%	8.23%	10.91%	12.23%	11.99%	11.39%	11.39%
ROIC	%	6.10%	7.12%	3.96%	4.27%	5.31%	6.10%	6.08%	5.87%	5.96%
EPS Common Stock	€	27.31	17.67	11.62	11.85	16.37	19.10	19.37	18.98	19.73
Liquidity Ratios										
Current Ratio	x	1.09 x	1.09 x	1.10 x	1.17 x	1.15 x	1.15 x	1.16 x	1.17 x	1.19 x
Quick Ratio	x	0.20 x	0.20 x	0.22 x	0.93 x	0.91 x	0.90 x	0.91 x	0.91 x	0.93 x
Efficiency Ratios										
Total Asset Turnover	x	0.60 x	0.62 x	0.55 x	0.56 x	0.58 x	0.59 x	0.60 x	0.59 x	0.60 x
Receivables Turnover	x	44.65 x	37.52 x	40.70 x	45.64 x	41.15 x	41.11 x	41.15 x	40.82 x	41.13 x
Inventory Turnover	x	6.57 x	5.75 x	4.97 x	5.52 x	6.12 x	6.13 x	6.18 x	6.03 x	6.00 x
Payables Turnover	x	11.39 x	10.48 x	9.60 x	10.30 x	10.29 x	10.28 x	10.29 x	10.20 x	10.25 x
Solvency Ratios										
Interest Coverage Ratio	x	-55.77 x	28.17 x	20.09 x	34.76 x	43.74 x	53.99 x	57.96 x	53.40 x	44.41 x
Total Debt to Shareholder's Equity Ratio	x	1.79 x	1.76 x	1.87 x	1.75 x	1.67 x	1.60 x	1.55 x	1.50 x	1.46 x
Equity Multiplier	x	2.70 x	2.70 x	2.82 x	2.69 x	2.61 x	2.54 x	2.49 x	2.44 x	2.40 x
Debt to Capital Ratio	%	63.0%	63.0%	64.5%	62.8%	61.7%	60.7%	59.8%	59.0%	58.3%
Industry Specific Ratios										
Vehicle Sales Growth Rate	%	10.15%	2.34%	-8.37%	-0.56%	1.54%	1.56%	1.58%	-0.50%	1.59%
R&D to Sales	%	4.64%	4.85%	5.37%	4.81%	4.90%	4.88%	4.88%	4.43%	4.41%
CAPEX to Sales	%	6.35%	7.00%	8.57%	7.21%	7.16%	7.18%	7.18%	7.01%	6.99%
CAPEX to Sales (excl. capit. R&D)	%	4.37%	5.32%	6.10%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%
ROCE	%	21.9%	27.3%	15.8%	17.2%	20.7%	23.2%	22.6%	21.2%	21.4%

Ratio Analysis 60%										
Ratio	Unit	History			Forecast					
		2022	2023	2024	2025F	2026F	2027F	2028F	2029F	2030F
Profitability Ratios										
Gross Profit Margin	%	17.23%	19.09%	16.08%	16.16%	16.49%	16.57%	16.77%	18.02%	18.96%
EBITDA Margin	%	15.82%	17.66%	14.16%	14.32%	14.86%	15.25%	15.11%	16.34%	17.18%
EBIT Margin	%	9.82%	11.89%	8.08%	7.72%	8.23%	8.59%	8.91%	10.14%	11.01%
Net Profit Margin	%	13.03%	7.82%	5.39%	4.53%	5.40%	5.67%	5.93%	6.82%	7.44%
ROA	%	7.80%	4.89%	2.96%	2.63%	3.27%	3.49%	3.71%	4.32%	4.76%
ROE	%	21.33%	13.58%	8.32%	7.33%	8.74%	9.16%	9.53%	10.84%	11.65%
ROIC	%	6.10%	7.12%	3.96%	4.16%	4.51%	4.82%	5.09%	5.85%	6.37%
EPS Common Stock	€	27.31	17.67	11.62	10.53	13.04	14.14	15.25	18.17	20.64
Liquidity Ratios										
Current Ratio	x	1.09 x	1.09 x	1.10 x	1.14 x	1.14 x	1.13 x	1.13 x	1.16 x	1.19 x
Quick Ratio	x	0.20 x	0.20 x	0.22 x	0.83 x	0.83 x	0.82 x	0.83 x	0.87 x	0.90 x
Efficiency Ratios										
Total Asset Turnover	x	0.60 x	0.62 x	0.55 x	0.58 x	0.61 x	0.62 x	0.63 x	0.63 x	0.64 x
Receivables Turnover	x	44.65 x	37.52 x	40.70 x	46.30 x	41.24 x	41.20 x	41.23 x	41.21 x	41.23 x
Inventory Turnover	x	6.57 x	5.75 x	4.97 x	5.05 x	5.01 x	5.15 x	5.33 x	5.54 x	5.68 x
Payables Turnover	x	11.39 x	10.48 x	9.60 x	10.47 x	10.31 x	10.30 x	10.31 x	10.30 x	10.28 x
Solvency Ratios										
Interest Coverage Ratio	x	-55.77 x	28.17 x	20.09 x	11.81 x	13.01 x	14.02 x	15.04 x	17.68 x	19.85 x
Total Debt to Shareholder's Equity Ratio	x	1.79 x	1.76 x	1.87 x	1.70 x	1.66 x	1.60 x	1.55 x	1.49 x	1.44 x
Equity Multiplier	x	2.70 x	2.70 x	2.82 x	2.65 x	2.61 x	2.54 x	2.49 x	2.43 x	2.37 x
Debt to Capital Ratio	%	63.0%	63.0%	64.5%	62.3%	61.7%	60.7%	59.9%	58.9%	57.9%
Industry Specific Ratios										
Vehicle Sales Growth Rate	%	10.15%	2.34%	-8.37%	3.50%	1.54%	1.56%	1.58%	1.57%	1.77%
R&D to Sales	%	4.64%	4.85%	5.37%	5.68%	5.79%	5.77%	5.33%	5.32%	5.31%
CAPEX to Sales	%	6.35%	7.00%	8.57%	8.57%	8.52%	8.55%	7.87%	7.87%	7.85%
CAPEX to Sales (excl. capit. R&D)	%	4.37%	5.32%	6.10%	6.20%	6.20%	6.20%	5.70%	5.70%	5.70%
ROCE	%	21.9%	27.3%	15.8%	15.2%	16.2%	16.8%	17.6%	20.3%	22.0%

Appendix B: MBA-Class Case Study Survey

Student ID	How would you rate the clarity of the case study's structure? (Scale: 1 = Very unclear, 5 = Very clear)	Was the narrative and central dilemma understandable and easy to follow? (Scale: 1 = Not at all, 5 = very understandable)	How engaging did you find the case study overall? (Scale: 1 = Not engaging, 5 = Very engaging)	Were the discussion/assignment questions easy to understand? (Scale: 1 = Very confusing, 5 = Very clear)	If any question(s) were unclear, please describe them and explain what was confusing.	Did the case study provide enough information to answer the questions effectively? (Scale: 1 = Not enough info, 5 = More than enough)	Was the appendix helpful and relevant? (Scale: 1 = Not at all, 5 = Very helpful)	Were there areas where you felt more data or context was needed? If so, please explain.	Overall, how would you rate the case study? (Scale: 1 = Poor, 10 = Excellent)	What did you like most about the case?	What is one suggestion you have to improve the case?
1	5	5	4	5	No	5	5	No	8	...	...
2	4	5	5	4	Na	3	4	Na	10	Na	Na
3	5	4	5	4	No	4	5	No	9	Complexity	More tine to discuss
4	4	5	5	5	Everything was clear	4	4	Political context of Germany vs China	9	Not having a definite answer	Probably presenting the case with less overall information but more relevant information regarding each of the PESTLE areas
5	4	4	5	4	No issues	4	5	No	8	The forecast analysis in this specific industry	.
6	4	4	5	4	.	4	5	.	9	Think about strategy and discuss that.	.
7	5	3	5	4	I think the case was really clear but sometimes the questions are not easy to follow because there's not a specific answer.. it's always a strategic perspective so I think it's normal!	5	4	No. Maybe a suggestion would be to add to the case (or in the slide where the case is mentioned) the TOP financial KPIs or ratios that we should review to reply to the case.	8	The up to date topic! Very very actual	As I said, maybe a "RECAP" KPIs list per case. But I try to do it on my own off course, but maybe that would help to follow the analista
8	5	5	5	4	No, all clear.	3	5	More information and data from competitors	10	Help everyone integrate the content of the topic into practical operation.	More information and data from competitors.
9	5	5	5	5	No	4	5	Investment in capex to meet the 60% scenario would be made in building factories? Could it be JV with Chinese company?	10	It's a real dilemma BMW and others alike are facing and we do not see a common path between being chosen, what demonstrates that there are no obvious answers, but in the end, decisions have to be made.	Provide information about competitors
10	4	4	5	4	No	4	5	No	8	Applying financial analysis to a very topical issue nowadays and to assess, live, what real managers do in their decision making	Nothing relevant to add
Average	**4.5**	**4.4**	**4.9**	**4.3**	**NA**	**4**	**4.7**	**NA**	**8.9**	**NA**	**NA**

Appendix C: BMW Equity Research

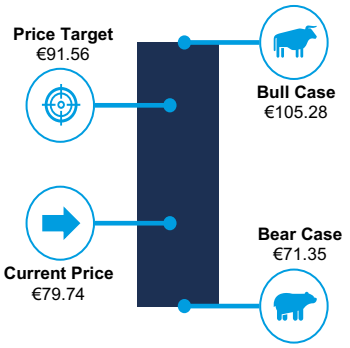
Recommendation: **BUY** June 2025

Table 1 – BMW AG Overview

Company Name	BMW AG
PT (2025YE)	€91.56
Upside	**26.2%**
Stock Exchange	Xetra
Industry	Automotive
52w Price Range (€)	62.69 - 92.38
Shares Outstanding	579Mn
Market Cap.	€42.06Bn
Dividend Yield	5.93%

Source: BMW Data, Author Analysis

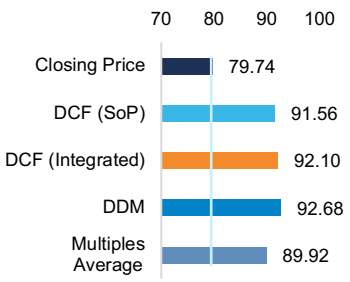
Figure 1 – Bull & Bear Scenarios



Assumptions:
Bull Case: +10% Vehicle Sales; g=1%
Bear Case: -10% Vehicle Sales; g=0.5%

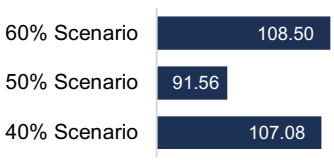
Source: Author Analysis

Figure 2 – Valuation Summary €/Sh.



Source: Author Analysis

Figure 3 – Scenarios Valuation €/Sh.



Source: Author Analysis

BMW: Structural Strength, Cyclical Uncertainty

BMW is a large and established player in the global premium automotive market, combining cutting-edge technology with a strong brand heritage. With consistent innovation, solid financials, and a market valuation below intrinsic value, BMW is well-positioned for long-term growth and share price appreciation.

1. Investment Summary

BMW received a **BUY recommendation** for its base case, with a **2025YE PT of €91.56/Sh.**, representing an **annualized return of 26.2%**, against the **closing price of €79.74/Sh.**, as of 28th May 2025, however with a **High Risk** (Figure 2).

Bull and Bear Scenarios were determined with a 2025YE PT of **€105.28/Sh.** and **€71.35/Sh.,** respectively, **considering the assumptions in Figure 1.**

The stock is **trading at a discount**, mainly due to: i) current **tariff policies** from the **Trump administration**; ii) ongoing **geopolitical tensions**; iii) **uncertainty** surrounding **macroeconomic developments**; and iv) **skepticism** regarding the pace of the **EV transition** and the potential for **disruptive new technologies**.

The **recommendation for the stock is based on the following**: BMW is well positioned for future growth, supported by **stabilizing automotive margins** (Figure 24) and **improved FCF**. While 2025 may see modest growth due to a weaker Chinese market and initial launch costs for **Neue Klasse**, the new platform is **expected to drive both revenue and EBIT from 2026**, particularly in Western markets. Compared to peers, **BMW stands out** with **stronger YoY FCF generation**, a highly **attractive cash return policy**, and a **balanced EV transition strategy** that **protects margins while meeting EU CO_2 regulations**.

Scenario Case Study

To analyze potential deviations from **BMW's EV strategy**, a scenario case study was conducted based on the company's **2030 target of 50% EV share**. Two alternative scenarios were modelled: a more conservative 40% EV share and a more ambitious 60% EV share by 2030. These cases accounted for changes in sales volume, regulatory compliance costs (including potential fines for missing CO_2 targets), and margin impacts. Under this framework, the **40% EV scenario** resulted in a TP of **€107.08/Sh.**, while the **60% scenario** supported a slightly higher TP of **€108.50/Sh**. (Figure 3). While the more ambitious scenario leads to a higher valuation, it also entails greater execution risk, particularly around market adoption and investment intensity. Conversely, the more conservative case reflects a lower-risk path, albeit with slightly reduced upside potential.

Investment Risks

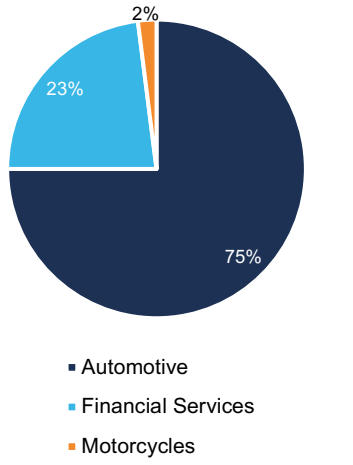
BMW is exposed to **significant risks** that could impact its valuation. Macroeconomic uncertainty, regulatory changes, and tariffs pose ongoing challenges, while demand volatility means that volume shifts could impact the investment case. The company's strong reliance on the Chinese market (Figure 8) leaves it vulnerable to geopolitical tensions and economic slowdowns. Furthermore, BMW faces risks from raw material price swings, supply chain disruptions, and accelerating technological change that could reshape the competitive environment or render key investments less effective.

Figure 4 – BMW FY2024 Overview

€46.6Bn Market Cap.	**€142.3Bn** Revenue FY2024
159,104 Employees	**19** Locations Worldwide
2,450,854 Deliveries	**426,536** EV's sold

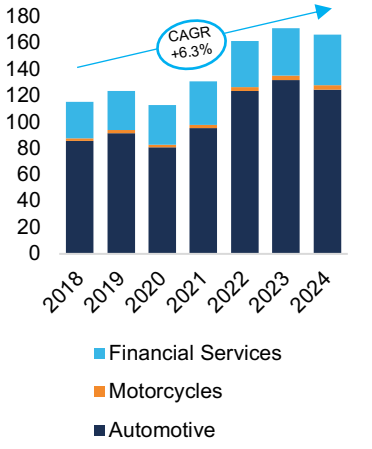
Source: BMW Annual Report 2024

Figure 5 – FY2024 Revenue Split



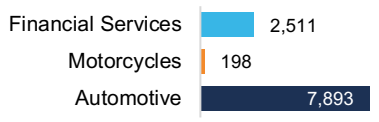
Note: Excluding eliminations
Source: BMW Annual Report 2024

Figure 6 – BMW Revenue in €Bn



Note: Excluding eliminations
Source: BMW Data

Figure 7 – FY2024 EBIT in €/Mn



Source: BMW Annual Report 2024

2. Business Description

Bayerische Motoren Werke Aktiengesellschaft ("BMW Group", "BMW AG", "BMW", or "Company"), headquartered in Munich, Germany, is a **global leader in the premium automotive and motorcycle industry**, with a market capitalization of €46.6Bn in 2024YE and 159,104 employees across 19 countries (Figure 4). The company operates through three **primary segments: i) Automotive, ii) Motorcycles, and iii) Financial Services.** The Automotive segment focuses on the development, manufacturing, assembly, and sale of automobiles, along with spare parts, accessories, and mobility services, under the BMW, MINI, and Rolls-Royce brands.

BMW traces its origins to 1916, evolving from the merger of Gustav Otto's and Karl Rapp's aviation companies into Bayerische Flugzeug-Werke AG (BFW). In 1917, Rapp Motorenwerke became Bayerische Motoren Werke GmbH, later converted into a public limited company (AG) in 1918. In 1922, BMW AG transferred its engine construction operations, including the company and brand names, to BFW. **Initially focusing on aircraft engines,** BMW AG **expanded** into **motorcycle production** in 1923 **and automobile manufacturing in 1928**, becoming one of the world's leading premium manufacturers of automobiles and motorcycles.

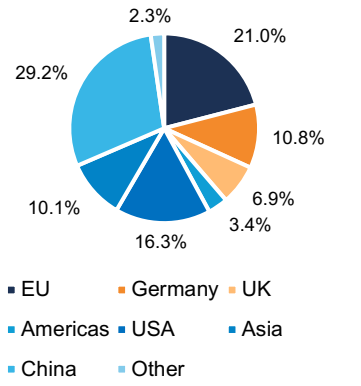
Geographic and business segments

The company operates through three reportable business segments: i) Automotive; ii) Motorcycles; and iii) Financial Services. **75% of FY2024 revenues** were **generated by the Automotive segment** (Figure 5), which delivered a **profit margin** of **3.9%**. In comparison, the **Financial Services** segment contributed **23% of revenues with a profit margin of 4.7%**, while the **Motorcycles** segment accounted for **2% of revenues** with a slightly lower **profit margin of 4.3%.** Historically, the Automotive segment had the highest profit margin, but **reduced sales volumes** in FY2024 led to **decreased cost efficiencies** and lower warranty provision reversals. Additionally, higher **expenses related to supplier issues** and ongoing investments in digitalization and electrification contributed to the decline in profitability.

Geographically, BMW reports its operations across three main countries and four regions: **i) Germany; ii) China; iii) USA; iv) Rest of Europe; v) Rest of Asia; vi) Rest of the Americas; and vii) Other regions**. In FY2024, China emerged as the company's largest market (Figure 8), accounting for **29.2% of total sales volume** (-3.1% YoY) and contributing **22.3% of overall revenues**. The **United States** followed with **16.3% of sales volume** (+0.7% YoY), contributing **19% of revenues**. **Germany** ranked third, with **10.8% of sales volume** (+0.1% YoY), translating into **13.9% of total revenues**.

