Last chance sharing? A merger between BMW AG and SIXT SE defining the future of mobility

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Abstract

Many economies are dependent on the automotive industry. It not only includes pure manufacturers but also suppliers, thus having extensive effects on entire countries and regions. Consequently, companies and policymakers are obligated and committed to proactively adopt new market trends and provide the environment and regulatory support to accompany those. The last few years have shown that new market entrants quickly gain market shares because of their portfolio of electrified vehicles – defining the future of mobility.

Nevertheless, the future of mobility also involves a shift to shared mobility services, offering excellent opportunities for well-established global players due to their extensive customer base and resources such as research and development, intellectual property and human capital. Consequently, the proposed merger between Bayerische Motoren Werke AG and Sixt SE would enable the bundling of those qualities and result in a solid foundation to tackle future disruptions. The financial analysis supports this strategic standpoint with net synergies amounting to EUR 1,659m. Sixt's target shareholders would receive an acquisition premium of EUR 19.05 per share, and BMW's shareholders' earnings per share would accrete by 7.9% yearly until 2028. Hence, it can be concluded that this merger would be beneficial for both companies. However, it must be noted that this analysis is subject to further research and limited by the potential of disapproval by policymakers due to competition laws.

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Resumo

Muitas economias dependem da indústria automóvel. Esta indústria não inclui apenas os fabricantes puros, mas também os fornecedores, tendo assim efeitos extensivos em países e regiões inteiros. Consequentemente, as empresas e os decisores políticos são obrigados e estão empenhados em adoptar proactivamente novas tendências de mercado e em proporcionar o ambiente e o apoio regulamentar que as acompanham. Os últimos anos mostraram que os novos participantes no mercado ganham rapidamente quotas de mercado devido à sua carteira de veículos electrificados – definindo o futuro da mobilidade.

No entanto, o futuro da mobilidade também envolve uma mudança para serviços de mobilidade partilhada, oferecendo excelentes oportunidades para operadores globais bem estabelecidos devido à sua extensa base de clientes e recursos como a investigação e o desenvolvimento, a propriedade intelectual e o capital humano. Consequentemente, o projecto de fusão entre a Bayerische Motoren Werke AG e a Sixt SE permitiria reunir estas qualidades e criar uma base sólida para fazer face a futuras perturbações. A análise financeira apoia este ponto de vista estratégico com sinergias líquidas que ascendem a EUR 1,659m. Os accionistas-alvo da Sixt receberiam um prémio de aquisição de EUR 19.05 por acção e os lucros por acção dos accionistas da BMW aumentariam 7.9% anualmente até 2028. Por conseguinte, pode concluir-se que esta concentração seria benéfica para ambas as empresas. No entanto, é de notar que esta análise está sujeita a mais investigação e é limitada pelo potencial de desaprovação por parte dos decisores políticos devido às leis da concorrência.

Título: Partilha da última oportunidade? Uma fusão entre a BMW AG e a SIXT SE que define o futuro da mobilidade

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Palavras-chave: Fusões, Aquisições, Avaliação, Sinergias, Automóvel, Carsharing, Mobilidade

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Glossary and list of abbreviations

%	Percent
A	Actual or Reported
A/S	Aktieselskab, Danish public limited company
Acquirer	The company which leads the M&A process and acquires another firm.
AG	Aktiengesellschaft, German public company
approx.	approximately
APV	Adjusted present value
b	Billions
B2B	Business-to-business
B2C	Business-to-customer
BFW	Bayerische Flugzeugwerke AG
BMW AG, BMW, the Company or the Acquirer	Bayerische Motoren Werke AG, Munich, Germany
BMW Group or the Group	Bayerische Motoren Werke Group
BoP	Beginning of period
Bundesbank	German Central Bank
BV	Book-value
C&CE	Cash and cash equivalents
CAGR	Compounded annual growth rate
CapEx	Capital Expenditures
CAPM	Capital Asset Pricing Model
CASE	Connected, Autonomous, Shared and Electric
CE	Common Equity
Co	Company
Commission	The European Commission
Comparables	Comparable company analysis

Consolidation	The merger of two separate entities into one single company.
Covid-19	Corona Virus pandemic
CSO	Carsharing operators
D&A	Depreciation and Amortisation
D/E	Debt-to-Equity ratio
DAX	Deutscher Aktienindex, German index representing the 40 largest and most liquid German companies
DCF	Discounted Cash Flow
DD	Due diligence
DIO	Days Inventory Outstanding
DPO	Days Payables Outstanding
DRO	Days Receivables Outstanding
e.g.	Latin "exempli gratia" meaning "for example"
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortisation
ECB	European Central Bank
EMG	Europcar Mobility Group, Paris, France
EoP	End of period
EPS	Earnings per share
Et al.	Latin for "and others"
EU	European Union
EUR	Currency Euro (€)
Europe5	France, Germany, Italy, Spain, United Kingdom
EV	Enterprise value
EV/EBITDA	Enterprise value divided by EBITDA-multiple
EV/Revenue	Enterprise value divided by Revenue-multiple

excl.	excluding
F	Forecasted
FCF	Free Cash Flow
FDI	Foreign Direct Investment
FY	Fiscal year
g	Terminal growth rate
GDP	Gross domestic product
HGB	Handelsgesetzbuch, German commercial code
i.e.	Latin “id est” meaning “in other words”
IBR	Incremental borrowing rate; interest rate entity would have to pay to borrow funds for specific timeframe (Leasecrunch, 2023).
Inc	Incorporated, legal corporation in the United States
IoT	Internet of Things
K	Thousands
KPI	Key performance indicator
Ltd	Limited, legal company form
m	Millions
M&A	Mergers and Acquisitions
MaaS	Mobility as a Service
MBO	Management-led Buyout
MCap	Market Capitalisation
MDAX	German Mid-Cap Index
Merger	This transaction or merger
Moody’s	Moody’s corporation, American credit rating agency, New York, United States
MRP	Market risk premium
MSCI	Morgan Stanley Capital International
MV	Market value

N.V.	Naamloze Vennootschap, Dutch public company
Nasdaq	National Association of Securities Dealers Automated Quotations, American index
NWC	Net working capital
NYSE	New York Stock Exchange, New York City, United States
OEM	Original equipment manufacturer
OTCM	Over-the-counter market
p.a.	Latin “per annum” meaning “annually” or “yearly”
P/E	Price-earnings ratio(-multiple)
PE	Preferred Equity
Pp	Percentage points
PP&E	Property, Plant and Equipment
PV	Present value
R&D	Research and Development
Rd	Cost of Debt
Re	Cost of Equity
ref.	Reference year
Refinitiv	Thomson Reuters Refinitiv Eikon/Datastream
Rf	Risk-free rate
RI	Return Index, variable on Refinitiv
Rolls-Royce	Rolls-Royce Motor Cars Ltd., Goodwood, United Kingdom
Rpe	Cost of Preferred Equity
S&P	Standard and Poor’s, American credit rating agency
S.A. or SA	Société Anonyme, French public company

SE	Societas Europaea, European stock corporation
Sixt or the Target	Sixt SE, Pullach, Germany
Standard & Poor's	American credit rating agency, New York, United States
T	Trillion
t	Defining a time period
Target	The company that is on the other side of the M&A process and is acquired.
Tc	Effective tax-rate
TCO	Total cost of ownership
Thesis	This Master's thesis
TV	Terminal value
uFCF	Unlevered Free Cash Flow
US	United States
USD	Currency United States Dollar ($)
VWAG	Volkswagen AG
WACC	Weighted average cost of capital
WC	Working capital
XETR	Xetra, reference market for exchange trading in German shares[1]
XFRA	Frankfurt Stock Exchange, Frankfurt, Germany

[1] Deutsche Boerse (2023)

List of Figures, Tables and Equations

1. Introduction

In the course of this thesis ("Thesis") a fictitious mergers and acquisitions ("M&A") transaction of two companies within the automotive industry will be discussed. In the literature review, the theoretical framework of M&A and the associated processes will be explained. In the subsequent industry analysis, an in-depth analysis of the industry will be conducted to establish future trends, opportunities and threats the companies are facing. This is essential as the automotive industry has been in a state of transformation for several years and is becoming increasingly dynamic, which is also due to new technologies being developed and new companies entering the market. These analyses will be the groundwork for the assumptions made for the valuation part, which will determine a fair value per share of the companies and whether this merger ("Merger") will be beneficial for the companies' shareholders. Lastly, the limitations of this work will be elaborated.