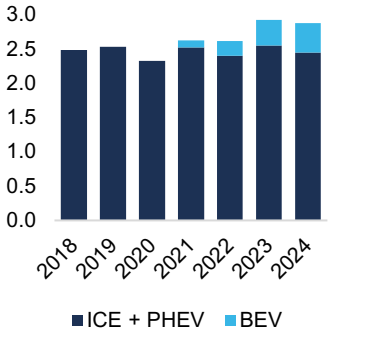
Automotive | The **Automotive segment** of BMW Group **encompasses** the **BMW, MINI, and Rolls-Royce brands**, **offering** a diverse range of **premium vehicles** that cater to varying customer needs from compact and luxury automobiles to high-performance and ultra-luxury models. The Automotive segment reported **FY2024 revenues of €124.9Bn** (CAGR of 6.5% between FY2018–24), a 6% decline compared to FY2023. The **EBIT margin was 6.3%** (–3.5% YoY), amounting to **€7.9Bn** (–39% YoY), **driven by a decline in vehicle sales** and a negatively impacted product mix, which was mainly due to **weaker demand in China** and **IBS-related delivery** stops of higher-class vehicle models. In FY2024, **BMW delivered 2.45Mn vehicles** (Figure 9), a decline of 4% YoY, yet **all-electric vehicles** (EV) remained a key **growth driver**, with over **426,000 units sold**, up 13.5% YoY, accounting for **17.4% of total BMW Group sales** and even higher shares at MINI and Rolls-Royce. The core BMW brand recorded **sales growth in Europe and** the **Americas**, supported by **strong demand for EVs**, including the BMW iX1 and BMW X1, which helped offset broader market headwinds and reinforce BMW's position as a global leader in the premium segment. The Automotive segment's **ROCE** for FY2024 was **11.4%,** down from 20.2% in 2023 due to lower profit before financial result.

Figure 8 – FY2024 Biggest Markets



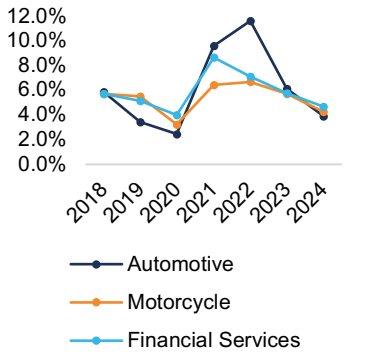
Source: BMW Annual Report 2024

Figure 9 – Vehicle Volume in Mn Units



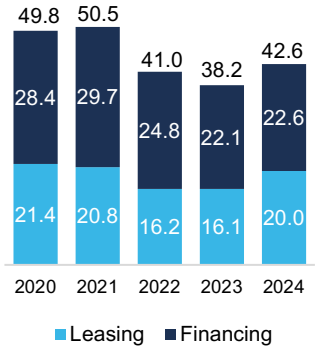
Source: BMW Data, Author Analysis

Figure 10 – BMW Profit Margin



Source: BMW Data, Author Analysis

Figure 11 – New BMW Group Vehicles Leased or Financed by FS in %



Source: BMW Data, Author Analysis

Motorcycles | The **Motorcycles segment**, under the BMW Motorrad brand, achieved a **new record in deliveries**, reaching **210,385 units in FY2024** (+0.6% YoY), supported by solid sales growth in Germany (+8.3%) and Brazil (+8.2%). Despite headwinds in China (–12.4%), **key markets in Europe and the Americas contributed to overall growth**, with standout performance in models across the Adventure, Heritage, and Sport segments. BMW Motorrad continued to renew and expand its portfolio, launching the CE 02 electric eParkourer and unveiling several updated and new models, including the BMW R 1300 GS Adventure and additions to the M and Roadster families. The **segment reported** an **EBIT margin of 6.1%** (down from 8.1% YoY), amounting to €198Mn (–23.6% YoY), as **higher material and development costs** offset favorable pricing and product mix effects. **ROCE stood at 15.5%**, within the forecast range, though lower than the previous year due to reduced earnings and increased inventory levels (22.1% in FY2023).

Financial Services | The **Financial Service**s segment of BMW Group **experienced strong growth** in new business, with n**ew credit financing and leasing contracts rising by 9.8% to 1.69Mn in 2024**, contributing to a **revenue increase** from €36.2Bn in FY2023 to **€39.0Bn in FY2024**, reflecting a 6.4% YoY growth. This growth was **driven by an attractive product portfolio and strong collaboration with dealerships**, increasing the share of BMW Group **vehicles leased or financed** to **42.6%** (Figure 11). However, the segment's EBIT declined by 17.8% to **€2.51Bn**, primarily due to lower results from lease returns and higher expenses for credit risk provisioning. The segment's **ROE** also decreased to **15.1%** (-6.6% YoY). The **contract portfolio stood at 4.85Mn contracts**, with slight regional variations, including a significant drop in Asia.

Company Strategy

The BMW Group's **strategy is a dynamic and continuous process** that adapts to global trends and industry changes, driven by core values of financial performance, customer satisfaction, and sustainable development. BMW **closely monitors key trends like digitalization, electromobility, and changing consumer needs** while addressing challenges such as charging infrastructure and resource availability. The company is advancing internal processes and workflows by leveraging generative AI to improve efficiency, foster innovation, and enhance customer experience. In **2024, BMW delivered 426,536 fully electric vehicles**, a **13.5% increase** from 2023, with the goal to have over **50% of deliveries be fully electric by 2030**. **The NEUE KLASSE**, set for production in 2025, will introduce sixth-generation BMW e-drive technology, advancing battery performance and manufacturing efficiency.

BMW also **plans to introduce its first fuel cell electric vehicle (FCEV) in 2028**, in partnership with Toyota. The company is **expanding its charging infrastructure**, partnering with IONITY in Europe and IONNA in North America to install **30,000 fast-charging points**. In **China**, a **joint venture** with **Mercedes-Benz** will establish 1**,000 fast-charging stations by 2026**.

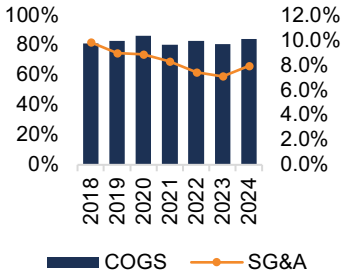
Additionally, BMW is **implementing a direct sales model across Europe**, with MINI leading the way, while expanding its financial services to offer tailored solutions such as insurance and financing. The **company's focus on sustainability** includes increasing the use of recycled materials in production, promoting a circular economy, and reducing reliance on primary raw materials.

With a **target EBIT margin of 8-10% and RoCE of at least 18%**, BMW continues to drive both financial success and the transition to sustainable, electrified mobility.

Key drivers of Profitability

BMW's profitability is driven by a combination of **volume growth**, **operational efficiency**, **strategic investment in electric vehicles**, and **strong capital returns**. In FY2024, BMW delivered over 2.4Mn vehicles globally, with growth in key markets like Europe and the U.S. underlining revenue expansion. **Operational efficiency** remains a key driver of profitability, with COGS and SG&A tightly managed, BMW

Figure 12 – BMW COGS & SG&A in % of Sales



Source: BMW Data, Author Analysis

Table 2 – ESG Scores

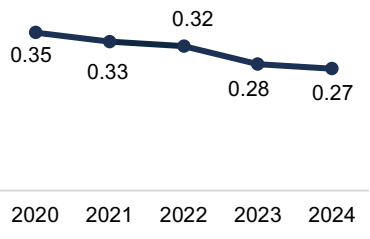
Pillar	Source	BMW
ESG	Refinitiv	87/100
ESG	S&P	48/100
ESG risk	Sustainalytics	23.8 - medium
E	Refinitiv	91/100
E	S&P	56/100
S	Refinitiv	92/100
S	S&P	45/100
G	Refinitiv	71/100
G	S&P	43/100

Note: E – Environment; S – Social; G – Governance
Source: Refinitiv, S&P, Sustainalytics

Figure 13 – CO_2 emissions per vehicle produced in tones

Source: BMW Data, Author Analysis

Figure 14 – Energy consumption per vehicle produced in MWh



Source: BMW Data, Author Analysis

Table 3 – FY2024 BMW Workforce

Gender	Count	%
Male	127.317	80%
Female	31.124	20%
Female in Management	2.752	22%

Source: BMW Data, Author Analysis

maintains a **COGS-to-revenue ratio of approximately 80-82%**, while **SG&A** expenses are consistently **around 8% of revenue** (Figure 12). The group's switch to electrification is a major profitability lever, EV sales rose 13.5% in 2024, comprising nearly 17.5% of total deliveries, with models like the i4 and iX leading the charge. Despite high upfront R&D costs, **EVs are projected to achieve EBIT margin parity with ICE vehicles by 2025YE.** Combined with BMW's strong brand equity and pricing power in the premium segment, they underpin the company's resilience and sustained profitability in a rapidly developing automotive industry. Additionally, the **Financial Services segment remains a major contributor to Group earnings**, supported by growth in digital sales channels and offerings like leasing and insurance.

3. Environmental, Social, & Governance

BMW Sustainability Strategy

BMW's sustainability strategy focuses on balancing business success with environmental and social responsibility. **Key priorities include electrification, digitalization, and circular economy practices**, integrated throughout the company's value chain. Sustainability is embedded in corporate governance, product development, production, and supply chain management. Over the past five years, the company has maintained an impressive **average ESG score of 88.2**, ranking among the top five peers in the automotive industry (Table 4).

Environment

BMW demonstrates strong environmental performance, with an **E-score of 91**, consistently outperforming the industry average E-score of 47 (Table 2). The company has implemented comprehensive measures to reduce its environmental impact, including ambitious CO_2 reduction targets, investment in renewable energy, and a strong focus on sustainable supply chains and circular economy principles.

Carbon Efficiency | BMW has set ambitious CO_2 reduction targets, focusing primarily on the vehicle's usage phase, which accounts for 70% of the company's global CO_2 footprint. By 2030, the company aims to **cut CO_2 emissions per vehicle and per kilometer driven** by at least **50%** compared to 2019 levels. In **2024**, BMW reduced its **EU fleet emissions to 99.5 g/km** (WLTP), well below the 128.5 g/km target, continuing a steady decline from 102.1 g/km in 2023 and 105 g/km in 2022. This progress was driven by **more efficient combustion engines** and **increased sales of electrified vehicles**. BMW is investing in **renewable energy**, **supply chain decarbonization**, **fleet electrification**, and **circularity** to systematically reduce CO_2 emissions across production, vehicle use, and end-of-life. These efforts are supported by digitalization and partnerships for verified climate projects.

Energy Management | BMW has a comprehensive **energy management system** that spans **structural planning**, **procurement**, and **renewable energy integration** across all its operations. The company sources **100% renewable electricity for production** and is expanding solar, biomass, and geothermal projects, such as new photovoltaic systems in Germany and South Africa and a geothermal plant in China. Efficiency initiatives include upgrading systems, optimizing processes, and phasing out fossil fuels, with a **goal to reduce energy consumption per vehicle by 25% by 2030** (vs. 2016 levels) (Figure 14). In **2024, 48.5% of BMW's total energy consumption came from renewables**, reflecting steady progress in its sustainability targets.

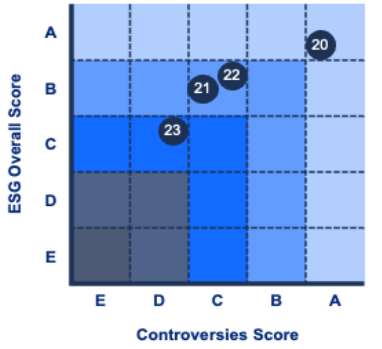
Raw Materials | BMW prioritizes **responsible raw material sourcing**, ensuring compliance with environmental and social standards across its supply chain. The company **actively mitigates risks in sourcing critical materials** like lithium, nickel, copper, and natural rubber, implementing a **multi-stage due diligence process** aligned with OECD guidelines. Through multi-stakeholder initiatives such as **IRMA**, **RMI**, and **TSM**, BMW helps shape global supply chain certification standards.

Table 4 – Peer ESG Scores

Rank	Company	Score
1	Mercedes	91.61
4	BMW	86.75
6	Stellantis	82.76
7	Volkswagen	82.52
17	Honda	73.32
19	Tesla	71.44
20	GM	71.40
25	BYD	64.54

Note: Global Rank in Automotive Industry
Source: Refinitiv, Author Analysis

Figure 15 – BMW ESG Score Matrix 2020-2023



Source: Refinitiv, Author Analysis

Table 5 – Shareholder Structure

Owner	%
Stefan Quandt	26.8%
Susanne Klatten	21.7%
Treasury Shares	2.3%
Free Float	49.2%
Top Holders	**%**
Aqton SE	8.8%
BlackRock	3.4%
Vanguard	2.3%

Source: BMW Data, Capital IQ

Table 6 – Board of Management

Member	Position
Oliver Zipse	CEO
Walter Mertl	CFO
Joachim Post	CPO
Milan Nedeljković	CPROD
Frank Weber	CTO
Jochen Goller	CCO
Ilka Horstmeier	CHRO

Source: BMW Annual Report 2024

Circular Economy | BMW prioritizes a circular economy by **increasing the use of secondary materials**, **reducing reliance on primary raw materials**, and **designing vehicles for easy dismantling and recycling**. Through its Recycling and Dismantling Centre (RDZ), BMW develops innovative recycling processes and shares expertise globally. Since late 2024, the company has also **established a closed-loop system for battery production**, recovering cobalt, nickel, and lithium. Additionally, BMW has **reduced non-recyclable waste** (from 2.74 kg to 1.68 kg per vehicle) and **water consumption** (from 1.90 m³ to 1.67 m³ per vehicle) between 2022 and 2024, reinforcing its commitment to sustainability.

Social

BMW ranks among the industry leaders in social performance, achieving a **Social score of 92** according to Refinitiv (2023) and an outstanding workforce subcategory score of 98. Notably, the BMW Group secured the top position in the 2024 Trendence Professionals Barometer, marking its **thirteenth consecutive year as the best employer**. In 2024, **women represented 20%** of the total workforce and held **22% of management positions** (Table 3). BMW Group engages globally in social initiatives, including BRIDGE, a partnership with UNICEF to provide STEM education for 10 million children in South Africa, Brazil, Thailand, Mexico, and India. Furthermore, through the Intercultural Innovation Hub with the United Nations Alliance of Civilizations (UNAOC), **BMW supports gender equality, social cohesion, and cultural diversity** by funding and mentoring organizations tackling interfaith and social challenges, reaching over six million people since 2011.

Governance

In 2023, **BMW received a B+** (71/100) rating from Refinitiv in this category, marking a decline from its previous A- rating. This downgrade was primarily due to changes in audit committee independence and the overall independence of Board members.

Shareholder Structure | BMW's **ownership** is concentrated among two primary shareholders: **Stefan Quandt** (26.8%) and **Susanne Klatten** (21.7%). Also, the company holds **2.3% in treasury shares**, while **49.2% constitutes free float** (Table 5). The next **largest institutional shareholders** include **BlackRock Inc.** (3.4%) and **Vanguard Group Inc**. (2.3%). Unlike some companies, BMW does not employ traditional anti-takeover mechanisms, such as poison pills or staggered boards. However, the Quandt family's strong voting power serves as an inherent defense against hostile takeovers.

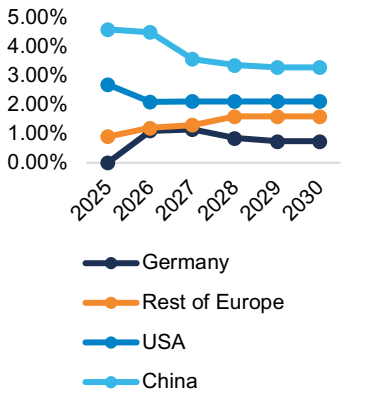
Board of Management | The **Board of Management** consists of **seven members** with a 12.5% diversity rate (Table 6). Chairman of the Board, Oliver Zipse, has led BMW since 2019 and will step down in 2026 due to the company's executive age limit policy.

Supervisory Board | The **Supervisory Board** consists of **20 members**, including major shareholders Stefan Quandt and Susanne Klatten, ensuring strong shareholder representation. The Supervisory Board maintains a **30% diversity rate in 2025**.

Remuneration | BMW's remuneration system includes a fixed salary for stability and a variable bonus tied to financial, sustainability, and strategic goals. A share-based component links rewards to company performance, requiring executives to invest in and hold BMW shares for at least four years. In FY2024, **total board remuneration decreased by 30%** compared to FY2023. **Supervisory board pay**, which consists of fixed remuneration and an attendance fee, **increased by 9% to €5.4 million**.

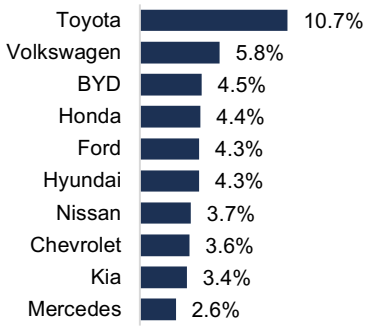
Controversies | In 2023, **BMW received a D-score** for controversies from Refinitiv, facing issues across environmental, labor, human rights, and anti-competition areas. A German court dismissed a lawsuit over emissions targets, while BMW UK set aside £70Mn for potential payouts in a finance commission scandal. The company was also scrutinized for importing vehicles with banned Chinese parts linked to forced labor and challenged EU tariffs on China-made EVs in court.

Figure 16 – GDP Growth



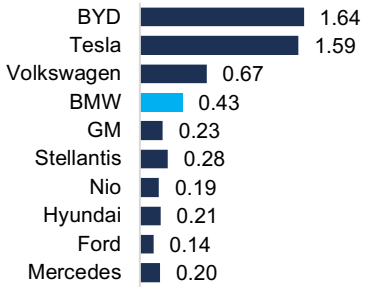
Source: Statista, EC, Author Analysis

Figure 17 – Global Automobile Market Share 2024



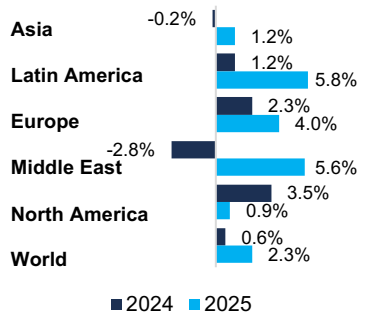
Source: Statista 2024, Adapted by Author

Figure 18 – BEV Sales in Mn Units 2024



Source: BofA 2025, Author Analysis

Figure 19 – New-Car Sales will Pick Up in 2025, % Change YoY



Source: The Economist 2024, Adapted by Author

4. Industry Overview & Competitive Position

World Economic Outlook

Global economic growth is expected to remain steady but subdued, at 3.3% in both 2025 and 2026, below the historical average. **Advanced economies**, such as the **U.S.**, will experience moderate growth, with a **2.7% increase in 2025** driven by strong domestic demand. Meanwhile, the **Euro Area** is likely to see a **slower recovery** due to **weak manufacturing** and **ongoing geopolitical risks**, growing at just 0.9% in 2025 and improving slightly to 1.2% in 2026. In emerging markets, **China's growth is projected at 4.6%** in 2025, supported by fiscal stimulus despite ongoing challenges, with growth stabilizing at 4.5% in 2026 (Figure 16).

Automotive Market Overview

The automotive industry comprises Original Equipment Manufacturers (OEMs), a multi-tiered supply chain, dealership networks, and a strong aftermarket for parts and services. OEMs depend on suppliers across multiple tiers to provide essential components and raw materials for vehicle production. Vehicles reach consumers through traditional dealership networks or direct sales models, while aftersales services play an important role in customer satisfaction and brand loyalty.

The **automotive sector plays a pivotal role in the Eurozone economy**, **contributing approximately 10% to the real value added** in manufacturing and **nearly 2% to GDP**. The sector also accounts for about **1% of total employment** and **represents 4% of exports outside the Euro area**, maintaining its importance as both an economic driver and a global trade contributor.

Globally, the automotive market exhibits regional disparities. Emerging markets, particularly in Asia, are seeing substantial growth due to urbanization, rising incomes, and increased demand for personal mobility. Conversely, mature markets such as Europe and North America are facing market saturation and stricter regulatory requirements, prompting a shift toward sustainable mobility solutions.

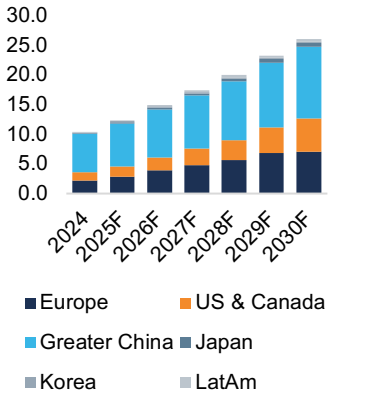
The **auto industry remains highly fragmented**, with the **top ten brands accounting for just over half of total market share**. Toyota leads with 10.7%, followed by Volkswagen (5.8%) and the fast-growing Chinese EV maker BYD (4.5%), showcasing the ongoing shift toward electrification and regional diversification. Traditional mass-market players like Honda, Ford, and Hyundai each hold around 4–4.5%, while premium brands such as Mercedes (2.6%) and BMW compete in a narrower, high-margin segment (Figure 17), where brand strength, pricing power, and innovation play a more critical role in sustaining market position.

The **industry is being reshaped** by **four major** emerging **trends** that will define its future. Firstly, **market dynamics are shifting**, with increasing polarization between Western and Eastern markets replacing previous globalization trends. Secondly, **automation and AI** are transforming vehicle manufacturing, R&D, sales, and aftersales, while autonomous driving technology continues to advance. Thirdly, **vehicles are becoming highly connected**, essentially functioning as computers on wheels. Lastly, **electrification is accelerating**, with EVs expected to capture 64–71% of the market by 2040, depending on regional adoption. These trends will have a big impact on manufacturers, supply chains, and consumers worldwide.

Global Automotive Industry Outlook

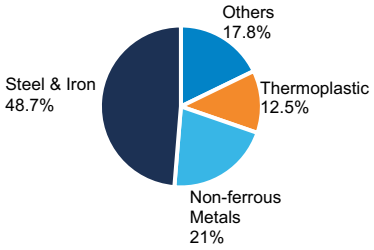
After years of disruption from the COVID-19 pandemic and geopolitical conflicts, the global **automotive market is set for a strong rebound in 2025**. **New-vehicle sales** across the top 60 markets will **reach a record 97.2 million units**, surpassing 2017 levels. While growth in 2024 was marginal, the industry is **expected to expand** by **2.3% in 2025**, driven largely by the accelerating EV market, which is expected to surpass ICE vehicles by 2036. Commercial vehicle sales will also see a solid 4% rise, albeit at a slower pace than in 2024. However, automakers will face challenges

Figure 20 – Global BEV Forecast in Mn Units



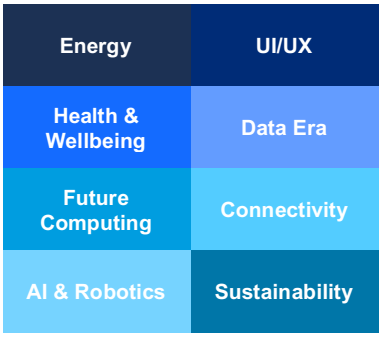
Source: BofA 2025, Author Analysis

Figure 21 – Average Distribution of Materials in BMW Vehicles



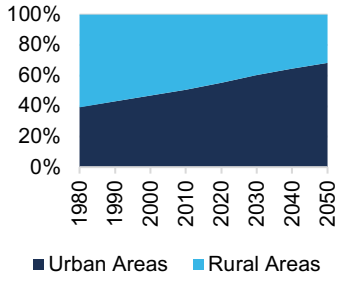
Note: Others: Textiles. Elastomers, Duromers
Source: BMW Data, Author Analysis

Figure 22 – BMW Technology Trend Radar



Note: UI: User Interface, UX: User Experience
Source: BMW Data, Author Analysis

Figure 23 – Do more people live in urban or rural areas? World, 1920 to 2050



Source: Our World in Data, Author Analysis

from rising trade tensions, intense competition from China, and ongoing disputes over decarbonization targets.

Supply Drivers

Technology | Technology plays a crucial role in driving supply in the automotive industry by **enhancing efficiency and innovation**. Advances in AI, IoT, and automation improve inventory management and production. The shift to electric vehicles is accelerating (Figure 20), with **EVs projected to make up 58% of global car sales by 2040**. Also, **connected car technology is growing**, with **95% of new vehicles** expected to **have embedded connectivity by 2030**.

Raw Materials | The industry is expected to see **mixed trends**, with **lithium prices declining due to oversupply**, while **steel prices are set to rise**, driven by tariffs and trade tensions, including policies from the Trump administration. These fluctuations will **impact production costs and OEMs supply potential**. **Steel** plays a critical role, **accounting for approximately 49% of the raw materials** used in BMW vehicles (Figure 21), making price volatility especially consequential for the company's cost structure and sourcing strategy.

Supply chain | The **automotive supply chain is highly vulnerable to disruptions** from labor shortages, transportation delays, global crises, and the financial stability of suppliers. The **2021 semiconductor shortage** was an example for **how unforeseen events can severely impact vehicle production**. Such challenges increase lead times and manufacturing costs, pushing automakers to diversify suppliers, invest in localized production, and reshape inventory strategies. While the global supply chain is expected to improve, **geopolitical tensions and trade wars create ongoing uncertainty**.

Regulatory | Government regulations are a key supply-side driver in the automotive industry, **shaping production through safety**, **emissions**, and **trade policies**. While regulations often promote innovation and sustainability, they also introduce complexity and operational challenges for OEMs across global markets.

Demand Drivers

Consumer Preferences | Modern **consumers** are increasingly **prioritizing connectivity, safety, and environmental sustainability** in their vehicle choices. There's a growing demand for electric and hybrid vehicles, reflecting heightened environmental awareness. Additionally, **integrated smart technologies and advanced driver-assistance systems have become key factors** influencing purchasing decisions.

Technology | The automotive industry is being reshaped by advancements in digitalization, software-as-a-service (SaaS), and autonomous driving. Consumers are showing a strong preference for vehicles equipped with AI-powered infotainment systems, over-the-air software updates, and semi-autonomous driving capabilities. As automation technology progresses, demand for self-driving features is increasing.

Financing | Interest rates play a crucial role in automotive affordability and consumer purchasing behavior. **Higher interest rates can dampen demand** by increasing borrowing costs, while lower rates encourage vehicle financing.

Demographics | Urbanization is reshaping transportation needs as the **urban population** share is expected to **reach 68% by 2050**, driving demand for compact, fuel-efficient, and technologically advanced vehicles suited for city living (Figure 23).

PESTEL

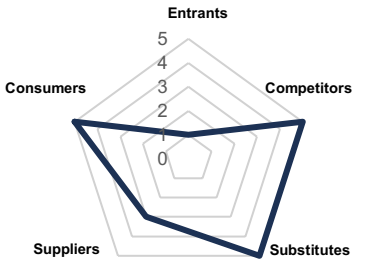
Political | Government regulations increasingly support the transition to electric vehicles and sustainability goals. Trade policies, tariffs, and political stability directly impact production locations, supply chains, and global sourcing strategies.

Table 7 – PESTEL Analysis

Impact	Low	Medium	High
P Political	Regulation		
	Tariffs		
E Economical	GDP Growth		
	Inflation		
S Social	Shifting Consumer Preference		
	Social Values		
T Technology	Artificial Intelligence		
	Innovation		
E Environment	Resource Scarcity		
	Stakeholder Pressure		
L Legal	Regulator		
	Labor Laws		

Source: Author Analysis

Figure 24 – Porter's 5 Forces



Source: Author Analysis

Table 8 – SWOT Analysis

Strength	Weaknesses
• Brand loyalty • Technological innovation • Economies of scale • R&D investment • Market diversity	• High costs • Supplier dependency • Regulatory compliance • Supply chain risk
Opportunities	**Threats**
• EV growth • Autonomous tech • Shared mobility • Emerging markets • Sustainability trends	• Intense competition • Economic downturns • Regulatory pressure • Resource scarcity • Substitute services

Source: Author Analysis

Economical | Car sales and profitability are influenced by macroeconomic trends such as GDP growth, inflation, fuel prices, interest rates, and currency fluctuations. Consumer income and employment levels also shape demand and financing conditions.

Social | Shifting consumer preferences toward environmentally friendly transport, urban living, and digital lifestyles are increasing interest in EVs, ride-sharing, and autonomous vehicles. Social values and expectations are reshaping mobility habits.

Technology | Advances in EV batteries, autonomous driving, artificial intelligence, and vehicle connectivity are transforming how cars are developed, manufactured, and experienced. Innovation is becoming a key differentiator among automakers.

Environmental | Growing pressure to address climate change and reduce emissions is accelerating the industry's move toward greener materials, sustainable sourcing, and circular economy practices. Resource scarcity, especially lithium and rare earths, adds supply chain risk.

Legal | Emissions regulations, safety standards, and intellectual property protection play a critical role in product development. Labor laws, environmental compliance, and international standards increase complexity in global operations.

Porter's 5 Forces

Threat of New Entrants (Low) | The automotive industry has **high barriers to entry**, including **high capital investment**, **economies of scale**, and **complex regulations**. However, the rise of EVs and the shift towards more innovative, sustainable models have allowed new entrants like Tesla and other EV startups to disrupt the market. Still, established brands have a competitive advantage due to their large-scale operations, supply chains, and brand recognition.

Bargaining Power of Suppliers (Moderate) | The bargaining power of suppliers is moderate in the automotive industry. While automakers depend on a wide range of suppliers for components like chips, batteries, and raw materials (e.g., lithium for EVs), the **concentration of key suppliers in some areas** (such as semiconductor manufacturers) **can give them strong bargaining power**. However, the **growing trend of vertical integration** (e.g., Tesla manufacturing its own batteries) is reducing reliance on suppliers for certain components.

Bargaining Power of Buyers (High) | The bargaining power of buyers is high due to the **vast number of alternatives available**, especially with the rise of EV options and a wide range of brands offering various models at different price points. **Consumer choices are influenced by price sensitivity, quality, brand loyalty, and fuel efficiency**. Online platforms also enable consumers to compare prices and features more easily, giving them greater power.

Threat of Substitute Products or Services (High) | The threat of substitutes is high in the automotive industry. The increasing popularity of **shared mobility** services (e.g., Uber, Bolt), **public transportation**, and **alternative modes of transport present realistic competition.** Additionally, the shift to electric vehicles could disrupt traditional combustion engine models, further increasing the availability of substitutes.

Industry Rivalry (High) | Industry rivalry is intense in the automotive sector, driven by the presence of established players like Toyota, Volkswagen, and Ford, as well as newer entrants like Tesla and Chinese EV manufacturers. **Companies compete on price, quality, technological advancements, and customer loyalty**. The market is also highly affected by factors like consumer preferences, fuel efficiency, and regulatory compliance, which contribute to competitive pressures.

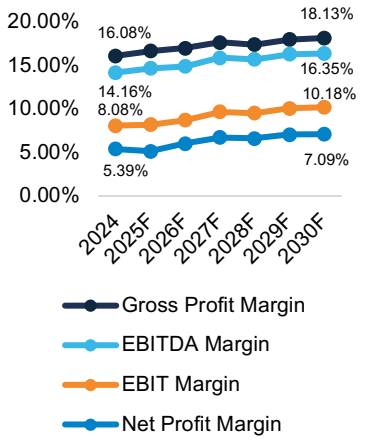
SWOT Analysis

Table 9 – DCF SoP Valuation

	Model	g	€/Mn
Industrials EV	FCFF	1%	88,393
-Net Debt			51,051
-Non-controlling interest			3,011
=Equity Value Industrials			34,330
Equity Value FS	FCFE	0%	22,061
=Equity Value Group			**56,391**
% Common Stock			90.9%
=Equity Common Stock			51,010
Shares Outstanding (Mn)			559,83
Share Price (€/Share)			**91.56**

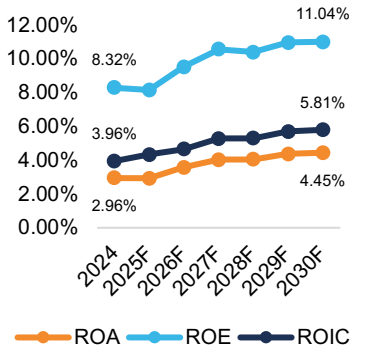
Source: Author Analysis

Figure 25 – Margin Evolution in %



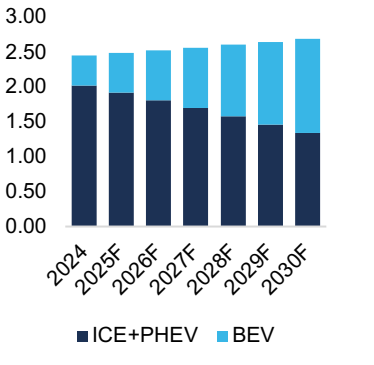
Source: Author Analysis

Figure 26 – Ratios Evolution in %



Source: Author Analysis

Figure 27 – Vehicle Volume in Mn Units



Source: Author Analysis

The **automotive industry offers growth opportunities** in electric vehicles, autonomous tech, and emerging markets, **but faces challenges** like high costs, supply chain issues, and regulatory pressures. For BMW, the company can use its strong brand and innovation in EVs and autonomous driving to materialize on these trends. However, it must manage supply chain risks, high production costs, and evolving environmental regulations to maintain its competitive edge (Table 8).

5. Valuation

Free Cash Flow to the Firm - A Sum-of-the-Parts Approach (SoP)

BMW Group has a **BUY recommendation** with a 2025YE **price target** (PT) of **€91.56/Sh.**, indicating a **26.2% annualized upside** from May 28th **closing price** of **€79.74/Sh**. This PT was derived using a **Discounted Cash Flow** (DCF) model based on a **SoP** approach, which **separates** the **valuation** of **each business segment**. The **Industrials segment** (Automotive and Motorcycles) was valued using a **FCFF** approach. In contrast, the **FS segment** was valued using a **FCFE approach**, which is more appropriate for financial institutions. This is due to their fundamentally different capital structure, where debt serves more as an operational input than as discretionary financing. To reflect the varying risk profiles of each segment, **different Weighted Average Cost of Capital** (WACC) rates were applied (see Appendix 21.1). Various valuation methodologies were applied to ensure robust and accurate estimates, including the FCFF-Integrated Model, the Dividend Discount Model (DDM) and a multiples-based valuation.

Revenue Breakdown

BMW's revenue forecast is divided into four main segments (see Appendix 19): **i) Automotive; ii) Motorcycles; iii) Financial Services; and, iv) Other Entities & Eliminations.**

Automotive | Segment revenue was **projected using BMW's geographic distribution**, incorporating country- and region-specific GDP growth to estimate volume. **For each brand**, BMW, MINI, and Rolls-Royce, a **per-vehicle volume forecast** was applied, using retail prices adjusted by wholesale discounts. A split between ICE+PHEV and BEV was made to reflect drivetrain differences, as BEVs carry a higher ASP. Given BMW's target of achieving profit parity across PHEVs, EVs, and ICEs by 2025YE, profitability was assumed to be equal across models.

Motorcycles | The **motorcycles segment was forecasted based on expected market growth**, with revenue derived from volume and an ASP that was derived from 2024 values.

Financial Services | The **financial services** segment, was **projected** using **expected contract volumes** and an ASP based on a moving average.

Other Entities & Eliminations | Revenues from other entities and eliminations were **assumed as a stable negative percentage of the three core segments**.

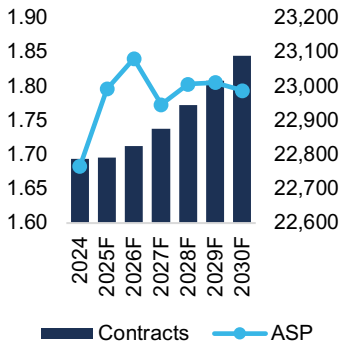
CapEx and D&A

CapEx was aligned with BMW's internal investment policy of 5–6% of sales, reaching 6% in 2025 before slightly declining to 5.5% in 2026 and beyond, reflecting the necessary investments in EV-transition and technological advancements. **Depreciation historically ranged between at 5-6%** of sales, so a moving average was used for the forecast.

Weighted Average Cost of Capital (WACC)

The Industrial segment has a different risk profile compared to Financial Services. As a result, **different WACCs were calculated**. To estimate the cost of equity (Ke),

Figure 28 – Financial Services Contracts in Mn Units and ASP in €



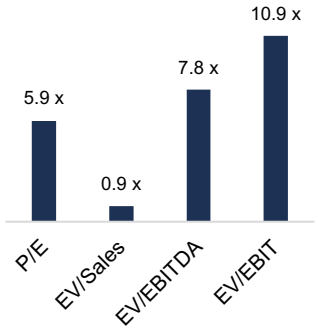
Source: Author Analysis

Table 10 – WACC

	2026F	TV
Debt Ratio	51%	50%
Kd	2.69%	2.69%
Ke		
Industrials	14.99%	14.18%
FS	10.87%	10.33%
WACC		
Industrials	8.71%	8.44%
FS	6.69%	6.51%

Note: Kd = after-tax cost of debt
Source: Author Analysis

Figure 29 – Peer Multiples LTM 2024YE



Source: Capital IQ, Author Analysis

Table 11 – Analyst Coverage €TP/Sh.

Company	12m. TP	Date
JP Morgan Chase & Co.	89.00	05/2025
Bernstein	92.00	05/2025
Berenberg	91.00	05/2025
Jefferies	88.00	05/2025
Deutsche Bank	85.00	05/2025
Warburg	95.00	05/2025
Morgan Stanley	85.00	04/2025
Goldman Sachs	87.00	02/2025

Source: FinanzenNet, Author Analysis

the traditional CAPM method was used, with unlevered and levered betas taken from Damodaran's beta database (see Appendix 21.1). BMW's cost of debt (Kd) was determined using the BMW 2035 bond, which has a YTM of 3.8%. The German corporate **income tax rate of 29.9%** was applied to calculate the after-tax Kd, resulting in an estimated **after-tax Kd of approximately 2.7%.** Throughout the forecast period, BMW's WACC is assumed to evolve in line with changes in its capital structure, ultimately reaching **a debt-to-equity (D/E) ratio of 100% in the terminal year** (Table 10).