2. Literature Review

2.1. Mergers and Acquisition structures, due diligence and synergies

M&A is related to the economic concept of market concentration, which measures the extent to which market shares are distributed between several firms. This can be used as a proxy for the market's competition level (OECD, 2020). Recently, policymakers and regulators have been discussing whether Mergers and Acquisitions cause rising concentration levels in markets and whether fewer competitors also mean less competition (OECD, 2020). This could result in stricter antitrust laws. Traditional economic concepts argue that more rivalry or competition can strengthen the economy by increasing the pressures on product quality and lowering the strain on costs, which drives innovation (Verma, 2023). While M&A usually leads to a consolidation of companies and a lower degree of competition, it may still enable firms to compete more successfully in global markets. Through these foreign direct investments ("FDI"), M&A may even support foreign economies and thus be beneficial for markets (Verma, 2023).

In the process of Mergers and Acquisitions, an acquiring firm and an acquisition target are involved. Nevertheless, an M&A operation can be conducted in several ways and does not only include the combination of two firms (Merger) or the obtainment of a majority stake in a target (Acquisition). Firstly, consolidation ("Consolidation") defines creating a new entity, which combines the core businesses of both firms and abandons old corporate structures. Additionally, an M&A operation can be structured as an acquisition of a firm's assets, common in times of distress or bankruptcy, resulting in the liquidation of assets. Lastly, as part of a management-led buyout ("MBO") or management acquisition, a company's executive can acquire a controlling stake in a different company and then take it private. MBOs are typically financed with a disproportionally amount of debt (Hayes, 2022).

In addition to the conduct of the M&A process, a merger can also occur in three ways. Firstly, a horizontal merger describes the process of a merger between two firms (acquirer and target) that operate in the same industry (e.g., Merger of Fiat Chrysler Automobiles N.V. and Peugeot S.A. in 2021 (Motavalli, 2021)). A vertical merger is the merger of two companies that provide different supply chain functions (e.g., Vehicle manufacturer acquiring a supplier). Lastly, a conglomerate merger combines two firms operating in unrelated industries (Berk et al., 2015). Despite horizontal, vertical and conglomerate mergers being used most commonly in M&A processes, Hayes (2022) argues that there are also congeneric mergers, which is the merger between two entities that serve the same consumer base in differing ways (e.g., TV manufacturer acquiring a cable company).

One crucial part of every M&A process is due diligence ("DD"). Generally, during a DD, the legitimacy of a company's information is confirmed, often performed by analysing the financial business case, conducting a risk analysis and performing a complete check of documents. In M&A, it describes the investigation of a potential investment opportunity (Dealroom, 2023), for example, in the form of a buy-side due diligence. In contrast to deal-making, this DD part is often less desirable. As practitioners regularly miss the thorough diligence of a deal's strategic rationale and the acquirer's ability to create value, managers rarely kill potential acquisitions despite deals being deeply flawed (Cullinan et al., 2004). Cullinan et al. (2004) also point out that successful acquirers regard due diligence as a greater exercise than solely verifying data. Instead, a comprehensive analysis of the business case, probing for strengths and weaknesses, and searching for unreliable assumptions is conducted. Paying close attention to the diligence's results can support managers in preparing for a potential annulment of a deal. In the final phases of the due diligence, a walk-away price should be determined, which is the highest price an acquirer is willing to pay when the price negotiations are final. This walk-away price should include less than the full potential of synergies. Hence it is crucial to consider a deal's separate stand-alone value (Cullinan et al., 2004).

Synergies are increases in a merged firm's value resulting from combining two entities into one more valuable entity (Damodaran, 2005). These synergies enable acquirers to pay substantial acquisition premia in M&A deals. Damodaran (2005) distinguishes between two kinds of synergies: operating and financial synergies. While operating synergies, which occur in one-third of takeovers in a sample of 77 acquisitions analysed by Bhide (1993), affect the operations of the combined firm and include factors like economies of scale and higher growth potential, financial synergies are more focused on tax benefits and higher debt capacities. These financial synergies sometimes take the form of lower discount rates. Also, a firm that can increase its depreciation costs post-acquisition could increase its tax shield, thereby increasing its value (Damodaran, 2005).

Nevertheless, a Mergers and Acquisitions process can also have detrimental effects on synergies, called negative synergies. Cullinan et al. (2004) state that potential conflicts between the merged businesses may decrease revenues or increase costs. Such conflicts should also be part of sound due diligence. In addition, inevitable distractions of a merger may force an acquirer's management to disregard the core businesses and undermine the merger's success. Damodaran (2005) argues that valuing synergies is complicated and may be pointless, as it requires too many assumptions. He advocates to make the best estimates of how much value synergies will create in an acquisition ahead of deciding on an acquisition price, despite making assumptions about an uncertain future necessary. Firms also commonly prioritise whether an acquisition will be accretive or dilutive, where the earnings per share ("EPS") of the acquirer increases or decreases after an acquisition, respectively (Damodaran, 2005). He indicates that this approach is inadequate, as it assumes that the market will not adjust the acquirer's price-earnings ratio ("P/E") post-acquisition. In addition, practice has shown that the target's P/E-ratio should be irrelevant for this consideration.

2.2. Valuation

The valuation determines how much the target is worth based on the concept of the time value of money. This financial concept states that a dollar today is worth more than a dollar received in the future, as it can be invested. As a result, the valuation serves as a tool to help acquirers decide whether to acquire a company. Luehrman (1997) determines that the discounted cash flow ("DCF") analysis has been established as the best practice for valuing corporate assets since the 1970s. The DCF-valuation method finds the present value ("PV"), which is today's value of expected future cash flows. This PV can be calculated by discounting the expected future cash flows with a discount rate, or interest rate, which represents the riskiness of these cash flows (Damodaran, 2012). He also states that a common reason to buy assets is that they are expected to generate future cash flows. Especially one version of the DCF became standard: the valuation based on the weighted average cost of capital ("WACC"). This version uses the capital structure, constructed by equity and debt, as weights to determine an appropriate discount rate. Despite using the WACC-based method in most M&A deals, Luehrman (1997) argues that this standard has become obsolete, primarily because information technological advancements (e.g., computers, software, artificial intelligence) enable practitioners to use valuation methodologies that are more suitable and tailored to the decisions that managers are confronted with. Damodaran (2012) adds that the DCF valuation displays substantial limitations in the hands of careless analysts, as they can be easily manipulated to generate value estimates preferred by clients and managers, thus having no relation to the actual intrinsic value of the target.

The basic DCF-method normally assumes a constant capital structure over the forecasting period. This means that the relation/ratio between debt and equity, and therewith the WACC, will not differ, which is not totally applicable to practice. As a result, Luehrman (1997) proposes to use a different approach, called the adjusted present value ("APV")-method, which values a business' various kinds of cash flows and then sums up their present values. The APV-method then sums the value of the unlevered, all-equity firm with the value added by the firm's choice of capital structure. This may come in the form of the interest tax shield (Kaplan & Ruback, 1996). As a result, the APV-method is a good way of providing managers with information about how much value is created by cost reductions or tax savings even after the acquisition has closed.