Terminal Value (TV)

The **terminal value** for the **Industrials segment** was calculated using a conservative **1% growth rate**. This cautious approach accounts for macroeconomic uncertainties, market volatility, and structural risks within the automotive industry. Additionally, as a standalone entity **without Financial Services**, BMW would **lose key synergy effects**, such as integrated financing, customer loyalty mechanisms, and margin support. For the **FS** segment, a **0% terminal growth rate** was applied. This reflects the view that FS, **when separated from the Industrials business**, **would not demonstrate standalone growth**, as its performance is heavily dependent on its integration with vehicle sales and the broader BMW ecosystem. The **terminal WACC** was **adjusted downward** by reducing the MRP from 7.5% to 7%, resulting in a **terminal WACC of 7.79%.** This reflects expectations of gradual long-term improvements in market conditions, such as lower risk premiums and reduced capital cost pressures over time.

FCFF – Integrated Approach

In the integrated approach, BMW's **TP is €92.10/Sh.**, reflecting a **27.4% annualized upside** compared to the closing share price (SP) of €79.74/Sh. on May 28th. A growth rate of 2% was assumed for the terminal value, reflecting the synergies between the Industrials and FS segments.

Dividend Discount Model (DDM)

The DDM calculations were based on BMW's projected dividend payments, with an average payout ratio of 55%, in line with BMW's 50-60% payout policy. A **TP of €92.68/Sh**. (28.8% annualized upside) was calculated (see Appendix 21.5).

Multiples Based Valuation

For the multiples valuation, peers with a similar segment structure were considered (Figure 28). The **EV/EBIT** multiple resulted in a **TP of €76.38/Sh.**, reflecting a **-7.0% annualized downside** (see Appendix 21.6), while the P/E and EV/EBITDA multiples produced TPs of €70.18/Sh. and €132.24/Sh. respectively.

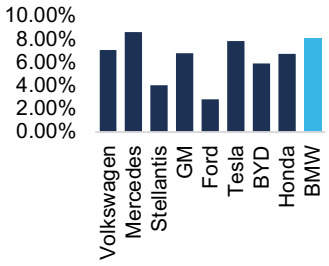
Author vs. Consensus

Analyst projections indicate an **average PT of €89.00/Sh.** (annualized upside of 20.3%), supporting the author's Buy recommendation and aligning with the valuations derived from the DDM, DCF FCFF, and Sum-of-the-Parts models (Table 11).

Sensitivity Analysis

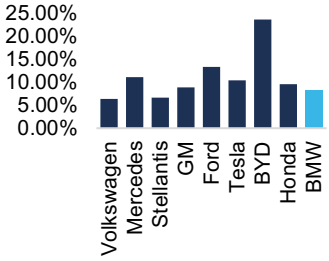
A sensitivity analysis was conducted to stress-test the impact of key inputs on the valuation. The results showed that a -0.25% change in BMW's terminal growth rate, and an increase in WACC to 8.04% (+0.25%) would lead to a change in the recommendation. This scenario is plausible and could materialize if market conditions continue to deteriorate due to trade or geopolitical disruptions (see Appendix 23).

Figure 30 – Peers EBIT Margin



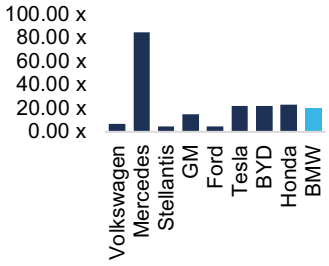
Source: Capital IQ, Author Analysis

Figure 31 – Peers ROE



Source: Capital IQ, Author Analysis

Figure 32 – Peers Interest Coverage



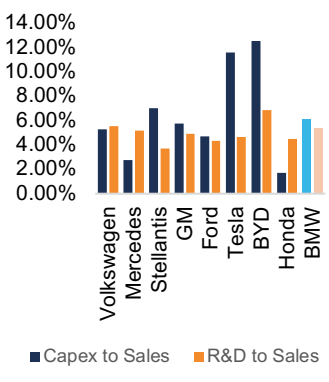
Source: Capital IQ, Author Analysis

Figure 33 – BMW Credit Rating

S&P	MOODY'S
Long-term rating	Long-term rating
A	A2
Outlook stable	Outlook stable
Short-term Rating	Short-term Rating
A-1	P-1

Source: BMW Data, Author Analysis

Figure 34 – R&D & CapEX to Sales



Source: Capital IQ, Author Analysis

6. Financial Analysis

Profitability | Building Resilience

BMW has demonstrated solid profitability over the past several years, with margins recovering steadily following the disruptions caused by COVID-19 and returning to pre-pandemic levels. In 2024, the company reported an **EBITDA margin of 14.16%** and an **EBIT margin of 8.08%**, both of which are expected to improve gradually to approximately 16.4% and 10.2%, respectively, by 2030. Compared to its peers, which reported an average **EBITDA margin of 10.7%** and **EBIT margin of 6.2%** in 2024, BMW maintains a clear margin advantage (Figure 30 and Appendix 17). This superior margin profile showcases the company's **resilience and operational strength** within the automotive sector.

Profitability has generally followed an upward trend from 2018 to 2023, with ROA increasing at a **7.0% CAGR** over that period. However, this trajectory was interrupted in FY2024, where ROA declined to **3.0%**, reflecting a **-2.3% CAGR** from 2018. The decline was primarily driven by a combination of **weaker volumes and higher PPE**, which weighed on net income and asset efficiency. Looking ahead, ROA is expected to recover, growing at a **7.2% CAGR** from 2024 to 2030, supported by improving earnings and better asset utilization. In contrast, BMW's **ROE** performance lags behind that of its peers (Figure 31). In FY2024, BMW reported an ROE of **8.3%,** compared to the peer group average of **11.3%**. Nonetheless, projections indicate a positive trend, with ROE expected to reach **11.3% by 2030**, implying a **5.2% CAGR** from 2024, as profitability improves and capital efficiency strengthens. Overall, **most ratios reflect a COVID-impacted dip followed by a gradual recovery and stabilization**, with strong EPS growth, improving margins, and solid returns pointing toward BMW regaining operational and financial momentum through 2030.

Liquidity | Remains Solid

BMW has maintained strong liquidity over the years, consistently holding approximately **€15 billion in cash and cash equivalents** between 2018 and 2024. This robust liquidity position has supported the company's ability to fund investments across its automotive and financial services segments, manage working capital needs, and continue dividend distributions to shareholders. The **current ratio** stands at **1.1x**, which is broadly in line with peers and only slightly below the industry average of **1.2x**, indicating a healthy short-term financial position.

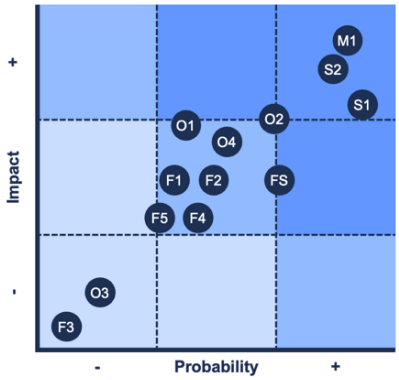
Financial Risk & Solvency | Stable

In terms of solvency, BMW's **interest coverage ratio** was **20.0x** in FY2024, marginally behind the peer average of **22.8x**. However, when excluding the outlier effect of Mercedes-Benz, the adjusted peer average drops to **15.0x**, placing BMW ahead of the majority of its competitors. Looking forward, the company's interest coverage is projected to strengthen, growing at a **13% CAGR** from 2024 to 2030, reflecting anticipated improvements in operating earnings and financial stability. BMW has received an **A rating** from S&P and an **A2 rating** from Moody's (Figure 33), reflecting the company's solid capital structure and financial stability. These investment-grade ratings indicate **low credit risk**, enabling BMW to **access funding at lower costs** and **maintain strong financial flexibility** to support investment, growth, and shareholder confidence. BMW's **net debt leverage** currently stands at **4.6x**, above the peer average of **3.6x**, but is expected to decline to **2.8x** by 2030, reflecting the company's **improving financial strength**.

CapEx & R&D | Innovation at the Right Pace

BMW's **CapEx-to-sales ratio** of **6.1%** and **R&D-to-sales ratio** of **5.4%** are broadly in line with the peer averages of **6.4%** and **5.0%** (Figure 34), respectively, indicating that the company maintains a **balanced approach** to **investment** and **innovation** in line with industry standards.

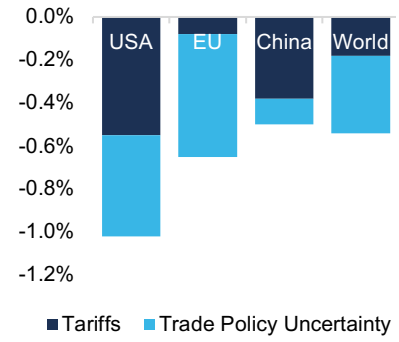
Figure 35 – Risk Matrix



Legend:
Impact – Economic-financial translation of potential risk impact on yield, growth, market share, operational efficiency, organizational efficiency
Probability – Degree of likelihood of risk materialization

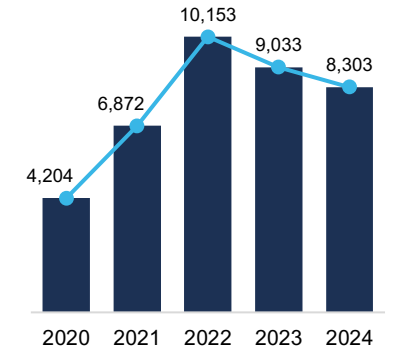
Source: Authors Analysis

Figure 36 – % Change in GDP through 2026



Source: J.P. Morgan, Adapted by Author

Figure 37 – Raw Material Price Exposures in €Bn



Source: BMW Data, Author Analysis

7. Investment Risks

BMW is subject to significant risks that may materially impact its business. These risks can be categorized as follows: **i) Macroeconomic Risks; ii) Strategic and Sector-Specific Risks; iii) Operational Risks; iv) Financial Risks; v) Legal Risks; and, vi) FS-Specific Risks**. These are the most significant risks identified and summarized; for a complete risk assessment, please refer to Appendix 24.

Macroeconomic Risks (M1)

Economic conditions heavily **impact BMW Group's performance**, with unforeseen **global disruptions having unpredictable effects**. The **ongoing war in Ukraine** poses risks of escalation, sanctions, and retaliatory measures, while tensions in the Middle East could drive oil price surges, inflation, and increased costs**. US-China trade relations** and **EU tariffs on Chinese electric vehicles** may also affect trade. The U.S. tariff war under the Trump administration, has also heavily impacted BMW, with related **costs forecasted to reach €1.09Bn**. Despite declining inflation, high interest rates continue to dampen growth, particularly in Germany, and China's economic struggles could affect global demand. **To mitigate these risks**, BMW regularly **assesses economic developments**, **monitors sales markets**, and **adjusts sales volumes to align production**, sales, and inventories efficiently.

Strategic and Sector-Specific Risks (S)

Regulatory Changes (S1) | Stricter **emissions and trade regulations** in the EU and China **pose high risks**, requiring material investments and supply chain adjustments. BMW mitigates this by engaging with policymakers and adapting its production strategy.

Market Developments (S2) | Changing **customer preferences and rising competition**, especially in China, increase market risks. BMW continuously **monitors sales trends** and **adjusts production** to align with demand.

Operational Risks (O)

Purchasing (O2) | Supply shortages due to raw material constraints, geopolitical tensions, inflation, and supplier insolvencies pose difficult challenges. BMW proactively manages these risks by **carefully selecting suppliers**, **monitoring their financial stability**, **supporting at-risk suppliers**, and **enforcing cybersecurity** standards across its supply chain to ensure continuity.

Information Security, Data Protection, and IT (O4) | Rising **cyber threats** and **evolving regulatory requirements** present high risks to BMW's IT infrastructure and data security. **To mitigate** these, BMW has **implemented strict security policies**, conducts **regular penetration testing**, enhances **employee cybersecurity awareness**, and ensures **compliance** with **global data protection regulations** to safeguard critical business operations.

Financial Risks (F)

Raw Materials (F2) | Price volatility for key raw materials such as metals, battery components, and energy poses a medium-level risk. BMW mitigates these risks through **financial hedging strategies** and **long-term supply contracts** to stabilize costs.

Liquidity (F3) | BMW **ensures liquidity through a diversified refinancing strategy**, **rigorous liquidity management**, and the "matched funding principle" in its Financial Services segment. The risk of restricted access to funds is considered low.

Appendix D: BMW Equity Research Supplementary Materials

Appendix 11: Income Statement

Income Statement - BMW AG (€/Mn)								
Line Item	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**CAGR 2024-30**
Revenues	**142,380**	**150,389**	**155,162**	**159,902**	**165,260**	**170,657**	**176,096**	**3.6%**
Automotive	124,917	128,537	133,232	138,064	143,040	148,129	153,289	3.5%
BMW	-	117,670	121,929	126,300	130,792	135,371	140,000	-
MINI	-	8,791	9,153	9,530	9,925	10,336	10,761	-
Rolls Royce	-	2,076	2,151	2,233	2,323	2,422	2,528	-
Motorcycle	3,220	3,375	3,561	3,758	3,965	4,184	4,416	5.4%
Financial Services	38,562	38,985	39,527	39,886	40,790	41,615	42,404	1.6%
Eliminations	-24,319	-20,508	-21,158	-21,805	-22,535	-23,271	-24,013	-0.2%
COGS	-119,485	-125,380	-128,854	-131,702	-136,577	-140,014	-144,175	3.2%
Manufacturing costs	-75,680	-82,225	-81,982	-82,532	-84,330	-85,109	-87,642	2.5%
Cost of sales relating to FS business	-30,277	-29,366	-27,729	-27,100	-26,832	-26,187	-26,967	-1.9%
thereof: interest expense relating to FS business	-4,902	-2,349	-2,411	-2,464	-2,555	-2,619	-2,697	-9.5%
R&D	-7,642	-7,916	-8,292	-8,519	-8,805	-9,077	-9,341	3.4%
Warranty expenditure	-1,964	-2,349	-2,411	-3,695	-3,833	-5,237	-5,393	18.3%
Vehicle services	-1,037	-1,762	-1,808	-2,464	-2,555	-2,619	-2,697	17.3%
Other cost of sales	-2,885	-1,762	-6,631	-7,391	-10,222	-11,784	-12,135	27.1%
Gross Profit	22,895	25,009	26,308	28,201	28,683	30,643	31,921	5.7%
Selling and administrative expenses	-11,296	-12,562	-12,633	-12,826	-13,052	-13,380	-13,906	3.5%
Other operating income	1,411	1,476	1,564	1,616	1,690	1,621	1,669	2.8%
Other operating expenses	-1,501	-1,611	-1,751	-1,555	-1,628	-1,690	-1,759	2.7%
Profit / loss before financial result (EBIT)	11,509	12,312	13,487	15,436	15,693	17,194	17,925	7.7%
Financial result	-538	-1,272	-181	-133	-75	-53	-127	-21.4%
Profit / loss before tax (EBT)	10,971	11,040	13,306	15,303	15,618	17,141	17,799	8.4%
Income taxes	-3,293	-3,301	-3,978	-4,576	-4,670	-5,125	-5,322	8.3%
Net profit / loss	**7,678**	**7,739**	**9,327**	**10,727**	**10,949**	**12,016**	**12,477**	**8.4%**
Attributable to non-controlling interest	388	323	357	392	437	488	466	3.1%
Attributable to shareholders of the BMW AG	**7,290**	**7,415**	**8,971**	**10,335**	**10,512**	**11,528**	**12,011**	**8.7%**

Appendix 12: Balance Sheet

Balance Sheet - BMW AG (€/Mn)								
Line Item	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**CAGR 2024-30**
Assets								
Non-current assets								
Intangible assets	20,220	21,458	22,573	23,742	24,946	26,198	27,510	5.3%
Property, plant and equipment	39,581	41,243	42,707	44,196	45,741	47,339	48,984	3.6%
Leased products	48,838	43,236	43,048	44,118	44,293	44,196	44,442	-1.6%
Investments accounted for using the equity method	553	553	553	553	553	553	553	0.0%
Other investments	1,099	1,099	1,099	1,099	1,099	1,099	1,099	0.0%
Receivables from sales financing	55,149	50,701	51,072	51,078	51,514	51,486	51,645	-1.1%
Financial assets	834	834	834	834	834	834	834	0.0%
Deferred tax	3,244	2,268	2,365	2,390	2,380	2,405	2,498	-4.3%
Other assets	1,827	1,827	1,827	1,827	1,827	1,827	1,827	0.0%
Non-current assets	**171,345**	**163,220**	**166,078**	**169,836**	**173,187**	**175,937**	**179,392**	**0.8%**
Current assets								
Inventories	24,387	22,670	23,567	24,058	25,110	25,849	26,465	1.4%
Trade receivables	2,834	3,708	3,826	3,943	4,075	4,208	4,342	7.4%
Receivables from sales financing	38,569	37,541	37,379	36,803	36,882	37,050	37,295	-0.6%
Financial assets	2,565	2,565	2,565	2,565	2,565	2,565	2,565	0.0%
Current tax	1,316	1,316	1,316	1,316	1,316	1,316	1,316	0.0%
Other assets	7,429	7,429	7,429	7,429	7,429	7,429	7,429	0.0%
Cash and cash equivalents	19,287	20,038	21,187	20,762	21,192	23,114	24,337	4.0%
Assets held for sale	0	0	0	0	0	0	0	
Currents assets	**96,387**	**95,267**	**97,268**	**96,876**	**98,569**	**101,532**	**103,749**	**1.2%**
Total Assets	**267,732**	**258,487**	**263,347**	**266,712**	**271,756**	**277,469**	**283,142**	**0.9%**
Equity								
Equity attributable to shareholders of BMW AG	92,315	94,652	97,689	101,339	105,070	109,257	113,062	3.4%
Non-controlling interests / minority interest	2,688	3,011	3,368	3,761	4,197	4,685	5,151	11.4%
Total equity	**95,003**	**97,663**	**101,057**	**105,100**	**109,267**	**113,942**	**118,213**	**3.7%**
Liabilities								
Non-current provisions and liabilities								
Pension provisions	222	222	222	222	222	222	222	0.0%
Other provisions	7,830	7,047	7,229	7,435	7,570	7,622	7,504	-0.7%
Deferred tax	2,621	1,798	1,797	1,964	2,171	2,273	2,203	-2.9%
Financial liabilities	66,770	62,610	62,301	61,109	60,212	59,907	60,827	-1.5%
Other liabilities	7,597	6,004	6,105	6,249	6,414	6,519	6,565	-2.4%
Non-current provisions and liabilities	**85,040**	**77,682**	**77,654**	**76,978**	**76,588**	**76,543**	**77,321**	**-1.6%**
Current provisions and liabilities								
Other provisions	8,543	7,549	7,759	7,807	7,852	8,009	8,108	-0.9%
Current tax	1,131	1,131	1,131	1,131	1,131	1,131	1,131	0.0%
Financial liabilities	44,491	41,768	42,188	41,630	42,008	42,134	42,336	-0.8%
Trade payables	14,126	14,833	15,304	15,771	16,300	16,832	17,465	3.6%
Other liabilities	19,398	17,862	18,254	18,295	18,610	18,877	18,568	-0.7%
Liabilities in conjunction with assets held for sale	0	0	0	0	0	0	0	
Current Provisions and liabilities	**87,689**	**83,142**	**84,635**	**84,634**	**85,900**	**86,983**	**87,608**	**0.0%**
Total equity and liabilities	**267,732**	**258,487**	**263,347**	**266,712**	**271,756**	**277,469**	**283,142**	**0.9%**