The cost of equity, as part of the critical component WACC, is the return that an investor demands in exchange for investing and bearing a risk of ownership (Kenton, 2023). It can be determined by using the Capital Asset Pricing Model ("CAPM"), which was initially developed by William Sharpe (1964) and John Lintner (1965). The model determines the relationship between the systematic or non-diversifiable risk (beta), defined as the inherent risk of the entire market, and the expected return for an asset. It is calculated with the formula below:

Equation 1: Cost of Equity

$$r_e = r_f + \beta[E(m) - r_f]$$

whereas:

R_e = cost of equity

β = Levered Beta

r_f = risk-free rate

$[E(m) - r_f]$ = Market Risk premium ("MRP")

In 1992, Eugene F. Fama and Kenneth R. French published a study that questioned the CAPM's explanatory power and argued that stock returns were correlated with firm size and book-to-market ratios rather than systematic risk, as the method implies (Kaplan & Ruback, 1996). However, the authors found that implied risk premia were not significantly related to firm size or pre-transaction book-to-market ratios but positively correlated to firm and industry betas, which contradicts Fama and French's results.

The CAPM also includes the risk-free rate, defined as the theoretical rate of return of an investment with zero risk. In theory, the risk-free rate is the minimum return an investor expects for an investment, as they will not accept additional risk unless the potential rate of return is higher than the risk-free rate. Practice has shown that every investment carries at least a small amount of risk, thus making the risk-free rate more of a theoretical rate (Hayes, 2022).

The company's capital structure is also essential for the weighted average cost of capital. Usually, firms use a combination of equity and debt, the firm's capital, to raise funds needed for their investments (Berk et al., 2015). The firm's overall cost of capital should be a blend of the costs of the different sources of capital. It is essential to use the market values ("MV") of debt and equity, as they are forward-looking and represent expectations of an asset's worth in the future. In contrast, book-values are historical. Uysal (2011) found that a deviation from a firm's target capital structure can impact the acquisition choices and structures. His study also illustrates the usefulness of target capital structures in managerial decisions. A target or optimal capital structure is the most beneficial mix between debt and equity financing that maximises the company's MV while minimising its capital cost. The cost of debt is the interest rate a firm would have to pay to refinance its existing debt (i.e., by issuing bonds) (Berk et al., 2015). Also, the rate reflects the risk of a company defaulting on its debt (Damodaran, 2005). He also points out that risk can also be regarded in terms of the variation of actual returns around expected returns. The actual returns on a risky investment can vary significantly from expected returns.

Damodaran (2005) defines two problems related to the cost of equity and debt. In contrast to the cost of debt, the cost of equity is implicit and cannot be observed directly. Additionally, different investors may be exposed to varying levels of risk in the same investment, demanding different rates of return. As a result, practitioners must come up with a cost of equity that the diverse investors will accept as the appropriate rate to value the company.

Berk et al. (2015) explain that the WACC is driven by a company's line of business and leverage due to its interest tax effect. Nevertheless, Luehrman (1997) points out that the WACC is only suitable for static capital structures. Otherwise, it would have to be adjusted for tax shields, issue costs and, most importantly, dynamic capital structures. Especially those sophisticated and multilayered situations lead to the WACC being easily misestimated.

There are also relative valuation methods, one being the comparable company or trading comparables analysis ("Comparables"). One can value another asset by examining how the market prices similar assets (Damodaran, 2005). This analysis assumes that Comparables provide a highly relevant reference point for valuing a given target since they share key business and financial indicators. Thus, a practitioner can establish valuation parameters for a target by determining its relative positioning in the market among peer companies or Comparables (Rosenbaum & Pearl, 2009). After defining a peer group, trading multiples are then calculated for this peer group, which are then used as a basis for establishing a valuation range for the target by applying financial multiples to the target's financial metrics. Kaplan and Ruback (1996) argue that comparable companies may only sometimes be perfect matches, as cash flows may reflect different growth rates and risks.

Concerning the potential of DCF analyses to be manipulated, as Damodaran (2005) presented before, Kaplan & Ruback (1996) discovered that DCF-approaches provided similar results to a comparable-based approach and added explanatory power to the DCF-based estimates. Consequently, the authors recommend performing both valuation approaches in conjunction, as the results provided the most reliable estimates.

Nevertheless, as Damodaran (2005) points out, valuations always incorporate a significant margin for errors. Uncertainty is part of the valuation process, both at the valuation date and how the value evolves, with new information being available. Such information can include information about the firm's operational sector but also information that relates to the general macroeconomy. In general, three areas of uncertainty can be identified. Firstly, the uncertainty of estimation. This relates to the conversion of raw information into model inputs. Secondly, firm-specific uncertainties may occur, leading to misestimates of the firm performance. Lastly, macroeconomic uncertainties concern the unforeseeable shifts in the macroeconomic environment. Interest rates can rise or decline, and the economy can perform above or below expectations.

Damodaran (2005) suggests that practitioners should apply as much information as they can legally access in carefully constructed models. Additionally, being as neutral as possible regarding the macroeconomic variables is essential.

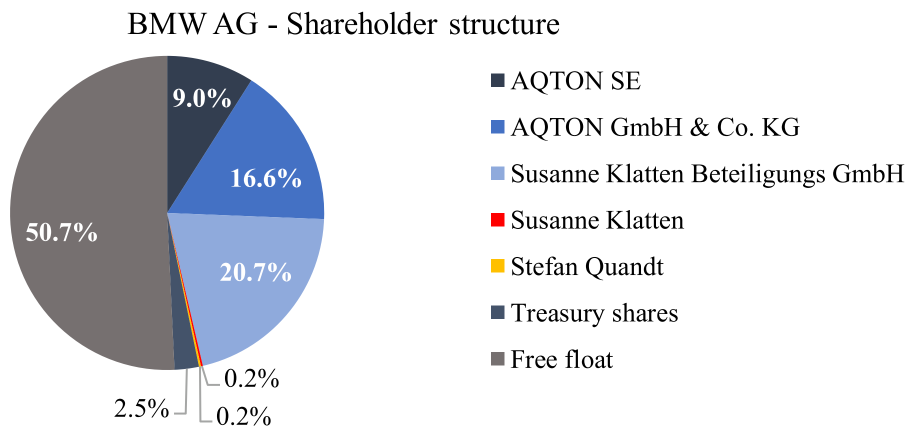
3. Industry analysis

3.1. Company profiles

3.1.1. Bayerische Motoren Werke AG

In March 1916, the “Flugmaschinenfabrik Gustav Otto” developed into the “Bayerische Flugzeugwerke AG” (“BFW”). Simultaneously, in 1917 Karl Rapp founded the “Bayerische Motoren Werke GmbH", which was converted into an "Aktiengesellschaft” (“AG”) in 1918. In a merger as part of an M&A-transaction in 1922, BMW AG transferred its company and brand name to the BFW. This process established today's Bayerische Motoren Werke AG ("BMW AG", "BMW", "the Company" or “the Aquirer”) (BMW Group, 2023). Nowadays, BMW specialises in developing, manufacturing and selling premium and luxury automobiles and motorcycles globally. In addition, the Company also offers a broad range of financial and mobility services. The Bayerische Motoren Werke Group (“BMW Group” or “the Group”), which is a subsidiary of BMW, includes three automotive brands (BMW, Rolls-Royce Motor Cars Ltd. (“Rolls-Royce”) and Mini) and the motorcycles division BMW Motorrad. BMW operates 41 different sales subsidiaries and financial services locations, 31 production and assembly plants and has Research and Development sites in 17 countries. This allows the Company to be present in 140 different countries. Through its extensive automotive sales network of more than 5k dealerships across its three brands, BMW could sell close to 2.4m passenger cars in 2022. In addition, the brand also sold around 200k Motorcycles. The Company’s headquarters is in Munich, Germany. The Company’s maximum share price was EUR 92.95 on January 31, 2022. A financial overview can be seen in Table 13 and Table 14, as well as Figure 7 to Figure 9. Figure 10 depicts a stock-benchmarking. In addition, Figure 1 shows that BMW has major shareholders controlling large stakes of the company.

Figure 1: BMW – Shareholder structure

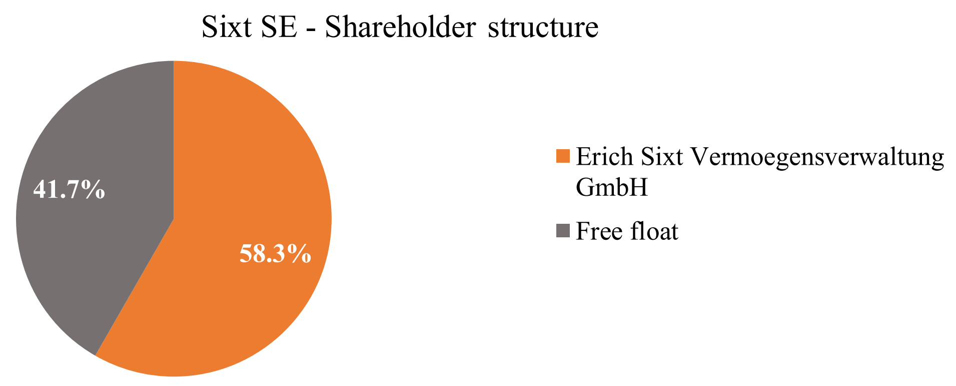


Source: Company information

3.1.2. SIXT SE

Sixt SE ("Sixt" or "the Target") is a listed European stock corporation ("SE") and acts as the parent and holding company of Sixt Group. The company acts as a mobility service provider. Sixt's fleet consists of 240k cars that are primarily from renowned manufacturers, which is also an elementary part of Sixt's strategy. Sixt operates five different sub-brands (rent, share, ride, plus and truck) at around 2.2k locations in more than 100 countries and employs approximately 6.4k employees globally (Sixt, 2022). Through its SIXT-application, Sixt integrates its car and commercial vehicle rental, carsharing, car subscriptions and the arrangement of transfer services within one application. This grants customers access to more than 2.5k corporate partners. Sixt is headquartered in Pullach, Germany. A financial overview can be seen in Table 15 and Table 16, as well as Figure 11 and Figure 12. Figure 13 depicts a stock-benchmarking. Figure 2 shows that Sixt's largest share is owned by the Sixt-family.

Figure 2: Sixt - Shareholder structure



Source: Company information

3.1.3. DriveNow

There already was a partnership between both companies: DriveNow. Founded in 2011, DriveNow was a premium carsharing joint venture which, by 2018, operated in 13 European cities and had 1m customers. DriveNow's fleet comprised 6k cars from BMW and Mini. In 2019, DriveNow merged with Mercedes-Benz's carsharing platform "car2go" to create ShareNow. This granted customers access to a broader range of cars and cities through a fully integrated carsharing app. The French company Free2move acquired ShareNow in 2022, extending its customer base to around 6m customers worldwide (ShareNow, 2023).

3.2. Company strategies

Through constant development, such as technological advancements, today’s world has become more dynamic and fast-paced. The automotive industry, in particular, has always been faced with high levels of competition, company failures and acquisitions. These acquisitions were often driven by a need to scale production and distribution. Global players, such as BMW and Sixt, are confronted with increasing pressures to refine their corporate strategies to mitigate the impact of challenging conditions.

3.2.1. BMW AG

BMW has identified five main circumstances: global competition, megatrends, such as electrification and connectivity, a capital market that is focused on profitability and growth, sustainability and diverging social expectations in the face of climate change (BMW Group, 2021). As a result, the Company has defined a strategy that aligns with external factors. Additionally, through profound analyses of megatrends, BMW has derived a strategy that acknowledges factors crucial to the automotive industry's transformation. The most critical megatrend with extensive implications for the Group is the mobility patterns within society (BMW Group, 2021).

BMW established four cornerstones or elements within their strategy. Firstly, the "Position" element aims to find a sustainable balance between business, environment and society. This includes the commitment to first-class individual mobility with a contribution to sustainable development. The Group is also committed to adherence to the Paris Climate Agreement by promoting the principles of the circular economy throughout their entire product life cycle (BMW Group, 2021).

The next element is defined as "Direction". By maintaining an attractive product portfolio, BMW can offer appealing products to current and future customers. The Company also shapes the future of sustainable mobility with solid effort and capacity for innovations. In addition, continuing to achieve high profitability levels secures the Company's independence as a company (BMW Group, 2021).

"Strategic approach", as the third element, focuses on providing individual customers with a unique overall experience while meeting different requirements globally. This also concerns BMW's assumption that modern vehicles are already one of the most complex and software-intensive assets for customers. They view their vehicles increasingly as digital objects. As a result, the Company expects digital business models to generate a growing percentage of addedvalue in the future.

Lastly, the fourth element comprises "Cooperation". The ambitious strategic targets the Group has set can only be achieved by maintaining a united workforce. Furthermore, creating value through expanding collaborations with partners to secure access to new technologies and defining strategic implications with partners based on the strategic framework is crucial, especially in a world with increasing competitors and market entrants (BMW Group, 2021).

In addition to the four cornerstones of BMW's strategy, the Company has defined an overall corporate strategy called "Neue Klasse". "Neue Klasse" is based on a new vehicle platform that sets new standards oriented towards electric drivetrains. By 2025, BMW wants electric vehicles to account for 30% of total vehicle deliveries, and this ratio should increase to 50% by 2030. BMW is also involved in addressing society's dynamic mobility needs in the face of a growing shortage of space as part of urbanisation processes. The main goal of an initiative called "New Mobility Berlin" in Berlin, Germany, is to make public street spaces more receivable for flexible use cases, such as carsharing and rental bicycles (BMW Group, 2021). This aligns with BMW's previous efforts in the carsharing industry with DriveNow.

In conclusion, BMW's strategy and operations considers various factors and implications the Company faces daily. Especially, shifting vehicle use cases and the future of mobility will confront every vehicle manufacturer with substantial challenges. Nevertheless, these trends also bear opportunities, which the Group can use to develop future business models and cope with these dynamics.

3.2.2. SIXT SE

In the same way as BMW, Sixt also establishes its strategy on four principles. However, the strategy is less sophisticated, as Sixt faces fewer challenges. In particular, the presence in fewer geographies, lower financial risks and a smaller customer base only requires the consideration of a smaller variety of factors and implications.

Firstly, the "Premium experiences" principle aims at ensuring a best-in-class experience. Secondly, the "Desire for growth" comprises the strive to expand the operations further globally. Especially the aim to achieve market leadership for premium-oriented customers influences this principle, as well as the ambition to find a sufficient balance between product groups and the customer base to develop stronger robustness against market volatilities. "Entrepreneurship and Responsibility" concerns a lean and dynamic organisation that fosters freedom and responsibility in the company's ambition for cost excellence. Lastly, the fourth pillar is to ensure a cutting-edge digital process environment that maximises usability for consumers and streamlines internal processes while relentlessly pushing for the development of ingenious business models and products (Sixt, 2023). One of these products is the Sixt application "ONE", which grants customers flexible and efficient access to the entire range of products and services offered by Sixt and its partners.