Appendix 13: Cash Flow Statement

Cash Flow - BMW AG (€/Mn)								
Line Item	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**CAGR 2024-30**
Operating Activities								
Profit before tax	10,971	11,040	13,306	15,303	15,618	17,141	17,799	8.4%
Income taxes paid	-3,794	-3,301	-3,978	-4,576	-4,670	-5,125	-5,322	5.8%
Depreciation and amortisation	8,650	9,729	9,584	9,917	10,251	10,579	10,865	3.9%
Result from equity accounted investments	14	0	0	0	0	0	0	-100.0%
Change in receivables from financing	-4,144	5,476	-208	569	-515	-140	-404	-32.2%
Deferred tax	0	153	-98	142	218	77	-163	-
Change in provisions	-726	-1,777	392	254	180	210	-19	-45.7%
Change in leased products	-5,231	5,602	188	-1,069	-176	97	-246	-39.9%
Change in other operating assets and liabilities	1,883	0	0	0	0	0	0	-100.0%
Change in NWC	-396	-1,549	543	141	655	341	117	-
Gain/loss on disposal of tangible and intangible assets and marketable securities	0	0	0	0	0	0	0	-
Other non-cash income and expense items	339	0	0	0	0	0	0	-100.0%
Cash inflow/outflow from operating activities	**7,566**	**28,471**	**18,641**	**20,400**	**20,251**	**22,497**	**22,394**	**19.8%**
Investing Activities								
Capex (PPE, Intangible Assets)	-12,205	-12,630	-12,163	-12,576	-12,999	-13,429	-13,823	2.1%
Proceeds	213	0	0	0	0	0	0	-100.0%
M&A	0	0	0	0	0	0	0	-
Others	623	0	0	0	0	0	0	-100.0%
Cash inflow/outflow from investing activities	**-11,369**	**-12,630**	**-12,163**	**-12,576**	**-12,999**	**-13,429**	**-13,823**	**3.3%**
Investing Activities								
Buybacks	-1,002	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000	0.0%
Dividends	-4,794	-4,078	-4,934	-5,684	-5,781	-6,341	-7,207	7.0%
Payments out of equity	-22	0	0	0	0	0	0	-100.0%
Proceeds from issue and (repayment) of non-current financial liabilities	7,843	-10,012	604	-1,565	-40	194	858	-30.8%
Others	3,741	0	0	0	0	0	0	-100.0%
Cash inflow/outflow from financing activities	**5,766**	**-15,090**	**-5,329**	**-8,249**	**-6,821**	**-7,146**	**-7,348**	**-**
Effect of exchange rate	-3	0	0	0	0	0	0	-100.0%
Change in cash and cash equivalents	**1,960**	**751**	**1,149**	**-425**	**430**	**1,922**	**1,223**	**-7.6%**
01. Jan	**17,327**	**19,287**	**20,038**	**21,187**	**20,762**	**21,192**	**23,114**	**4.9%**
31. Dec	**19,287**	**20,038**	**21,187**	**20,762**	**21,192**	**23,114**	**24,337**	**4.0%**

Appendix 14: Common-Size Statements

Common-Size IS - BMW AG (%)							
Line Item	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**
Revenues	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
COGS	**83.9%**	**83.4%**	**83.0%**	**82.4%**	**82.6%**	**82.0%**	**81.9%**
Manufacturing costs	53.2%	54.7%	52.8%	51.6%	51.0%	49.9%	49.8%
Cost of sales relating to FS business	21.3%	19.5%	17.9%	16.9%	16.2%	15.3%	15.3%
thereof: interest expense relating to FS business	5.4%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%
R&D	1.4%	1.6%	1.6%	2.3%	2.3%	3.1%	3.1%
Warranty expenditure	0.7%	1.2%	1.2%	1.5%	1.5%	1.5%	1.5%
Vehicle services	2.0%	1.2%	4.3%	4.6%	6.2%	6.9%	6.9%
Other cost of sales	**16.1%**	**16.6%**	**17.0%**	**17.6%**	**17.4%**	**18.0%**	**18.1%**
Gross Profit	7.9%	8.4%	8.1%	8.0%	7.9%	7.8%	7.9%
Selling and administrative expenses	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%
Other operating income	1.1%	1.1%	1.1%	1.0%	1.0%	1.0%	1.0%
Other operating expenses	**8.1%**	**8.2%**	**8.7%**	**9.7%**	**9.5%**	**10.1%**	**10.2%**
Profit / loss before financial result (EBIT)	0.4%	0.8%	0.1%	0.1%	0.0%	0.0%	0.1%
Financial result	**7.7%**	**7.3%**	**8.6%**	**9.6%**	**9.5%**	**10.0%**	**10.1%**
Profit / loss before tax (EBT)	2.3%	2.2%	2.6%	2.9%	2.8%	3.0%	3.0%
Income taxes	**5.4%**	**5.1%**	**6.0%**	**6.7%**	**6.6%**	**7.0%**	**7.1%**
Net profit / loss	0.3%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%
Attributable to non-controlling interest	**5.1%**	**4.9%**	**5.8%**	**6.5%**	**6.4%**	**6.8%**	**6.8%**

Common-Size BS - BMW AG (%)							
Line Item	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**
Assets							
Non-current assets							
Intangible assets	7.6%	8.3%	8.6%	8.9%	9.2%	9.4%	9.7%
Property, plant and equipment	14.8%	16.0%	16.2%	16.6%	16.8%	17.1%	17.3%
Leased products	18.2%	16.7%	16.3%	16.5%	16.3%	15.9%	15.7%
Investments accounted for using the equity method	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Other investments	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Receivables from sales financing	20.6%	19.6%	19.4%	19.2%	19.0%	18.6%	18.2%
Financial assets	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Deferred tax	1.2%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Other assets	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%
Non-current assets	**64.0%**	**63.1%**	**63.1%**	**63.7%**	**63.7%**	**63.4%**	**63.4%**
Current assets							
Inventories	9.1%	8.8%	8.9%	9.0%	9.2%	9.3%	9.3%
Trade receivables	1.1%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Receivables from sales financing	14.4%	14.5%	14.2%	13.8%	13.6%	13.4%	13.2%
Financial assets	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%
Current tax	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Other assets	2.8%	2.9%	2.8%	2.8%	2.7%	2.7%	2.6%
Cash and cash equivalents	7.2%	7.8%	8.0%	7.8%	7.8%	8.3%	8.6%
Assets held for sale	0. 0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Currents assets	**36.0%**	**36.9%**	**36.9%**	**36.3%**	**36.3%**	**36.6%**	**36.6%**
Total Assets	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Equity							
Equity attributable to shareholders of BMW AG	34.5%	36.6%	37.1%	38.0%	38.7%	39.4%	39.9%
Non-controlling interests / minority interest	1.0%	1.2%	1.3%	1.4%	1.5%	1.7%	1.8%
Total equity	**35.5%**	**37.8%**	**38.4%**	**39.4%**	**40.2%**	**41.1%**	**41.8%**
Liabilities							
Non-current provisions and liabilities							
Pension provisions	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Other provisions	2.9%	2.7%	2.7%	2.8%	2.8%	2.7%	2.7%
Deferred tax	1.0%	0.7%	0.7%	0.7%	0.8%	0.8%	0.8%
Financial liabilities	24.9%	24.2%	23.7%	22.9%	22.2%	21.6%	21.5%
Other liabilities	2.8%	2.3%	2.3%	2.3%	2.4%	2.3%	2.3%
Non-current provisions and liabilities	**31.8%**	**30.1%**	**29.5%**	**28.9%**	**28.2%**	**27.6%**	**27.3%**
Current provisions and liabilities							
Other provisions	3.2%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
Current tax	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Financial liabilities	16.6%	16.2%	16.0%	15.6%	15.5%	15.2%	15.0%
Trade payables	5.3%	5.7%	5.8%	5.9%	6.0%	6.1%	6.2%
Other liabilities	7.2%	6.9%	6.9%	6.9%	6.8%	6.8%	6.6%
Liabilities in conjunction with assets held for sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Current Provisions and liabilities	**32.8%**	**32.2%**	**32.1%**	**31.7%**	**31.6%**	**31.3%**	**30.9%**
Total equity and liabilities	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Appendix 15: Segment Analysis

Segment Analysis								
Line Item	**Unit**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Revenues								
Automotive	€/Mn	85,846	91,682	80,853	95,476	123,602	132,277	124,917
% of Total Sales	%	*88.6%*	*88.0%*	*81.7%*	*85.8%*	*86.7%*	*85.1%*	*87.7%*
% growth YoY	%	-	*6.8%*	*-11.8%*	*18.1%*	*29.5%*	*7.0%*	*-5.6%*
Motorcycles	€/Mn	2,173	2,368	2,284	2,748	3,176	3,214	3,220
% of Total Sales	%	*2.2%*	*2.3%*	*2.3%*	*2.5%*	*2.2%*	*2.1%*	*2.3%*
% growth	%	-	*9.0%*	*-3.5%*	*20.3%*	*15.6%*	*1.2%*	*0.2%*
Financial Services	€/Mn	27,705	29,598	30,044	32,867	35,122	36,227	38,562
% of Total Sales	%	*28.6%*	*28.4%*	*30.4%*	*29.5%*	*24.6%*	*23.3%*	*27.1%*
% growth	%	-	*6.8%*	*1.5%*	*9.4%*	*6.9%*	*3.1%*	*6.4%*
Other Entities	€/Mn	6	5	3	5	8	11	14
% of Total Sales	%	-	-	-	-	-	-	-
% growth	%	-	-	-	-	-	-	-
Eliminations	€/Mn	-18,875	-19,443	-14,194	-19,857	-19,298	-16,231	-24,333
% of Total Sales	%	-	-	-	-	-	-	-
% growth	%	-	-	-	-	-	-	-
Group	€/Mn	**96,855**	**104,210**	**98,990**	**111,239**	**142,610**	**155,498**	**142,380**
Gross Profit								
Automotive	€/Mn	13,928	13,620	9,397	16,839	19,278	22,357	17,188
Gross Profit Margin	%	*16.2%*	*14.9%*	*11.6%*	*17.6%*	*15.6%*	*16.9%*	*13.8%*
Motorcycles	€/Mn	435	457	343	489	548	558	499
Gross Profit Margin	%	*20.0%*	*19.3%*	*15.0%*	*17.8%*	*17.3%*	*17.4%*	*15.5%*
Financial Services	€/Mn	3,616	3,660	3,086	5,118	4,685	4,679	4,379
Gross Profit Margin	%	*13.1%*	*12.4%*	*10.3%*	*15.6%*	*13.3%*	*12.9%*	*11.4%*
Other Entities	€/Mn	6	5	3	5	8	11	14
Gross Profit Margin	%	-	-	-	-	-	-	-
Eliminations	€/Mn	393	321	753	-465	49	2,084	815
Gross Profit Margin	%	-	-	-	-	-	-	-
Group	€/Mn	**18,378**	**18,063**	**13,582**	**21,986**	**24,568**	**29,689**	**22,895**
Gross Profit Margin	%	*19.0%*	*17.3%*	*13.7%*	*19.8%*	*17.2%*	*19.1%*	*16.1%*
EBIT								
Automotive	€/Mn	6,182	4,499	2,162	9,870	10,635	12,981	7,893
EBIT Margin	%	*7.2%*	*4.9%*	*2.7%*	*10.3%*	*8.6%*	*9.8%*	*6.3%*
Motorcycles	€/Mn	175	194	103	227	257	259	198
EBIT Margin	%	*8.1%*	*8.2%*	*4.5%*	*8.3%*	*8.1%*	*8.1%*	*6.1%*
Financial Services	€/Mn	2,172	2,312	1,721	3,701	3,163	3,055	2,511
EBIT Margin	%	*7.8%*	*7.8%*	*5.7%*	*11.3%*	*9.0%*	*8.4%*	*6.5%*
Other Entities	€/Mn	-27	29	36	-8	-203	-13	-25
EBIT Margin	%	-	-	-	-	-	-	-
Eliminations	€/Mn	431	377	808	-390	147	2,200	932
EBIT Margin	%	-	-	-	-	-	-	-
Group	€/Mn	**8,933**	**7,411**	**4,830**	**13,400**	**13,999**	**18,482**	**11,509**
EBIT Margin	%	*9.2%*	*7.1%*	*4.9%*	*12.0%*	*9.8%*	*11.9%*	*8.1%*
Net Income								
Automotive	€/Mn	5,061	3,127	1,992	9,150	14,366	8,100	4,890
Net Income Margin	%	*5.9%*	*3.4%*	*2.5%*	*9.6%*	*11.6%*	*6.1%*	*3.9%*
Motorcycles	€/Mn	124	131	74	177	212	183	138
Net Income Margin	%	*5.7%*	*5.5%*	*3.2%*	*6.4%*	*6.7%*	*5.7%*	*4.3%*
Financial Services	€/Mn	1,581	1,523	1,202	2,844	2,492	2,084	1,808
Net Income Margin	%	*5.7%*	*5.1%*	*4.0%*	*8.7%*	*7.1%*	*5.8%*	*4.7%*
Other Entities	€/Mn	-81	-67	-171	412	786	-72	595
Net Income Margin	%	-	-	-	-	-	-	-
Eliminations	€/Mn	289	201	678	-201	85	995	-141
Net Income Margin	%	-	-	-	-	-	-	-
Group	€/Mn	**6,974**	**4,915**	**3,775**	**12,382**	**17,941**	**11,290**	**7,290**
Net Income Margin	%	*7.2%*	*4.7%*	*3.8%*	*11.1%*	*12.6%*	*7.3%*	*5.1%*
Total Assets								
Automotive	€/Mn	97,118	113,062	15,779	121,318	147,024	143,628	144,568
Motorcycle	€/Mn	1,276	1,447	681	1,394	1,671	1,817	1,915
Financial Services	€/Mn	146,221	156,500	15,555	153,437	149,413	150,392	164,883
Other Entities	€/Mn	91,596	112,897	98,226	105,593	118,799	118,127	131,623
Eliminations	€/Mn	-127,273	-155,872	86,417	-152,215	-169,981	-163,074	-175,257
Group	€/Mn	**208,938**	**228,034**	**216,658**	**229,527**	**246,926**	**250,890**	**267,732**

Appendix 16: Geographic Analysis

Geographic Analysis								
Geographic Data	**Unit**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Revenue per Region								
Rest of Europe	€/Mn	31,154	32,805	30,258	32,920	36,032	39,848	40,935
% of Total Sales	*%*	*32.2%*	*31.5%*	*30.6%*	*29.6%*	*25.3%*	*25.6%*	*28.8%*
Germany	€/Mn	13,556	13,428	13,638	14,206	15,413	18,829	19,845
% of Total Sales	*%*	*14.0%*	*12.9%*	*13.8%*	*12.8%*	*10.8%*	*12.1%*	*13.9%*
Rest of Asia	€/Mn	10,975	11,344	10,433	10,875	12,805	15,689	14,772
% of Total Sales	*%*	*11.3%*	*10.9%*	*10.5%*	*9.8%*	*9.0%*	*10.1%*	*10.4%*
China	€/Mn	18,959	20,564	21,315	25,333	41,881	40,833	31,786
% of Total Sales	*%*	*19.6%*	*19.7%*	*21.5%*	*22.8%*	*29.4%*	*26.3%*	*22.3%*
Rest of the Americas	€/Mn	3,591	3,904	3,379	3,821	4,941	5,386	4,893
% of Total Sales	*%*	*3.7%*	*3.7%*	*3.4%*	*3.4%*	*3.5%*	*3.5%*	*3.4%*
USA	€/Mn	15,979	19,720	17,837	21,522	28,751	31,845	27,048
% of Total Sales	*%*	*16.5%*	*18.9%*	*18.0%*	*19.3%*	*20.2%*	*20.5%*	*19.0%*
Other Regions	€/Mn	2,641	2,445	2,130	2,562	2,787	3,068	3,101
% of Total Sales	*%*	*2.7%*	*2.3%*	*2.2%*	*2.3%*	*2.0%*	*2.0%*	*2.2%*
Group	**€/Mn**	**96,855**	**104,210**	**98,990**	**111,239**	**142,610**	**155,498**	**142,380**
Geographic Volume Analysis								
BMW Volumes	**Unit**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Deliveries								
BMW	Units	2,125,026	2,184,939	2,028,841	2,213,790	2,100,689	2,252,793	2,200,217
MINI	Units	361,531	347,465	292,582	302,138	292,922	295,358	244,925
Rolls-Royce	Units	4,107	5,100	3,756	5,586	6,021	6,032	5,712
Group	**Units**	**2,490,664**	**2,537,504**	**2,325,179**	**2,521,514**	**2,399,632**	**2,554,183**	**2,450,854**
% chg	*%*	*-*	*1.9%*	*-8.4%*	*8.4%*	*-4.8%*	*6.4%*	*-4.0%*
BEV Deliveries	Units	-	-	-	103,854	215,752	375,716	426,536
BEV Penetration	*%*	*0.0%*	*0.0%*	*0.0%*	*4.1%*	*9.0%*	*14.7%*	*17.4%*
Production								
Group Production	**Units**	**2,541,534**	**2,564,025**	**2,255,637**	**2,461,269**	**2,382,305**	**2,661,922**	**2,513,830**
Over/Under Production	Units	50,870	26,521	-69,542	-60,245	-17,327	107,739	62,976
% Over/Under Production	*%*	*2.0%*	*1.0%*	*-3.0%*	*-2.4%*	*-0.7%*	*4.2%*	*2.6%*
Sales Volume Per Region								
Europe	Units/th.	1,097	1,084	914	949	879	943	949
thereof Germany	Units/th.	311	331	285	267	254	273	266
thereof UK	Units/th.	237	234	163	164	157	159	169
Americas	Units/th.	457	473	380	452	442	482	483
thereof USA	Units/th.	355	376	308	368	364	397	399
Asia	Units/th.	871	930	987	1,068	1,031	1,073	964
thereof China	Units/th.	636	725	778	848	794	826	715
Other Regions	Units/th.	58	52	45	53	49	56	56
Group	Units/th.	**2,483**	**2,538**	**2,325**	**2,522**	**2,400**	**2,554**	**2,451**
Sales Volume Per Region in %								
Europe	%	44%	43%	39.3%	37.6%	36.6%	36.9%	38.7%
thereof Germany	%	13%	13%	12.3%	10.6%	10.6%	10.7%	10.8%
thereof UK	%	10%	9%	7.0%	6.5%	6.6%	6.2%	6.9%
Americas	%	18%	19%	16.3%	17.9%	18.4%	18.9%	19.7%
thereof USA	%	14%	15%	13.2%	14.6%	15.1%	15.6%	16.3%
Asia	%	35%	37%	42.4%	42.4%	43.0%	42.0%	39.3%
thereof China	%	26%	29%	33.5%	33.6%	33.1%	32.4%	29.2%
Other Regions	%	2%	2%	2.0%	2.1%	2.0%	2.2%	2.3%