3.3. Trends and the future of mobility

Ever since Karl Benz patented the first vehicle with a piston engine in 1886 (Mercedes-Benz Group, 2023), the automotive industry has shown substantial transformation and innovation, such as the development of the mass production assembly line by Henry Ford or the introduction of hybrid- and fully electric vehicles. With new challenges and trends emerging, one could argue that the industry is currently experiencing a disruptive Renaissance with four significant trends standing out, the so-called CASE-megatrends: Connected, Autonomous, Shared and Electric ("CASE"). Accordingly, these trends influence several firm performance factors, such as revenues, profits and investments (Deloitte UK, 2023). Despite "Connected", "Autonomous", and "Electric" being undoubtedly crucial disruptors to the industry, this Thesis focuses on the megatrend "Shared".

"Shared" refers to the sharing of vehicles, bicycles and other mobility options and is part of the general future of mobility. However, especially for BMW, the sharing of vehicles is of particular interest. The definition or principle of carsharing is straightforward, and an individual gains the advantages of accessing private vehicles without the responsibilities and total costs of ownership ("TCO") (Shaheen & Cohen, 2012). In addition to the CASE-megatrends, carsharing is also part of the entire concept of Mobility as a Service ("MaaS"), which describes integrating various transport and transport-related services into a single, comprehensive and exhaustive on-demand mobility service. Also, MaaS offers companies new opportunities for potential sales channels, as it grants access to idle customer demand, simplified payment management and extensive data on demand patterns and dynamics (MaaS, 2023).

Generally, today's economy is increasingly becoming shared. As the market research and consulting firm IPSOS (2019) finds in their market study of the future of mobility, close to 33% of the participants in their survey comprising more than 100k participants, have used a shared economy service. Nevertheless, there are significant demographic and geographic differences to be noted in these findings. While only 18% of the generation over 50 years old claims to have used such shared services, already over 50% of the generation between 18 and 34 years old has used these services. The urban dispersion is also significant (38% in megacities vs 28% in small cities or rural areas).

As urbanisation continues to change society, these demographic and societal impacts also become increasingly important for the trend of carsharing and mobility. By 2070, 30% of the world's population is projected to be at least 65 years old, compared to 20% in 2019 (Deloitte Global, 2023). Despite the ageing population having been heavily reliant on privately owned vehicles in the past, the rising popularity of shared transportation modes offers urban, cost-conscious consumers a more affordable option to satisfy their mobility needs (Deloitte Global, 2023). This can also be regarded as an argument concerning discussions about whether the elderly population should still own driving licenses. Shared transportation could still provide them with the required mobility. Additionally, in Deloitte Global's study, around 50% of the 18-34 years old generation in EUROPE5 (France, Germany, Italy, Spain and the United Kingdom) question whether the ownership of private vehicles is still necessary due to their experiences with shared transportation.

In their 2021 annual report, BMW states that they expect individual mobility to remain a fundamental human need for the foreseeable future, despite ownership primarily depending on income, household size and location. As a result, the Company believes that on-demand mobility will remain relevant as a supplementary option (BMW Group, 2021). However, the industry report by IPSOS (2019) argues that ridesharing and carsharing will make car ownership less attractive for young and urbanised people. This is mainly due to congestion through traffic and high parking expenses, which increases the TCO (Deloitte Global, 2023). However, whether this mentality of the Youth will remain when they become parents and more suburban is unclear, as IPSOS (2019) note that older consumers seem less inclined towards giving up the freedom offered to them by owning a car. This statement is supported by a different finding in the study that most consumers struggle to see how shared mobility services can replicate the convenience of a car's ownership. However, this societal opinion is only believed to be temporary, as the transport revolution is still at an early stage. IPSOS (2019) also notes that the generational effect, driven by global warming, should trigger the shift toward sharing, especially in megacities where the consumers' adoption barriers are easier to overcome. The concentrated number of consumers provides sufficient demand for efficiently maintaining a fleet of shared vehicles, which also lowers walking/waiting times to and for car-/ridesharing services.

Laws and regulations also support the trend towards shared mobility solutions. These political decisions often set ambitious goals for decarbonisation (i.e., the European Union's ("EU") "Fit for 55 plan" that requires a shift from cars to other means of transportation (McKinsey, 2021)). Additionally, on a local level, city councils have begun to disincentivise individual car ownership by more actively defining a city's mobility mix, such as increasing investments into bicycle pathways and other more sustainable infrastructure. This is also because 55% or 61% of the mobility mix in urban areas is still comprised of individual vehicles in EUROPE5 and the United States, respectively (Deloitte Global, 2023).

As a result of these government-directed regulations and the growing society's interest in more flexible mobility solutions, new Start-ups and established players are launching vehicle subscription products. This trend is expected to increase by 16% in EUROPE5 and 13% in US markets through 2035 (Deloitte Global, 2023). Because of a trend towards bundled products (i.e., full-service leases and subscriptions), usage-based products are expected to increase by 129% or 77% in Europe5 or the United States by 2035, respectively. Usage-based products focus on the development of innovative products such as “pay-how-you-drive” or “pay-when-you-drive” services that emerge from the rental and carsharing industry (Deloitte Global, 2023).

Despite varying carsharing growth rates around the globe, Shaheen & Cohen (2012) forecast continued worldwide growth in this industry. Subsequently, the entry of traditional car rental companies, such as Sixt, and traditional vehicle manufacturers into the carsharing market has begun. One recent example is the Acquisition of the Europcar Mobility Group ("EMG") by Volkswagen AG ("VWAG"), which establishes EMG as the cornerstone for a new platform covering the customers' mobility requirements (VWAG, 2023). Shaheen & Cohen (2012) expect this trend to reshape and disrupt the automotive industry as new global players emerge. This will lead to increasing levels of competition, greater customer choice and Mergers and Acquisitions.

The automotive industry can be regarded as mature. However, the emergence of new business models and the growing importance of shared mobility solutions will substantially change the automotive industry in the future. Vehicle sales and aftersales turnover could decrease by approximately 16% or 55%, respectively. In contrast, financial services and, especially, MaaS and the car as a platform are identified as growth areas (Deloitte UK, 2023). As a result, the revenue pools of traditional vehicle manufacturers will be greatly diversified by on-demand mobility services, which could generate up to USD 1.5T more in revenues in 2030 than the USD 5.2T achieved through traditional car sales and aftermarket products and services in 2015 (Hampleton, 2023).

Every trend also poses risks and threats to an industry. The "new era of transportation" promises to be less expensive and more desirable for consumers due to the access to a wider variety of cars, and more profitable for the industry, as there are more touchpoints with customers through online purchases, recurring revenues and the ride in autonomous vehicles (IPSOS, 2019). However, and this is presumably one of the strongest arguments for this proposed Merger, sharing rather than owning affects wider areas than simply who is the owner of a car. Many purchases concerning a vehicle (i.e., spare parts, replacement tyres) will move from a business-to-customer ("B2C") relationship to a business-to-business ("B2B") relationship. This defines one of the most significant risks for the industry: losing the connection to the basis, the customers. Vehicle manufacturers would just become vehicle providers to mobility third parties (IPSOS, 2019). Manufacturers must acknowledge this risk and build a stronger presence and leadership in mobility. As a result, vehicle manufacturers are strongly investing in their mobility divisions (IPSOS, 2019).

In addition to threats and risks that come with a trend, there are also opportunities. One of them is abolishing the precondition that car usage depends on car ownership. As IPSOS (2019) found in their survey, 58% expect shared mobility to replace personal car ownership in the future. This greatly influences how carmakers rethink the customer experience that vehicles will have to deliver in the future (McKinsey, 2017). It is precisely about how a car for carsharing or ridesharing will look and feel different to current vehicle generations. Cars will increasingly become platforms for drivers and passengers to use their time in transit to consume various forms of media and services (Hampleton, 2023).