Appendix 17: Peers Analysis

Competitors Analysis - FY2024										
Ratio	**Unit**	**Volkswagen AG**	**Mercedes-Benz Group AG**	**Stellantis N.V.**	**General Motors Company**	**Ford Motor Company**	**Tesla, Inc.**	**BYD Company Limited**	**NIO Inc.**	**Honda Motor Co., Ltd.**
Balance Sheet										
Cash and cash equivalents	€/Mn	47,199	18,610	35,392	21,286	27,403	35,316	18,955	4,478	31,769
Property, plant and equipment	€/Mn	70,611	40,908	38,900	51,022	41,440	49,745	38,749	5,128	19,821
Total Assets	€/Mn	632,905	265,010	207,607	270,221	275,471	117,907	103,663	14,239	182,458
Net Debt	€/Mn	206,882	93,544	1,859	105,196	127,974	-22,158	-13,601	-3	30,514
Net Debt Leverage	x	6.09 x	5.59 x	0.17 x	6.09 x	12.51 x	-1.84 x	-0.98 x	0.00 x	1.77 x
Total Debt	€/Mn	254,081	112,798	37,251	126,482	155,377	13,158	5,354	4,476	62,283
Total Equity	€/Mn	182,294	92,625	81,692	60,921	43,306	70,427	24,515	790	77,808
Non-controlling interests / minority interest	€/Mn	14,437	1,005	423	2,432	22	741	1,778	998	1,893
Total Equity	€/Mn	196,731	93,630	82,115	63,353	43,328	71,168	26,293	1,787	79,701
Current Ratio	x	1.13 x	1.36 x	1.09 x	1.13 x	1.17 x	2.03 x	0.75 x	0.99 x	1.43 x
Quick Ratio	x	0.78 x	0.96 x	0.74 x	0.90 x	0.98 x	1.43 x	0.47 x	0.70 x	1.08 x
Total Debt/Equity	%	129%	120%	45%	200%	359%	18%	20%	250%	78%
Income Statement										
Revenue	€/Mn	324,656	145,594	156,878	173,306	171,041	90,323	99,871	8,448	130,463
Gross Profit	€/Mn	56,298	27,023	20,887	21,403	14,375	16,134	19,041	834	28,177
Net Income	€/Mn	11,351	10,207	5,473	5,555	5,436	6,556	5,173	-2,912	7,071
EBITDA	€/Mn	33,969	16,734	10,696	17,280	10,232	12,045	13,940	-2,056	17,235
EBIT	€/Mn	22,918	12,586	6,296	11,760	4,808	7,081	5,916	-2,811	8,826
R&D Expenses		-17,963	-7,585	-5,784	-8,506	-7,397	-4,198	-6,836	-1,676	-5,898
R&D to Sales	%	5.53%	5.21%	3.69%	4.91%	4.32%	4.65%	6.84%	19.84%	4.52%
Fixed Asset Turnover	x	4.74 x	3.59 x	4.42 x	3.60 x	4.27 x	2.02 x	2.74 x	1.75 x	6.38 x
Interest Coverage	x	6.65 x	84.47 x	4.80 x	15.03 x	4.58 x	21.88 x	21.99 x	-	23.18 x
Total Asset Turnover	x	0.53 x	0.55 x	0.77 x	0.68 x	0.66 x	0.85 x	1.06 x	0.58 x	0.75 x
Cash Flow										
Cash inflow/outflow from operating activities	€/Mn	17,151	17,735	4,008	18,611	14,260	13,798	17,151	-1,009	4,772
Cash inflow/outflow from investing activities	€/Mn	-31,573	-8,750	-15,982	-18,970	-22,532	-17,370	-16,589	-637	-5,539
Cash inflow/outflow from financing activities	€/Mn	11,140	-10,752	2,061	1,792	6,921	3,562	-1,320	228	5,867
Capital Expenditure	€/Mn	-17,202	-4,039	-11,060	-10,013	-8,029	-10,487	-12,512	-1,175	-2,227
CapEx to Sales	%	5.30%	2.77%	7.05%	5.78%	4.69%	11.61%	12.53%	13.91%	1.71%
Profitability										
ROA	%	2.32%	2.98%	1.92%	2.88%	1.16%	4.19%	3.93%	-12.15%	3.17%
ROE	%	6.42%	11.17%	6.72%	8.91%	13.45%	10.42%	23.82%	-103.95%	9.65%
Gross Profit Margin	%	17.34%	18.56%	13.31%	12.35%	8.41%	17.86%	19.07%	9.88%	21.60%
Net Income Margin	%	3.50%	7.01%	3.49%	3.21%	3.18%	7.26%	5.18%	-34.47%	5.42%
EBITDA Margin	%	10.46%	11.49%	6.82%	9.97%	5.98%	13.34%	13.96%	-24.34%	13.21%
EBIT Margin	%	7.06%	8.65%	4.01%	6.79%	2.81%	7.84%	5.92%	-33.28%	6.77%
Per Share Information										
Dividends per Share	€	6.36	4.30	0.68	0.44	0.55	-	0.17	-	0.43
Basic EPS	€	21.39	10.19	1.86	5.96	1.37	2.06	0.59	-1.42	1.44
Weighted Avg. Basic Shares Out. (actual)	Shares/Mn	501	1,002	2,950	1,115	3,978	3,197	8,721	2,055	4,902

Appendix 18: SWOT Analysis

Strengths	Weaknesses
• Strong brand recognition and customer loyalty • Technological advancements in EVs, autonomous driving, and AI • Economies of scale and cost efficiency • Significant investment in R&D for innovation • Diversification into electric, hybrid, and autonomous vehicles	• High production and manufacturing costs. • Dependence on global suppliers for critical components • Compliance with strict regulations and safety standards • Supply chain vulnerabilities (e.g., semiconductor shortages)
Opportunities	**Threats**
• Growing demand for electric vehicles (EVs) • Expansion of autonomous vehicle technology • Rise of shared mobility and ride-hailing services • Increasing demand in emerging markets (China, India) • Consumer shift towards sustainable and eco-friendly vehicles	• Intense competition, especially in EV and tech sectors • Economic downturns reducing consumer spending • Increasing regulatory compliance costs • Resource scarcity (e.g., lithium, cobalt) • Growth in substitute services (shared mobility, alternative transport)

Appendix 19: Income Statement Assumptions

Appendix 19.1: Macroeconomic Assumptions

Macroeconomic Data - GDP growth per region									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
GDP growth per region									
Germany	%		0.00%	1.10%	1.15%	0.85%	0.74%	0.74%	Data from Statista and European Commission
UK	%		1.70%	1.40%	1.46%	1.37%	1.35%	1.35%	
Rest of Europe	%		0.90%	1.20%	1.30%	1.60%	1.60%	1.60%	
Americas	%		3.18%	3.11%	3.12%	2.87%	2.82%	2.82%	
USA	%		2.70%	2.10%	2.12%	2.12%	2.12%	2.12%	
Rest of Asia	%		4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
China	%		4.60%	4.50%	3.58%	3.37%	3.29%	3.29%	
Other Regions	%		3.25%	3.27%	3.15%	3.10%	3.08%	3.08%	

Appendix 19.2: Motorcycles Revenue and EBIT Assumptions

Motorcycles									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
Motorcycles									Volume growth based on historical average between 3-5% YoY growth and market expectations; EBIT set to improve over time, in line with BMW targets
Volume	Units	**210,385**	**220,904**	**231,949**	**243,547**	**255,724**	**268,510**	**281,936**	
chg	%	*-5.2%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	
ASP	€	*15,200*	*15,276*	*15,352*	*15,429*	*15,506*	*15,584*	*15,662*	
chg	%	-	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	
Motorcycles Revenue	**€/Mn**	**3,220**	**3,375**	**3,561**	**3,758**	**3,965**	**4,184**	**4,416**	
Underlying EBIT Motorcycle	€/Mn	198	206	249	282	317	335	353	
Margin	%	*6.1%*	*6.1%*	*7.0%*	*7.5%*	*8.0%*	*8.0%*	*8.0%*	
Exceptionals	€/Mn	0	0	0	0	0	0	0	
EBIT	**€/Mn**	**198**	**206**	**249**	**282**	**317**	**335**	**353**	

Appendix 19.3: Financial Services Revenue and EBIT Assumptions

Financial Services									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
FS									Contracts expected to grow slowly as FS business is highly volatile with historical average growth of -1.4%; Margin based on historical average
Revenues	**€/Mn**	**38,562**	**38,985**	**39,527**	**39,886**	**40,790**	**41,615**	**42,404**	
chg	%	*6.4%*	*1.1%*	*1.4%*	*0.9%*	*2.3%*	*2.0%*	*2.0%*	
Contracts	**Units**	**1,693,876**	**1,695,570**	**1,712,526**	**1,738,213**	**1,772,978**	**1,808,437**	**1,844,606**	
chg	%	9.8%	0.1%	1.0%	1.5%	2.0%	2.0%	2.0%	
Average contract value	€	22,766	22,992	23,081	22,946	23,007	23,011	22,988	
Underlying EBIT FS	€/Mn	2,511	2,924	2,965	2,991	3,059	3,121	3,180	
Margin	%	*6.5%*	*7.5%*	*7.5%*	*7.5%*	*7.5%*	*7.5%*	*7.5%*	
Exceptionals	€/Mn	0	0	0	0	0	0	0	
EBIT	**€/Mn**	**2,511**	**2,924**	**2,965**	**2,991**	**3,059**	**3,121**	**3,180**	

Appendix 19.4: Other Entities & Eliminations Revenue and EBIT Assumptions

Other Entities & Eliminations									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
Revenues									Revenues assumed as a negative percentage of the three segments, EBIT considered with historical moving average
Revenues	**€/Mn**	**-24,319**	**-20,508**	**-21,158**	**-21,805**	**-22,535**	**-23,271**	**-24,013**	
as % of segments	%	-14.59%	-12.00%	-12.00%	-12.00%	-12.00%	-12.00%	-12.00%	
Underlying EBIT	€/Mn	907	827	947	1,117	873	1,147	1,362	
as % of segments	%	*8.6%*	*7.2%*	*7.6%*	*7.8%*	*5.9%*	*7.1%*	*8.2%*	
Exceptionals	€/Mn	0	0	0	0	0	0	0	
EBIT	**€/Mn**	**907**	**827**	**947**	**1,117**	**873**	**1,147**	**1,362**	

Appendix 19.5: Operating Expenses

Operating Expenses									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
COGS									COGS calculated as difference between Revenue and Gross Profit and then divided into sub-items, target is COGS to sales between 80-83%
Total COGS (without R&D)	€/Mn	-111,843	-117,464	-120,562	-123,182	-127,773	-130,937	-134,834	
Manufacturing costs	€/Mn	-75,680	-82,225	-81,982	-82,532	-84,330	-85,109	-87,642	
as % of COGS	%	67.7%	70.0%	68.0%	67.0%	66.0%	65.0%	65.0%	
Cost of sales relating to financial services business	€/Mn	-30,277	-29,366	-27,729	-27,100	-26,832	-26,187	-26,967	
as % of COGS	%	27.1%	25.0%	23.0%	22.0%	21.0%	20.0%	20.0%	
thereof: interest expense relating to financial services business	€/Mn	-4,902	-2,349	-2,411	-2,464	-2,555	-2,619	-2,697	
as % of COGS	%	4.4%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Research and development expenses	€/Mn	-7,642	-7,916	-8,292	-8,519	-8,805	-9,077	-9,341	
Warranty expenditure	€/Mn	-1,964	-2,349	-2,411	-3,695	-3,833	-5,237	-5,393	
as % of COGS	%	1.8%	2.0%	2.0%	3.0%	3.0%	4.0%	4.0%	
Expenses for service contracts, telematics and roadside assistance	€/Mn	-2,885	-1,762	-1,808	-2,464	-2,555	-2,619	-2,697	
as % of COGS	%	2.6%	1.5%	1.5%	2.0%	2.0%	2.0%	2.0%	
Other cost of sales	€/Mn	-1,037	-1,762	-6,631	-7,391	-10,222	-11,784	-12,135	
as % of COGS	%	0.9%	1.5%	5.5%	6.0%	8.0%	9.0%	9.0%	
Total COGS	**€/Mn**	**-119,485**	**-125,380**	**-128,854**	**-131,702**	**-136,577**	**-140,014**	**-144,175**	
as % of Sales	%	-83.9%	-83.4%	-83.0%	-82.4%	-82.6%	-82.0%	-81.9%	
Gross Profit									Bottom-Up calculation from EBIT to Gross Profit
Gross Profit	**€/Mn**	**22,895**	**25,009**	**26,308**	**28,201**	**28,683**	**30,643**	**31,921**	
Gross Margin	%	16.1%	16.6%	17.0%	17.6%	17.4%	18.0%	18.1%	
SG&A									
Sales and administrative costs	**€/Mn**	**-11,296**	**-12,562**	**-12,633**	**-12,826**	**-13,052**	**-13,380**	**-13,906**	Historical moving average
as % of Sales	%	*-7.9%*	*-8.4%*	*-8.1%*	*-8.0%*	*-7.9%*	*-7.8%*	*-7.9%*	
R&D									R&D in line with BMWs 5-6% of sales research policy
Cash R&D	€/Mn	9,078	8,853	9,096	9,369	9,678	9,988	10,301	
Cash R&D to sales, %	%	*6.4%*	*6.0%*	*6.0%*	*6.0%*	*6.0%*	*6.0%*	*6.0%*	
Capitalization	€/Mn	3,525	3,305	3,318	3,461	3,580	3,702	3,785	
Capitalization Ratio, %	%	*38.8%*	*37.3%*	*36.5%*	*36.9%*	*37.0%*	*37.1%*	*36.7%*	
Amortisation	€/Mn	2,089	2,368	2,514	2,612	2,707	2,791	2,825	
Amortisation Ratio	%	*23.0%*	*26.7%*	*27.6%*	*27.9%*	*28.0%*	*27.9%*	*27.4%*	
R&D Income Statement	**€/Mn**	**7,642**	**7,916**	**8,292**	**8,519**	**8,805**	**9,077**	**9,341**	
as % of sales	%	*5.4%*	*5.3%*	*5.3%*	*5.3%*	*5.3%*	*5.3%*	*5.3%*	
Other operating income and expenses									Other operating income & expenses calculated using moving average
Other operating income	**€/Mn**	***1,411***	**1,476**	**1,564**	**1,616**	**1,690**	**1,621**	**1,669**	
% of sales	%	*1.0%*	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	
Other operating expenses	**€/Mn**	***-1,501***	**-1,611**	**-1,751**	**-1,555**	**-1,628**	**-1,690**	**-1,759**	
% of sales	%	*-1.1%*	-1.1%	-1.1%	-1.0%	-1.0%	-1.0%	-1.0%	
EBIT	**€/Mn**	**11,509**	**12,312**	**13,487**	**15,436**	**15,693**	**17,194**	**17,925**	Sum of all 4 segments EBIT
EBIT Margin	%	*8.1%*	*8.2%*	*8.7%*	*9.7%*	*9.5%*	*10.1%*	*10.2%*	

Appendix 19.6: Automotive Revenue and EBIT Assumptions

Volume Forecast - Per Region									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
Germany	**Units**	**265,700**	**265,700**	**268,623**	**271,712**	**274,021**	**276,049**	**278,092**	FY2024 regional volumes were forecasted using macroeconomic development; for China an elasticity factor was introduced to account for the slower growth of BMW in the Chinese market
of total Volume	%	10.8%	10.7%	10.6%	10.6%	10.5%	10.4%	10.3%	
UK	**Units**	**168,800**	**171,670**	**174,073**	**176,614**	**179,034**	**181,451**	**183,901**	
of total	%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%	6.8%	
Rest of Europe	**Units**	**514,000**	**518,626**	**524,850**	**531,673**	**540,179**	**548,822**	**557,603**	
of total	%	21.0%	20.9%	20.8%	20.7%	20.7%	20.7%	20.7%	
Rest of the Americas	**Units**	**83,400**	**86,053**	**88,733**	**91,498**	**94,123**	**96,779**	**99,509**	
of total	%	3.4%	3.5%	3.5%	3.6%	3.6%	3.7%	3.7%	
USA	**Units**	**399,300**	**410,081**	**418,693**	**427,569**	**436,634**	**445,890**	**455,343**	
of total	%	16.3%	16.5%	16.6%	16.7%	16.8%	16.9%	16.9%	
Rest of Asia	**Units**	**248,400**	**258,336**	**268,669**	**279,416**	**290,593**	**302,217**	**314,305**	
of total	%	10.1%	10.4%	10.6%	10.9%	11.2%	11.4%	11.7%	
China	**Units**	**715,200**	**718,490**	**721,723**	**724,307**	**726,748**	**729,139**	**731,538**	
of total	%	29.2%	28.9%	28.6%	28.2%	27.9%	27.6%	27.2%	
Elasticity	**Factor**	0	0.1	0.1	0.1	0.1	0.1	0.1	
Other Regions	**Units**	**56,100**	**57,923**	**59,817**	**61,702**	**63,614**	**65,574**	**67,593**	
of total	%	2.3%	2.3%	2.4%	2.4%	2.4%	2.5%	2.5%	
Total	**Units**	**2,450,900**	**2,486,878**	**2,525,180**	**2,564,491**	**2,604,946**	**2,645,920**	**2,687,884**	