3.4. China

China, as the largest carsharing market, is set to proliferate. In 2017, there were 26k shared vehicles in Tier 1 and 2 cities (e.g., Beijing, Shanghai, Hangzhou, et cetera). This number is expected to grow by approx. 45% p.a. until 2025. This promising outlook is driven substantially by the government’s efforts to combat air pollution, the limited availability of license plates, the growing gap between the number of driving license holders and vehicles and the increasing popularity of shared economy philosophies. However, challenges such as the low pricing compared to traditional taxis, malpractice (e.g., incorrect parking) that increases costs and management issues, and the dependence on government subsidies remain concerns (Roland Berger, 2021).

3.5. Deal and transaction rationale

The trend towards sharing within the automotive industry offers a mix of opportunities and challenges. This will disrupt BMW’s current business model and shift operations from B2C to B2B. However, acquiring Sixt would transfer these revenues and connections in-house. Sixt offers an extensive network of rental locations. Together with BMW’s global network of dealerships, this would develop into a specialised network for shared mobility services. As both companies operate dealerships or locations within the largest urbanised areas, many customers could be targeted directly and offered short distances to shared services.

Additionally, BMW's quest for sustainable materials (circular economy) and drivetrains (electromobility) meets the younger generation's increasing focus to mitigate, as far as possible, climate change and incorporate sustainability into their everyday life. Also, BMW's expertise in autonomous driving can be combined with the user data from Sixt’s application to offer the best available customer experience. Sixt's existing application, "ONE", will remain an industry-leading source for car-rental and carsharing services. As a result, BMW could mitigate losses from decreasing revenues of aftermarket sales. Sixt could continue to follow its strategy of offering premium vehicles to a more extensive target group and in more geographies.

4. Valuation

This part of the Thesis covers the intrinsic (DCF) and relative (Comparables) valuation of BMW and Sixt. In addition, a DCF-valuation of the combined entity is performed with synergy effects. The valuation provides a valuation range and target price indicating an implied fair value per share. The Acquirer and Target have a fiscal year ending as of December 31. Thus, December 31, 2022, is used as a valuation date, and all analyses described hereinafter are based on this date.

4.1. CAPM

4.1.1. Risk-free rate

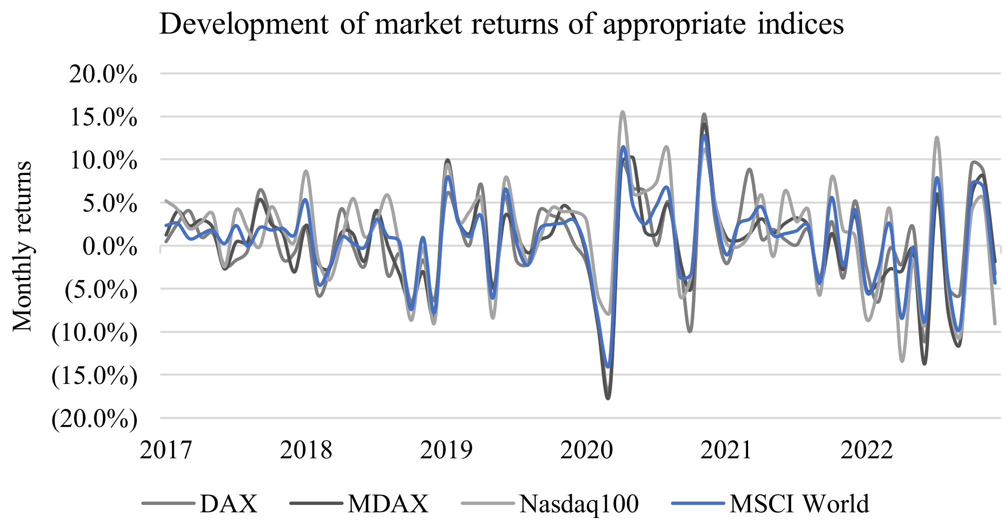
As previously discussed in the literature review, every investment carries a particular risk. Therefore, the yield of government bonds will be used as a proxy for the Rf-rate, as it is relatively riskless. As the Acquirer and the Target report per the German Commercial Code ("HGB") and are headquartered in Germany, the Rf-rate and MRP are computed similarly for both stand-alone valuations.

Industry experts commonly assume the risk-free rate for Germany using the "Basiszinssatz" from Basiszinskurve.de (Basiszinssatz, 2019), listed at 2.03%. Consequently, this will also be used as the appropriate risk-free rate for further analyses.

4.1.2. Market risk premium

In recent years, the globalised world has faced several challenges that may have affected the volatility of country indices and market returns. The following (Figure 3) graph depicts the historical market development of the German stock market indices DAX (BMW) and MDAX (Sixt). In addition, for reference, the Nasdaq100's and MSCI World's development is also presented.

Figure 3: Development of the market share of four indices



Source: Refinitiv

The MSCI World shows slightly less volatile market returns, as it is more diversified by including over 1,000 constituents from approximately 20 countries (JustETF, 2023) and is, therefore, less prone to unsystematic risk. Hence, the MSCI World Index was chosen as the basis for the MRP.

The monthly Total Return Index for a 5-year period was withdrawn from Refinitiv. In a subsequent step, the excess return was computed by deducting the monthly government bond returns from the monthly index return. This excess return was then annualised to receive a MRP of 7.34%.

4.1.3. Cost of Equity – BMW AG

The calculation of the Cost of Equity ("Re") is based on the CAPM and includes the Rf-rate, the levered beta and the MRP (please see Equation 1 for a legend of the constituents and abbreviations).

For the calculation/determination of the Rf-rate and MRP, please refer to sections 4.1.1 and 4.1.2 BMW's 5-year beta was withdrawn from Refinitiv and amounts to 1.22, which implies that BMW demonstrates a higher volatility than the overall market. Consequently, the cost of equity of BMW is 11% (see Table 22), which is close to Refinitiv's indication of this rate (10.6%).

Since BMW also has preferred stock outstanding, this type of equity cost must also be included in the weighted average cost of capital computation in a subsequent step. It amounts to 7.3% (see Table 23) and is determined by dividing the latest dividend declared on preferred stock (EUR 5.82) by the share price as of December 31 (EUR 79.55).

4.1.4. Cost of Equity – SIXT SE

The exact same process of calculating the cost of equity and preferred stock for BMW is applied to Sixt. However, Sixt's levered beta is significantly higher than BMW's, amounting to 2.00. This means that Sixt is even more volatile than BMW compared to the market, and investors request a higher return on equity due to the higher level of risk.

As a result, Sixt's equity cost is equivalent to 16.7%, which is 1.3 percentage points ("Pp") higher than the cost of equity indicated by Refinitiv (15.4%). Just like BMW, Sixt also has preferred stock outstanding. With a share price of EUR 54.5 at the valuation date and the latest declared dividend of EUR 6.13, the cost of preferred stock amounts to 11.2%.

4.2. Cost of Debt

4.2.1. BMW AG

BMW accounted for a positive net interest expense of EUR 416m on their Income statement in 2022, which is relatively low compared to the EUR 94,196m in total debt outstanding (Book Value). The annual report does not provide sufficient information regarding this topic. As a result, the cost of debt was computed by calculating an incremental borrowing rate based on ratings and default spreads.

Appendix Table 20 shows that BMW received two solvency ratings from the credit-rating agencies Moody's and Standard & Poor's. These ratings can be matched with Damodaran's ratings table and default spreads as of January 31, 2023 (Damodaran, 2023). Correspondingly, the default spread for an A2 and A credit rating is 1.42%. Adding the Rf-rate to this spread results in an incremental borrowing rate ("IBR") of 3.45% (see Table 21). The yield of the BMW bond maturing last (FY33) is 3.25%, which shows that the IBR is a better proxy for the pre-tax cost of debt than historic interest expenses and will therefore be used for subsequent parts of the valuation.

4.2.2. SIXT SE

Sixt's pre-tax cost of debt was determined similarly to BMW's. However, no credit ratings were available as information from the company. As a result, an implied rating was withdrawn from Refinitiv. This Ba1/BB+ rating corresponds to a default spread of 2.42% (see Table 39). By adding the risk-free rate of 2.03%, Sixt's IBR can be defined as 4.45%, which is close to Refinitiv's indication of 4.1%, therefore also being a sufficient proxy for the pre-tax cost of debt.

4.3. Weighted average cost of capital

4.3.1. BMW AG

The peer group for determining a median unlevered industry beta comprises 12 automobile manufacturers from various geographies (see Table 24). The levered betas and tax rates are retrieved from Refinitiv. Additionally, the MVs of equity are computed by multiplying the last share closing price of the calendar year 2022 with the shares outstanding as of the valuation date, which are also withdrawn from Refinitiv. Next, the MVs of debt had to be determined (see Table 17). First, all bonds outstanding with the appropriate year of maturity, the net interest expense, cost of debt and total debt had to be retrieved per company from Refinitiv. To calculate the weighted average maturity of these bonds, in years, the amount outstanding (per year) was divided by the total amount outstanding and multiplied by the years to maturity. Then a sum of all ratios was calculated, indicating the average maturity. In a third and last step, the MVs of debt were computed by using the formula below:

Equation 2: Market Value of Debt

$$MV\ of\ Debt = C * \left(\frac{1 - \frac{1}{(1 + r_d)^{ta}}}{r_d} \right) + \frac{FV}{(1 + r_d)^{ta}}$$

whereas:

C = Interest Expense (annually) | r_d = *cost of debt*

ta = Weighted average maturity of the bonds | *FV = Total bank debt*

The levered betas of the peer group are then unlevered following the formula below:

Equation 3: Unlevered Beta

$$\beta_U = \left(\frac{\beta_L}{1 + \frac{D}{E} * (1 - T_C)} \right)$$

whereas:

β_U = *Unlevered beta* | $\frac{D}{E}$= *Debt/Equity-ratio*

β_L = *Levered beta* | *Tc = Effective tax rate*

Unlevering a beta removes the financial effects from leverage, allowing investors to analyse how much risk a firm's equity carries compared to the market. The result is a peer group's median unlevered beta of 0.67 (see Table 24).

This unlevered beta can then be relevered with BMW's capital structure with the following formula:

Equation 4: Levered Beta

$$\beta_L = \beta_U * \ (1 + \frac{D}{E} * (1 - T_C))$$

whereas:

β_U = *Unlevered beta* | $\frac{D}{E}$= *Debt/Equity-ratio*

β_L = *Levered beta* | *Tc = Effective tax rate*

BMW's MV of equity has the particularity of including the market capitalisation of preferred stock. The MV of debt is determined in the same way as for the peer group. As a result of relevering the beta, BMW's levered beta is 1.56[2]. As this levered beta is higher than the beta[3] used previously to compute the cost of equity (11%), a new cost of equity was computed, amounting to 13.48% (see Table 26).

As previously defined in the literature review, the weighted average cost of capital considers all sources of funding (debt and equity) and weights their cost with their respective capital structure:

Equation 5: Weighted average cost of capital

$$r_{WACC} = r_e * \frac{CE}{C} + r_{pe} * \frac{PE}{C} + r_d * \frac{D}{C} * (1 - T_c)$$

whereas:

r_{WACC} = *Weighted average cost of capital*

r_e = *cost of equity*

CE = MV of Common Equity

r_{pe} = *cost of preferred equity*

PE = MV of Preferred Equity

r_d = *cost of debt*

D = MV of Debt

C = Total Capital (Sum of CE, PE, D)

T_c = *Effective tax rate*

BMW's weighted average cost of capital for our valuation equals 6.65%, slightly higher than the WACC retrieved from Refinitiv (5.70%) (see Table 26).

4.3.2. SIXT SE

Sixt operates within a market that has been heavily transformed in recent years, with new competitors entering the market and challenging existing business models. However, many of those companies are not part of stock indices, so financial data is often not publicly available. As a consequence, the peer group of Sixt only comprises seven publicly listed companies and their MVs of equity and debt (see Table 36) were calculated similarly to BMW, and the peers' tax rates and levered betas were also retrieved from Refinitiv. The unlevered betas were calculated with the same process and formula (see Equation 4) as for BMW.

Table 42 shows the results of this unlevering process, indicating a median unlevered beta of 1.03. As there are two outliers within the peer group (Tourism Holdings Ltd and Avis Budget

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[2] see Appendix Table 27

[3] 1.22

Group Inc), the median unlevered beta will serve as the basis for the relevering procedure (see Equation 5), cost of equity re-calculation and WACC estimation, as outliers do not distort a median.

The resulting levered beta, based on the industry median, of Sixt can therewith be denoted with 1.81[4]. This translates into a cost of equity of 15.3% which is 1.4Pp lower than the previously computed cost of equity based on the historical five-year monthly beta (16.7%). Combined with the cost of debt (see Table 39) and the cost of preferred stock (Table 41), Sixt's WACC can be computed with Equation 6 and results in 10%[5].

4.4. Forecasts and Assumptions

4.4.1. BMW AG

The revenues of BMW are split into five line items on the income statement: Automotive, Motorcycles, Financial Services, Other entities and Consolidations (BMW, 2023). For this Thesis, the revenues of the first three line items were forecasted in detail. In contrast, the other two were forecasted by taking an average of a period consisting of one year prior to Covid-19 (2019) to approximately one year after Covid-19 (2022) and multiplying this value with the compounded annual growth rate ("CAGR") of all historical years.

4.4.1.1. Segment: Automotive

The Automotive segment accounted for approximately 85% of the Company's revenues and required a detailed and sophisticated forecasting and assumptions schedule. The European Central Bank ("ECB") or the German central bank (Bundesbank) usually target an inflation rate of approximately 2%, however, the German inflation rate has increased significantly from 0.5% in 2020 to around 8%[6] at the end of 2022. This was primarily due to macroeconomic shocks, such as Covid-19 and the Ukraine war. Especially the automotive industry was faced with distressed supply chains and a scarcity of resources. As a result, prices for automotive vehicles have also increased over the historical period. With this in mind, the forecast of BMW's revenues is primarily based on the development of units sold and the number of dealerships (see Table 27) to mitigate the sole increase of revenues due to increasing prices, as this may not depict the accurate financial outlook of a company. The automotive analysis was split into the

[4] See Table 43
[5] See Table 44
[6] DESTATIS – Statitisches Bundesamt (2022)

three group brands, BMW, Mini and Rolls-Royce, and a scenario analysis was conducted with a base, upside and downside case.

In a next step, the scenario analysis was performed for the units delivered per brand (see Table 28). Interestingly enough, and referring to the revenue increase due to increasing prices, the units sold of BMW, which made up approximately 90% of the total units sold in 2022, only grew with a CAGR of 0.1% in the past, while Rolls-Royce grew by around 12.4% annually.

The units delivered per dealership and brand could be calculated historically and forecasted. The average list vehicle price had to be estimated for all three brands to get an estimated revenue per dealership. For this, the 2023 list prices were retrieved from the brands' websites for BMW and Mini (see Table 79 and Table 80). No specific prices were publicly available for Rolls-Royce, so price estimates from automotive magazines were used as an orientation (see Table 79). These base list prices were then downward adjusted for the macroeconomic factors mentioned earlier. In addition, a scenario analysis based on potential price increases was conducted, resulting in the prices shown in Table 29.

Then, a trailing three-year average of the units delivered per dealership and brand was multiplied by the vehicle price estimates. Finally, this was multiplied by the estimated number of dealerships per brand and summed to receive an estimated revenue for the automotive segment (see Table 29).