Volume Forecast - Per Model									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
BMW									
BMW 1 Series/ 2 Series	Units	167,957	159,592	151,048	142,227	133,122	123,689	114,800	Forecasted regional volume as base for per model planning; ASP based on FY2024 retail prices and adjusted with a 10% wholesale discount, higher segment vehicles price increase moderate at 1%, while lower class models are assumed to grow at 2%; BEV share until 2030 assumed to be 50%
ASP	€	35,000	35,700	36,414	37,142	37,885	38,643	39,416	
chg	%	-	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
BMW 3 Series/ 4 Series	Units	439,943	418,030	395,652	372,547	348,697	323,987	300,703	
ASP	€	46,800	47,736	48,691	49,665	50,658	51,671	52,704	
chg	%	-	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
BMW 5 Series/ 6 Series	Units	212,397	201,818	191,014	179,859	168,345	156,415	145,174	
ASP	€	60,000	60,600	61,206	61,818	62,436	63,061	63,691	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
BMW 7 Series/ 8 Series	Units	47,908	45,522	43,085	40,569	37,972	35,281	32,745	
ASP	€	95,000	95,950	96,910	97,879	98,857	99,846	100,844	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
BMW Z4	Units	8,881	8,439	7,987	7,521	7,039	6,541	6,070	
ASP	€	60,000	60,600	61,206	61,818	62,436	63,061	63,691	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
BMW X1/X2	Units	350,263	332,817	315,001	296,605	277,617	257,944	239,407	
ASP	€	46,000	46,920	47,858	48,816	49,792	50,788	51,803	
chg	%	-	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
BMW X3/X4	Units	313,670	298,046	282,091	265,617	248,613	230,996	214,395	
ASP	€	60,000	60,600	61,206	61,818	62,436	63,061	63,691	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
BMW X5/X6	Units	233,278	221,658	209,793	197,541	184,895	171,793	159,446	
ASP	€	74,060	74,801	75,549	76,304	77,067	77,838	78,616	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
BMW X7	Units	50,795	48,265	45,681	43,013	40,260	37,407	34,719	
ASP	€	100,750	101,758	102,775	103,803	104,841	105,889	106,948	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
BMW XM	Units	6,620	6,290	5,954	5,606	5,247	4,875	4,525	
ASP	€	130,000	131,300	132,613	133,939	135,279	136,631	137,998	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
BMW i3/i8	Units	31	29	27	26	24	22	21	
ASP	€	140,000	141,400	142,814	144,242	145,685	147,141	148,613	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
Total ICE Volume	**Units**	**1,831,742**	**1,740,507**	**1,647,334**	**1,551,131**	**1,451,831**	**1,348,951**	**1,252,005**	
BEV	**Units**	**368,475**	**492,051**	**619,609**	**751,102**	**886,720**	**1,026,384**	**1,161,002**	
ASP	€	67,000	65,000	65,650	66,307	66,970	67,639	68,316	
chg	%		*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
Total BMW Volume	**Units**	**2,200,217**	**2,232,557**	**2,266,942**	**2,302,233**	**2,338,551**	**2,375,335**	**2,413,007**	
BEV penetration	%	*16.7%*	*22.0%*	*27.3%*	*32.6%*	*37.9%*	*43.2%*	*48.1%*	
BMW Revenue	**€/Mn**	**127,175**	**130,744**	**135,477**	**140,334**	**145,324**	**150,413**	**155,556**	
Mini									
MINI Hatch	Units	101,467	93,276	84,880	76,217	67,276	58,033	49,255	
ASP	€	37,500	38,250	39,015	39,795	40,591	41,403	42,231	
chg	%		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
MINI Convertible	Units	14,982	13,773	12,533	11,254	9,934	8,569	7,273	
ASP	€	35,000	35,700	36,414	37,142	37,885	38,643	39,416	
chg	%		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
MINI Clubman	Units	8,435	7,754	7,056	6,336	5,592	4,824	4,094	
ASP	€	35,000	35,700	36,414	37,142	37,885	38,643	39,416	
chg	%		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
MINI Countryman	Units	63,870	58,714	53,429	47,976	42,348	36,529	31,004	
ASP	€	39,000	39,780	40,576	41,387	42,215	43,059	43,920	
chg	%	-	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
Total ICE Volume	**Units**	**188,754**	**173,516**	**157,898**	**141,782**	**125,151**	**107,955**	**91,627**	
BEV	**Units**	**56,171**	**75,009**	**94,454**	**114,499**	**135,173**	**156,464**	**176,985**	
ASP	€	40,470	41,279	42,105	42,947	43,806	44,682	45,576	
chg	%		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
Total Mini Volume	**Units**	**244,925**	**248,525**	**252,353**	**256,281**	**260,324**	**264,419**	**268,612**	
BEV penetration	%	*22.9%*	*30.2%*	*37.4%*	*44.7%*	*51.9%*	*59.2%*	*65.9%*	
Mini Revenue	**€/Mn**	**9,389**	**9,768**	**10,170**	**10,589**	**11,028**	**11,484**	**11,956**	
Rolls-Royce									
Phantom	Units	413	354	293	230	165	97	33	
ASP	€	465,500	470,155	474,857	479,605	484,401	489,245	494,138	
chg	%		*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
Ghost	Units	808	692	572	449	322	191	65	
ASP	€	335,000	338,350	341,734	345,151	348,602	352,088	355,609	
chg	%		*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
Wraith/Dawn	Units	11	9	8	6	4	3	1	
ASP	€	332,645	335,971	339,331	342,724	346,152	349,613	353,109	
chg	%		*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
Cullinan	Units	2,590	2,217	1,834	1,440	1,032	611	210	
ASP	€	390,000	393,900	397,839	401,817	405,836	409,894	413,993	
chg	%	-	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
Total ICE Volume	**Units**	**3,822**	**3,272**	**2,707**	**2,124**	**1,523**	**902**	**309**	
BEV	**Units**	**1,890**	**2,524**	**3,178**	**3,853**	**4,548**	**5,265**	**5,955**	
ASP	€	400,000	408,000	416,160	424,483	432,973	441,632	450,465	
chg	%		*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	
Total Rolls-Royce Volume	**Units**	**5,712**	**5,796**	**5,885**	**5,977**	**6,071**	**6,167**	**6,264**	
BEV penetration	%	*33.1%*	*43.5%*	*54.0%*	*64.5%*	*74.9%*	*85.4%*	*95.1%*	
Rolls-Royce Revenue	**€/Mn**	**2,233**	**2,307**	**2,390**	**2,481**	**2,582**	**2,691**	**2,809**	
Total Group Volume	**Units**	**2,450,854**	**2,486,878**	**2,525,180**	**2,564,491**	**2,604,946**	**2,645,920**	**2,687,884**	
Total BEV	Units	426,536	569,584	717,241	869,454	1,026,442	1,188,113	1,343,942	
BEV penetration	%	*17.4%*	*22.9%*	*28.4%*	*33.9%*	*39.4%*	*44.9%*	*50.0%*	
Thereof PHEV	Units	166,614	149,213	126,259	128,225	130,247	132,296	134,394	
PHEV penetration	%	*6.8%*	*6.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	
Automotive Revenue	**€/Mn**	**138,796**	**142,819**	**148,036**	**153,404**	**158,934**	**164,588**	**170,321**	
Wholesale discount	%	10%	10%	10%	10%	10%	10%	10%	
Adjusted Automotive Revenue	**€/Mn**	**124,917**	**128,537**	**133,232**	**138,064**	**143,040**	**148,129**	**153,289**	

EBIT Automotive									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
CO_2 emissions per drivetrain									Non-compliance with EU CO2 targets leads to potential fines; EBIT in FY2025 expected to stay low before recovering until 2030 (BMW target margin 8-10%)
ICE	g/km	128	128	118	108	98	88	78	
PHEV	g/km	36	36	34	32	30	30	28	
BEV	g/km	0	0	0	0	0	0	0	
Drivetrain weighting of volume									
ICE	%	76%	71%	67%	61%	56%	50%	45%	
PHEV	%	7%	6%	5%	5%	5%	5%	5%	
BEV	%	17%	23%	28%	34%	39%	45%	50%	
CO_2 emissions of the EU new vehicle fleet (WLTP)	**g/km**	**99.5**	**93.2**	**80.3**	**67.6**	**56.0**	**45.6**	**36.5**	
EU targets (WLTP)	g/km	115.0	93.6	93.6	93.6	93.6	93.6	49.5	
Fine rate for non-compliance	€	95	95	95	95	95	95	95	
Fine for non-compliance	€/Mn	0	0	0	0	0	0	0	
Underlying EBIT Automotive	€/Mn	7,893	8,355	9,326	11,045	11,443	12,591	13,030	
Margin	%	*6.3%*	*6.5%*	*7.0%*	*8.0%*	*8.0%*	*8.5%*	*8.5%*	
Exceptionals	€/Mn	0	0	0	0	0	0	0	
EBIT Automotive	**€/Mn**	**7,893**	**8,355**	**9,326**	**11,045**	**11,443**	**12,591**	**13,030**	

Appendix 19.7: Net Income

Financial Result & Net Income									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
Result from equity accounted investments	€/Mn	-14	-40	-40	-40	-40	-40	-40	Moving average assumed; Anticipated tariffs hit in 2025 from Trump administration
Interest income	€/Mn	655	372	369	396	436	479	487	
Interest expense	€/Mn	-573	-355	-351	-330	-311	-332	-415	
Other financial result	€/Mn	-606	-159	-159	-159	-159	-159	-158	
Non-recurring tariffs hit (USA)	€/Mn	-	-1,090	-	-	-	-	-	
Financial Result	**€/Mn**	**-538**	**-1,272**	**-181**	**-133**	**-75**	**-53**	**-127**	
EBT	**€/Mn**	**10,971**	**11,040**	**13,306**	**15,303**	**15,618**	**17,141**	**17,799**	German corporate income tax 29.9%; Minority interest calculated with moving average
EBT Margin	*%*	*7.7%*	*7.3%*	*8.6%*	*9.6%*	*9.5%*	*10.0%*	*10.1%*	
Effective tax rate	*%*	*-30.0%*	*-29.9%*	*-29.9%*	*-29.9%*	*-29.9%*	*-29.9%*	*-29.9%*	
Income taxes	**€/Mn**	**-3,293**	**-3,301**	**-3,978**	**-4,576**	**-4,670**	**-5,125**	**-5,322**	
Net Profit	**€/Mn**	**7,678**	**7,739**	**9,327**	**10,727**	**10,949**	**12,016**	**12,477**	
Minority interest	€/Mn	388	323	357	392	437	488	466	
Attributable to shareholders of the BMW AG	**€/Mn**	**7,290**	**7,415**	**8,971**	**10,335**	**10,512**	**11,528**	**12,011**	

Appendix 20: Balance Sheet Assumptions

Appendix 20.1: High level assumptions

High Level Assumptions	
Line Item	**Assumptions**
Assets	
Non-current assets	
Intangible assets	Capex, R&D, D&A
Property, plant and equipment	Capex, R&D, D&A
Leased products	Moving Avrg.
Investments accounted for using the equity method	Stable
Other investments	Stable
Receivables from sales financing	Moving Avrg.
Financial assets	Stable
Deferred tax	Moving Avrg.
Other assets	Stable
Current assets	
Inventories	NWC
Trade receivables	NWC
Receivables from sales financing	Moving Avrg.
Financial assets	Stable
Current tax	Stable
Other assets	Stable
Cash and cash equivalents	Cash Flow Statement
Assets held for sale	Zero
Equity	
Equity attributable to shareholders of BMW AG	Cash Flow Statement, Dividends, Share buybacks, Net income
Non-controlling interests / minority interest	Income Statement
Liabilities	
Non-current liabilities	
Pension provisions	Stable
Other provisions	Moving Avrg.
Deferred tax	Moving Avrg.
Financial liabilities	Moving Avrg.
Other liabilities	Moving Avrg.
Other provisions	Moving Avrg.
Current liabilities	
Current tax	Stable
Financial liabilities	Moving Avrg.
Trade payables	NWC
Other liabilities	Moving Avrg.
Liabilities in conjunction with assets held for sale	Zero

Appendix 20.2: CapEX, D&A, WC, Dividends

CapEx, D&A, WC, Dividends									
Line Item	**Unit**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Assumptions**
CapEx									CapEx in line with BMWs investment policy and to account for ongoing EV transformation
Capitalized R&D	€/Mn	3,525	3,305	3,318	3,461	3,580	3,702	3,785	
Other intangible assets	€/Mn	83	301	310	320	331	341	352	
as % of sales	*%*	*0.1%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	
PP&E	€/Mn	8,597	9,023	8,534	8,795	9,089	9,386	9,685	
as % of sales	*%*	*6.0%*	6.0%	5.5%	5.5%	5.5%	5.5%	5.5%	
Total Group Capex	€/Mn	**12,205**	**12,630**	**12,163**	**12,576**	**12,999**	**13,429**	**13,823**	
D&A									Historical Average as of PPE investment
Amortisation R&D	€/Mn	2,089	2,368	2,514	2,612	2,707	2,791	2,825	
Other intangible assets	€/Mn	1,431	1,496	1,523	1,589	1,636	1,687	1,745	
as % of sales	*%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	
Depreciation PP&E	€/Mn	5,130	5,865	5,547	5,717	5,908	6,101	6,295	
as % of PPE	*%*	*59.7%*	*65.0%*	*65.0%*	*65.0%*	*65.0%*	*65.0%*	*65.0%*	
Total D&A	**€/Mn**	**8,650**	**9,729**	**9,584**	**9,917**	**10,251**	**10,579**	**10,865**	
Working Capital									DIO, DSO, and DPO based on historical moving average
Revenues	€/Mn	142,380	150,389	155,162	159,902	165,260	170,657	176,096	
NWC	€/Mn	13,095	11,546	12,089	12,229	12,885	13,225	13,342	
as a % of sales	*%*	*9.2%*	*7.7%*	*7.8%*	*7.6%*	*7.8%*	*7.7%*	*7.6%*	
Change in working capital	**€/Mn**	**761**	**-1,549**	**543**	**141**	**655**	**341**	**117**	
Working Capital - Breakdown									
Inventories	€/Mn	24,387	22,670	23,567	24,058	25,110	25,849	26,465	
DIO	Days	74.5	66	67	67	67	67	67	
Receivables	€/Mn	2,834	3,708	3,826	3,943	4,075	4,208	4,342	
DSO	Days	7.3	9	9	9	9	9	9	
Payables	€/Mn	14,126	14,833	15,304	15,771	16,300	16,832	17,465	
DPO	Days	36.2	36	36	36	36	36	36	
Dividends to BMW Shareholders									BMW payout policy between 50-60%, average of 55% assumed with 60% in 2030 due to higher net income and less investment needs
Net Income	€/Mn	7,290	7,415	8,971	10,335	10,512	11,528	12,011	
Dividends	**€/Mn**	**-3,781**	**-4,078**	**-4,934**	**-5,684**	**-5,781**	**-6,341**	**-7,207**	
Pay out ratio	%	-51.9%	-55%	-55%	-55%	-55%	-55%	-60%	
Dividends per share	€	6.63	7.15	8.81	10.35	10.74	12.02	13.95	

Appendix 21: Valuation

Appendix 21.1: WACC

WACC Calculation								
Cash-flow	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Terminal**	**Assumptions**
Cost of Equity								
Risk-free Rate	**2.84%**	**2.84%**	**2.84%**	**2.84%**	**2.84%**	**2.84%**	**2.84%**	For the Rf the German 10-Y Bond yield was assumed; Betas were taken from Damodaran Beta Data Base; German corporate tax rate is 29.9%; MRP is by how much the Stoxx600 returns exceed the Rf, Ke was calculated using CAPM; Terminal MRP was adjusted downwards to reflect for long-term market improvements
Unlevered Beta	**1.04**	**1.04**	**1.04**	**1.04**	**1.04**	**1.04**	**1.04**	
Automotive	1.39	1.39	1.39	1.39	1.39	1.39	1.39	
Motorcycle	1.39	1.39	1.39	1.39	1.39	1.39	1.39	
FS	0.34	0.34	0.34	0.34	0.34	0.34	0.34	
Tax rate	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	
Levered Beta	**1.44**	**1.44**	**1.44**	**1.44**	**1.44**	**1.44**	**1.44**	
Automotive	1.62	1.62	1.62	1.62	1.62	1.62	1.62	
Motorcycle	1.62	1.62	1.62	1.62	1.62	1.62	1.62	
FS	1.07	1.07	1.07	1.07	1.07	1.07	1.07	
Market Risk Premium	**7.50%**	**7.50%**	**7.50%**	**7.50%**	**7.50%**	**7.50%**	**7.00%**	
Cost of Equity	**13.62%**	**13.62%**	**13.62%**	**13.62%**	**13.62%**	**13.62%**	**12.90%**	
Automotive	14.99%	14.99%	14.99%	14.99%	14.99%	14.99%	14.18%	
Motorcycle	14.99%	14.99%	14.99%	14.99%	14.99%	14.99%	14.18%	
FS	10.87%	10.87%	10.87%	10.87%	10.87%	10.87%	10.33%	
Cost of Debt								
BMW Bond Yield (2035)	3.84%	3.84%	3.84%	3.84%	3.84%	3.84%	3.84%	For the cost of debt BMWs 2035 bond was taken with a YTM of 3.842%
Tax rate	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	
After-tax Cost of Debt	**2.69%**	**2.69%**	**2.69%**	**2.69%**	**2.69%**	**2.69%**	**2.69%**	
WACC	**7.97%**	**8.06%**	**8.22%**	**8.34%**	**8.46%**	**8.53%**	**7.79%**	
Automotive	8.64%	8.74%	8.91%	9.05%	9.18%	9.26%	8.44%	
Motorcycle	8.64%	8.74%	8.91%	9.05%	9.18%	9.26%	8.44%	
FS	6.64%	6.71%	6.83%	6.92%	7.00%	7.06%	6.51%	
Target Weights								
Description	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030**	**Terminal**	Weights move with BMWs capital structure composition and are assumed to balance out in the terminal period
Debt weight	51.66%	50.83%	49.43%	48.33%	47.25%	46.60%	50.00%	
Equity weight	48.34%	49.17%	50.57%	51.67%	52.75%	53.40%	50.00%	
D/E ratio	106.87%	103.40%	97.75%	93.55%	89.56%	87.27%	100.00%	

Appendix 21.2: FCFF & FCFE

FCFF & FCFE - SoP						
Cash-flow €Mn	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Terminal**
FCFF						
EBIT	**13,487**	**15,436**	**15,693**	**17,194**	**17,925**	**18,284**
Automotive	9,326	11,045	11,443	12,591	13,030	13,290
Motorcycle	249	282	317	335	353	360
FS	2,965	2,991	3,059	3,121	3,180	3,244
Others & Eliminations	947	1,117	873	1,147	1,362	1,389
(-) Tax	**-4,033**	**-4,615**	**-4,692**	**-5,141**	**-5,360**	**-5,467**
Automotive	-2,789	-3,302	-3,422	-3,765	-3,896	-3,974
Motorcycle	-75	-84	-95	-100	-106	-108
FS	-886	-894	-915	-933	-951	-970
Others & Eliminations	-283	-334	-261	-343	-407	-415
(=) NOPAT	**9,454**	**10,820**	**11,001**	**12,053**	**12,566**	**12,817**
Automotive	6,538	7,743	8,022	8,826	9,134	9,316
Motorcycle	175	198	222	235	248	253
FS	2,078	2,097	2,145	2,188	2,229	2,274
Others & Eliminations	664	783	612	804	955	974
(+) D&A	**9,584**	**9,917**	**10,251**	**10,579**	**10,865**	**11,082**
Automotive	9,393	9,719	10,046	10,367	10,648	10,861
Motorcycle	184	190	197	203	209	213
FS	8	8	8	8	9	9
Others & Eliminations	0	0	0	0	0	0
(-) Capex	**12,163**	**12,576**	**12,999**	**13,429**	**13,823**	**14,099**
Automotive	11,919	12,324	12,739	13,161	13,546	13,817
Motorcycle	234	241	250	258	265	271
FS	10	10	10	11	11	11
Others & Eliminations	0	0	0	0	0	0
(-) Delta NWC	**543**	**141**	**655**	**341**	**117**	**119**
Automotive	500	129	603	313	108	110
Motorcycle	20	5	24	13	4	4
FS	23	6	28	15	5	5
Others & Eliminations	0	0	0	0	0	0
(=) FCFF	**6,333**	**8,021**	**7,597**	**8,862**	**9,491**	**9,681**
Automotive	3,511	5,008	4,725	5,719	6,128	6,250
Motorcycle	105	141	145	167	187	190
FS	2,053	2,089	2,114	2,171	2,222	2,266
Others & Eliminations	664	783	612	804	955	974
FCFE						
(-) Interest Expense (1-T)	**456**	**428**	**404**	**431**	**540**	**543**
Automotive	152	143	135	144	180	182
Motorcycle	152	143	135	144	180	182
FS	152	143	135	144	180	180
Others & Eliminations	0	0	0	0	0	0
(+) Net Borrowing	**604**	**-1,565**	**-40**	**194**	**858**	**862**
Automotive	6	-16	0	2	9	9
Motorcycle	3	-8	0	1	4	4
FS	323	-837	-21	104	459	459
Others & Eliminations	272	-704	-18	87	386	390
(=) FCFE	**6,482**	**6,028**	**7,153**	**8,625**	**9,810**	**8,595**
Automotive	3,365	4,850	4,590	5,578	5,957	5,196
Motorcycle	-44	-9	10	25	11	22
FS	2,224	1,109	1,958	2,131	2,501	2,501
Others & Eliminations	936	79	594	891	1,341	876

Appendix 21.3: DCF SoP

Sum of the Parts Approach						
Cash-flow €Mn	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Terminal**
FCFF - Industrial	4,280	5,933	5,483	6,691	7,269	7,342
WACC - Industrial	8.74%	8.91%	9.05%	9.18%	9.26%	8.44%
FCFE - FS	2,224	1,109	1,958	2,131	2,501	2,501
Cost of Equity - FS	10.87%	10.87%	10.87%	10.87%	10.87%	10.33%
Terminal Value - Industrial (g = 1%)						98,726
Terminal Value - FS (g= 0%)						24,214
PV - Industrial	3,936	5,001	4,228	4,709	4,669	65,850
PV - FS	2,006	902	1,437	1,411	1,493	14,812
EV - Industrial						**88,393**
(+) Cash - Industrial						16,814
(-) Debt - Industrial						67,865
(-) Non-controlling interest						3,011
(=) Equity Value - Industrial						**34,330**
Equity Value - FS						**22,061**
Equity Value - Group						**56,391**
% Common Stock						90.9%
% Preferred Stock						9.1%
Equity Common Stock						**51,260**
Common shares outstanding (Mn)						559.83
Share Price (€/Share)						**91.56**
Equity Preferred Stock						**5,132**
Preferred shares outstanding (Mn)						53.91
Share Price Preferred Stock (€/Share)						**95.19**

Appendix 21.4: DCF Integrated

FCFF - Integrated						
Cash-flow €Mn	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Terminal**
FCFF - Group	6,333	8,021	7,597	8,862	9,491	9,681
WACC - Group	8.06%	8.22%	8.34%	8.46%	8.53%	7.79%
Terminal Value (g = 2%)						167,060
PV	5,860	6,850	5,975	6,405	6,305	114,783
Enterprise Value						**146,178**
(+) Cash						20,038
(-) Debt						106,485
(-) Non-controlling interest						3,011
(=) Equity Value - Group						**56,720**
% Common Stock						90.9%
% Preferred Stock						9.1%
Equity Common Stock						**51,558**
Common shares outstanding (Mn)						559.83
Share Price (€/Share)						**92.10**
Equity Preferred Stock						**5,161**
Preferred shares outstanding (Mn)						53.91
Share Price Preferred Stock (€/Share)						**95.74**

Appendix 21.5: DDM

DDM						
Cash-flow €Mn	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**Terminal**
Dividends	4,934	5,684	5,781	6,341	7,207	7,351
Cost of Equity - Group	13.62%	13.62%	13.62%	13.62%	13.62%	12.90%
Terminal Value (g = 2%)						67,459
PV	4,343	4,403	3,942	3,805	3,807	36,782
Equity Value						**57,082**
% Common Stock						90.9%
% Preferred Stock						9.1%
Equity Common Stock						**51,888**
Common shares outstanding (Mn)						559.83
Share Price (€/Share)						**92.68**
Equity Preferred Stock						**5,194**
Preferred shares outstanding (Mn)						53.91
Share Price Preferred Stock (€/Share)						**96.35**

Appendix 21.6: Multiples Valuation

Peer Group Multiples - TTM				
Company Name	**P/E**	**EV/Sales**	**EV/EBITDA**	**EV/EBIT**
Peer Group				
Volkswagen AG	3.4 x	0.8 x	8.5 x	10.5 x
Mercedes-Benz Group AG	5.0 x	1.0 x	6.9 x	8.6 x
Stellantis N.V.	3.3 x	0.2 x	1.5 x	1.9 x
General Motors Company	5.5 x	0.9 x	9.0 x	14.2 x
Ford Motor Company	11.5 x	1.0 x	14.2 x	34.6 x
Tesla, Inc.	61.6 x	7.5 x	50.8 x	90.4 x
BYD Company Limited	25.1 x	1.3 x	8.7 x	21.5 x
Honda Motor Co., Ltd.	7.7 x	0.7 x	5.0 x	9.9 x
Hyundai Motor Company	4.8 x	1.0 x	7.9 x	9.4 x
BMW AG Multiples				
BMW AG	5.1 x	0.9 x	6.2 x	8.7 x
Multiples				
Maximum	61.6 x	7.5 x	50.8 x	90.4 x
Minimum	3.3 x	0.2 x	1.5 x	1.9 x
Average (excluding outliers)	5.9 x	0.9 x	7.8 x	10.9 x
Valuation				
Price Target (€) Average	**70.18**	**80.86**	**132.24**	**76.38**

Appendix 22: Ratio Analysis

Ratio Analysis												
Ratio	**Unit**	**2022**	**2023**	**2024**	**2025F**	**2026F**	**2027F**	**2028F**	**2029F**	**2030F**	**CAGR 2018-2024**	**CAGR 2024-2030**
Profitability Ratios												
Gross Profit Margin	%	17.23%	19.09%	16.08%	16.63%	16.96%	17.64%	17.36%	17.96%	18.13%	-2.7%	2.0%
EBITDA Margin	%	15.82%	17.66%	14.16%	14.66%	14.87%	15.86%	15.70%	16.27%	16.35%	-0.4%	2.4%
EBIT Margin	%	9.82%	11.89%	8.08%	8.19%	8.69%	9.65%	9.50%	10.07%	10.18%	-2.2%	3.9%
Net Profit Margin	%	13.03%	7.82%	5.39%	5.15%	6.01%	6.71%	6.63%	7.04%	7.09%	-5.0%	4.7%
ROA	%	7.80%	4.89%	2.96%	2.94%	3.57%	4.05%	4.07%	4.38%	4.45%	-2.3%	7.0%
ROE	%	21.33%	13.58%	8.32%	8.18%	9.55%	10.59%	10.42%	11.00%	11.04%	-6.4%	4.8%
ROE - DuPont	%	32.64%	24.58%	15.45%	15.15%	17.69%	19.62%	19.31%	20.38%	20.45%	-5.1%	4.8%
ROIC	%	6.10%	7.12%	3.96%	4.34%	4.68%	5.30%	5.31%	5.70%	5.81%	-0.5%	6.6%
EPS Common Stock	€	27.31	17.67	11.62	11.82	14.57	17.12	17.76	19.87	21.14	1.2%	10.5%
EPS Preferred Stock	€	27.33	17.69	11.64	11.84	14.32	16.49	16.78	18.40	19.17	1.2%	8.7%
DPS Common Stock	€	27.31	17.67	11.62	11.82	14.57	17.12	17.76	19.87	21.14	1.2%	10.5%
DPS Preferred Stock	€	27.33	17.69	11.62	11.84	14.32	16.49	16.78	18.40	19.17	1.2%	8.7%
Payout Ratio	%	29.44%	48.10%	51.87%	55.00%	55.00%	55.00%	55.00%	55.00%	60.00%	5.5%	2.5%
FCF Margin	%	13.1%	5.1%	-2.7%	10.5%	4.2%	4.9%	4.4%	5.3%	4.9%	-	-
Liquidity Ratios												
Current Ratio	x	1.09 x	1.09 x	1.10 x	1.15 x	1.15 x	1.14 x	1.15 x	1.17 x	1.18 x	-1.1%	1.2%
Quick Ratio	x	0.86 x	0.82 x	0.82 x	0.87 x	0.87 x	0.86 x	0.86 x	0.87 x	0.88 x	-3.1%	1.2%
Efficiency Ratios												
Total Asset Turnover	x	0.60 x	0.62 x	0.55 x	0.57 x	0.59 x	0.60 x	0.61 x	0.62 x	0.63 x	2.9%	2.3%
Receivables Turnover	x	44.65 x	37.52 x	40.70 x	45.97 x	41.19 x	41.17 x	41.22 x	41.21 x	41.19 x	1.1%	0.2%
DSO	days	11	10	7	9	9	9	9	9	9	-4.5%	3.6%
Inventory Turnover	x	6.57 x	5.75 x	4.97 x	5.33 x	5.57 x	5.53 x	5.56 x	5.50 x	5.51 x	-3.1%	1.7%
DIO	days	62	69	74	66	67	67	67	67	67	3.5%	-1.8%
Payables Turnover	x	11.39 x	10.48 x	9.60 x	10.39 x	10.30 x	10.29 x	10.31 x	10.30 x	10.27 x	-0.7%	1.1%
DPO	days	36	36	36	36	36	36	36	36	36	-0.1%	0.0%
CCC	days	36	42	46	39	40	40	40	40	40	5.1%	-2.2%
Solvency Ratios												
Total interest bearing Debt Ratio	%	38.15%	37.87%	41.56%	40.38%	39.68%	38.52%	37.61%	36.78%	36.43%	-2.9%	-2.2%
Interest Coverage Ratio	x	55.77 x	28.17 x	20.09 x	34.67 x	38.45 x	46.84 x	50.43 x	51.77 x	43.15 x	-2.3%	13.6%
Total Debt to Shareholder's Equity Ratio	x	1.79 x	1.76 x	1.87 x	1.70 x	1.66 x	1.59 x	1.55 x	1.50 x	1.46 x	-5.5%	-4.1%
Equity Multiplier	x	2.70 x	2.70 x	2.82 x	2.65 x	2.61 x	2.54 x	2.49 x	2.44 x	2.40 x	-4.0%	-2.7%
Net Debt Leverage	x	3.43 x	2.83 x	4.56 x	3.83 x	3.61 x	3.23 x	3.12 x	2.84 x	2.74 x	-6.0%	-8.2%
Debt to Capital Ratio	%	63.0%	63.0%	64.5%	62.2%	61.6%	60.6%	59.8%	58.9%	58.2%	-1.9%	-1.7%
Industry Specific Ratios												
Vehicle Sales Growth Rate	%	-4.8%	6.4%	-4.0%	1.47%	1.54%	1.56%	1.58%	1.57%	1.59%	-	-
R&D to Sales	%	4.64%	4.85%	5.37%	5.26%	5.34%	5.33%	5.33%	5.32%	5.30%	-0.4%	-0.2%
CAPEX to Sales	%	6.35%	7.00%	8.57%	8.40%	7.84%	7.86%	7.87%	7.87%	7.85%	0.6%	-1.5%
CAPEX to Sales (excluding capitalised R&D)	%	4.37%	5.32%	6.10%	6.20%	5.70%	5.70%	5.70%	5.70%	5.70%	2.7%	-1.1%
ROCE	%	21.9%	27.3%	15.8%	16.6%	17.4%	19.3%	18.8%	19.8%	20.0%	-7.0%	4.0%

Appendix 23: Sensitivity Analysis

Sensitivity Analysis – €TP/Sh.

		TV WACC				
		7.29%	**7.54%**	**7.79%**	**8.04%**	**8.29%**
g	**1.50%**	96.48	86.47	77.29	68.84	61.03
	1.75%	105.08	94.27	84.39	75.32	66.96
	2.00%	114.49	102.77	92.10	82.33	73.37
	2.25%	124.84	112.08	100.50	89.95	80.30
	2.50%	136.26	122.30	109.69	98.26	87.83

Appendix 24: Risk Matrix

Macroeconomic Risk (M1)
Economic conditions significantly influence BMW Group's business performance and earnings, with unforeseen global disruptions posing highly unpredictable effects. The ongoing war in Ukraine presents risks of further escalation, sanctions, and retaliatory measures, while tensions in the Middle East could drive oil price surges, fueling inflation and increasing costs. Also, US-China trade relations and EU-imposed tariffs on Chinese battery-powered vehicles raise concerns over countermeasures that may impact BMW's trade conditions. Despite declining inflation, persistently high interest rates continue to dampen growth, particularly in Germany, which could slow the eurozone economy. China's economic struggles, particularly in the real estate sector, pose risks to global demand and BMW's sales performance. **To mitigate** these risks, BMW regularly assesses economic developments within its internal strategy processes, closely monitors sales markets, and adjusts planned sales volumes accordingly. This approach ensures optimal alignment between production, sales, and inventories across all plants, markets, and model series.
Strategic and Sector-Specific Risk (S)
Regulatory Changes (S1) | Changes in legislation and regulations, particularly around emissions, safety, and consumer protection, pose high risks, including increased costs, investments, and supply disruptions. Stricter emissions regulations, such as the EU's EU7 regulation and China's tightening emissions laws, could impact vehicle development. The EU's carbon emissions target of 0 g/km by 2035 also presents challenges. **To mitigate** these risks, BMW engages with stakeholders to influence political frameworks and continuously adapts to regulatory changes. **Market Developments (S2) |** The BMW Group faces risks from changing customer preferences, altered brand perception, and a competitive market environment. The shift from conventional to alternative drivetrains could cause short-term supply and demand imbalances, compounded by subdued customer demand in certain markets, particularly in China, where consumer spending remains weak despite government support. Market risks have increased and are classified as very high. **To mitigate** these risks, BMW continuously monitors sales markets, adapts to changing customer needs, and seeks to capitalize on opportunities for sales growth and pricing, though the resulting opportunities are considered insignificant.
Operational Risk (O)
Production and Technology (O1) | Production interruptions, caused by system failures, supplier issues, energy shortages, cyberattacks, or natural disasters, pose high risks to BMW's manufacturing operations. **To mitigate** these risks, BMW implements preventive maintenance, flexible production networks, cybersecurity measures, and disaster preparedness in site selection and construction. Risks from property damage and production downtime are covered by insurance, though rising premiums and deductibles could increase BMW's exposure. Additionally, potential delays in type approvals or product recalls could affect production timelines and reputation. BMW establishes provisions for warranty obligations but cannot fully rule out additional costs. **Purchasing (O2) |** Purchasing risks primarily stem from supply shortages due to disruptions at the supplier level, such as raw material shortages, natural disasters, IT issues, or non-compliance with standards. These risks, classified as high, could lead to production interruptions, cost increases, or damage to BMW's reputation. To mitigate these, BMW assesses risk criteria during supplier selection, monitors the supplier network for potential disruptions, and has a prevention program in place. Inflation and supplier insolvencies also pose additional risks, as do cyberattacks across the value chain. Opportunities from local supplier structures and innovative manufacturing technologies are deemed insignificant. **Sales Network (O3) |** The insolvency of key dealerships could disrupt global vehicle sales and services, but this risk is classified as low. **To mitigate**, BMW continuously monitors dealership performance and market conditions, adjusting its sales strategies to maintain stability and customer satisfaction. **Information Security, Data Protection, and IT (O4) |** Digitalization and automation present opportunities but also increase risks, particularly in IT security and data protection, with rising cyberattacks and stricter legal requirements. Despite extensive security measures, the risk level is high due to the complexity and connectivity of systems. **To mitigate** these risks, BMW conducts safety assessments, penetration tests, and promotes employee awareness of IT security. Information security, data protection, and IT risks are systematically monitored, and a strong security culture is maintained. However, it is impossible to fully eliminate risks in this area.
Financial Risk (F)
Currencies (F1) | As an international company, BMW faces currency risks and opportunities due to business conducted in various currencies, with big portions of revenue and purchases outside the eurozone. **To mitigate**, currency risks are managed strategically (medium to long term) through production adjustments in foreign currency regions and operationally through financial market hedging, improving planning reliability. The risk level is classified as moderate, having decreased slightly due to stable exchange rates. **Raw Materials (F2) |** Price volatility for key raw materials such as metals, battery components, and energy poses a medium-level risk. BMW **mitigates** these risks through financial hedging strategies and long-term supply contracts to stabilize costs. **Liquidity (F3) |** BMW ensures liquidity through a diversified refinancing strategy, rigorous liquidity management, and the "matched funding principle" in its Financial Services segment. The risk of restricted access to funds is considered low. **Other Financial Risks (F4) |** Other financial risks for the BMW Group include counterparty risks and those linked to investments in other entities. Counterparty risk, which involves the possibility of not receiving payments in full, is managed using a value-at-risk model and a limit system for daily monitoring. The recoverability of equity investments is continuously assessed, though impairment risks remain. These financial risks are classified as medium **Pension Obligations (F5) |** BMW's pension obligations depend on market yields, inflation, and life expectancy. Investments in diversified asset portfolios help mitigate risks, though fluctuations in pension assets and provisions remain a medium-level risk. Favorable capital market trends could present financial opportunities. The risk is classified as medium.
Legal Risk (L1)
BMW faces legal risks such as product liability claims, intellectual property infringements, and regulatory proceedings, particularly in markets like the US and Great Britain, where class actions and product liability risks could harm its reputation and finances. The company is also subject to export control regulations and tax/customs audits, which could result in financial consequences. **To mitigate** these risks, BMW employs a comprehensive risk management system, including a Tax Compliance Management System (Tax CMS) in key countries, and appropriate insurance coverage for legal disputes. However, damages exceeding insured amounts cannot be ruled out, and the potential financial impact of certain legal risks remains uncertain.
Financial Services Risk (FS)
The BMW Group faces various financial risks in its Financial Services segment, including credit risks, residual value risks, interest rate risks, and operational risks. Credit risks are assessed based on factors like customer creditworthiness and payment history and are classified as medium. Opportunities for reduced credit risk exist but are considered immaterial. Residual value risks are high, arising from potential negative deviations in vehicle resale prices at the end of lease terms, while positive deviations present material opportunities. Interest rate risks are low, as some mismatches between fixed interest periods are accepted for return potential, with associated opportunities considered relevant. Operational risks, such as IT security and supplier management issues, are medium and are actively managed through defined measures and a comprehensive risk recording system.

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