4.4.1.2. Segment: Motorcycles

A similar approach as for the forecast of the automotive segment's revenues was used for the motorcycles segment. First, the number of dealerships and units sold were forecasted, including a scenario analysis. Second, the total number of motorcycles sold per dealership was calculated. The average list price of a BMW motorcycle was retrieved, adjusted and forecasted with estimated price increases in per cent, including a scenario analysis. This figure was multiplied by the average number of units sold per dealership over three years. Lastly, this estimate was multiplied by the number of dealerships to receive an estimated revenue for the Motorcycles segment. Please see Table 30 for all calculations and estimates.

4.4.1.3. Segment: Financial Services

The revenues of the Financial Services segment are based on the forecasts of the contract portfolio and revenue per contract. While the number of financial services contracts was estimated concerning the historic unit development, the forecast of the revenue per contract was estimated with potential growth rates. For both approaches, a scenario analysis was performed.

Lastly, the estimated revenue was computed by averaging three-trailing years of the number of contracts with the revenue per contract. Please refer to Table 31 for a full overview of the revenue estimates.

The revenue forecasts (Table 14) are in line with analyst consensus.

4.4.1.4. Earnings before interest and taxes

In the company's annual report, BMW denotes its financial goal to reach an Earnings before interest and taxes ("EBIT") margin between 8% and 10% for the Automotive and Motorcycle segments (BMW, 2023). This served as the basis for the forecast of the EBIT per segment for the forecasting period from FY23F to FY28F. The EBIT margin of the other three segments was forecasted using the CAGR of the historical period, which was multiplied by a multiplier that depends on the case chosen in the scenario analysis. The consolidated EBIT for all segments combined aligns with analyst consensus from Refinitiv (see Table 13 or Table 52).

4.4.2. SIXT SE

Sixt's revenue is heavily dependent on developments within the global travel and tourism market, which generally influences the car rental market. The tourism market is expected to grow at a CAGR of 7.9% in the years after Covid-19 until 2026. In addition, worldwide revenues in the car rental sector are expected to increase by 3.5% yearly from 2023 to 2027 (Statista, 2022) (see Table 45). These two values serve as an indication for the revenue and EBIT forecast. For the revenue estimates, two separate approaches were chosen:

4.4.2.1. Revenue by Segment

Sixt reports its revenues in 5 segments: Germany, Europe, North America, Other and Reconciliations (Sixt SE, 2023). The revenues of the "Other" segment was forecasted by averaging four prior years and multiplying with the historic average revenue growth rate. The "Reconciliations" segment was forecasted using an average of four years-trailing. For the geographical segments, the future revenue growth rates were estimated through a scenario analysis (base, upside and downside case) which determines the growth value through a multiplier that is oriented on the market growth rates for the tourism and car rental industry (see Table 46).

4.4.2.2. Revenue by fleet size

The basis of Sixt's business model is the vehicles available to rent. As a result, it is essential to consider the development of the rental fleet while estimating future revenues. Sixt operated a fleet of 270,900 vehicles as of December 31, 2022 (Sixt SE, 2023). These vehicles are split into approx. 138,400 group vehicles and 132,500 vehicles from franchisees or cooperation partners. In addition, the CAGRs of both fleet segments varied significantly over the historical period from FY17 to FY22 (3.9% vs 1.3%, respectively). Consequently, the fleets were estimated separately to provide a more accurate revenue forecast using this approach. In the base case, the CAGRs served as the expected future annual growth rate for both fleets.

Next, the average revenue per vehicle in the total fleet was calculated by dividing the total revenues by the fleet size. Again, a base, upside and downside case were established to forecast this value. Lastly, the estimated revenue per vehicle was multiplied by the number of vehicles in the total fleet (incl. franchisees and cooperation partners) to provide an accurate revenue forecast. Please see Table 47 for a comprehensive overview.

The final revenue is the average of the revenue by segment and revenue by fleet approach plus “Other revenues”, which were forecasted with a trailing four-year average**.** These values are in line with analyst estimates from Refinitiv (see Table 16).

4.4.2.3. EBIT

The EBIT was forecasted using an average of four historic EBIT margins and multiplying this with an EBIT multiplier. The EBIT's resulting values align with analyst consensus, with EBIT margins ranging from 14.2% to 17.3% (see Table 15).

4.4.3. Schedules

The values for Debt, Property, Plant and equipment (“PP&E”), Capital Expenditures (“CapEx”), Depreciation and Amortisation (“D&A”), and Retained earnings were all forecasted using appropriate schedules. As the same method applies to both BMW and Sixt, the methodology will be explained for both simultaneously for simplification.

4.4.3.1. Schedules – Debt

Total debt was forecasted using a debt schedule. First, the total historical debt was determined by summing the balance sheet’s line items related to debt and leases from the current and non-current liabilities. This served as the value at the beginning of the period ("BoP"). Then the total debt issued was added, and the total debt repaid was subtracted from the total debt outstanding. Both debt inflows/outflows are part of the Cash Flow from financing activities. The sum is denoted as the total debt at the end of the period (“EoP") and serves as the next period's BoP. Multiplied with the appropriate interest rate for the respective company

(3.45% for BMW; 4.45% for Sixt), the period's interest expense was determined (see Table 32 and Table 48).

To calculate the net debt at EoP, which is the difference between debt and cash at this point, and the related net interest expense/income, the EoP cash balance was still required to be computed. For this, the previous period's cash and cash equivalents ("C&CE") line item from the balance sheet or cash flow statement served as the EoP value for each year and was multiplied by the respective cost of debt to receive the interest income. The net interest expense or income was then computed by taking the sum of the interest expense and interest income. These values were then reflected on the forecasted income statements (net interest expense) or balance sheet (total debt) (see Table 70 and Table 72).

4.4.3.2. Schedules – PP&E, CapEx and D&A

For BMW and Sixt, PP&E has a significant share of approximately 13% or 11%, respectively, of their total balance sheet value or total assets (see Table 72 and Table 75). Consequently, forecasting this value appropriately is important, as it can substantially affect the financial position. Net PP&E is calculated using the prior year's EoP balance sheet value and adding CapEx and subtracting D&A. It must be noted that these D&A expenses exclude any amortisation of Intangibles or Goodwill.

While BMW is expected to invest heavily in their factories to be capable of manufacturing the next generation of vehicles ("Neue Klasse"), Sixt will focus on investing in integrating more premium vehicles into their fleet. Both processes are determined in their corporate strategies and result in increasing CapEx and D&A expenditures in the coming years. Both are forecasted by estimating a share of the total net PP&E-BoP values (see Table 33 and Table 49). BMW's CapExs are expected to increase from 29% of net PP&E to 30% over the forecasting period. In addition, D&A expenses are expected to increase from 18% of net PP&E to 20% over the same period. Sixt's CapExs are expected to increase from 13% to 20%, while D&A expenses are expected to increase from 22% to 35% over the forecasting period.

4.4.3.3. Retained earnings

The cumulative retained earnings were estimated with the following formula:

Equation 6: Cumulative retained earnings

$$\begin{aligned} &Cumulative\ retained\ earnings \\ &\qquad = Retained\ earnings\ (EoP) + Net\ income - Dividends\ paid \\ &\qquad - Share\ buybacks \end{aligned}$$

whereas:

Retained earnings (EoP) = cumulative retained earnings from the previous year

Net income = baseline profit from the income statement

*Dividends paid = net income * payout ratio*

Share buybacks = shares repurchased by the company

The payout ratio determines the dividends paid each year and how much of the net income is paid or retained. Please see Table 34 and Table 50 for the calculations.

4.4.4. Net working capital

The working capital is a financial metric determining the capital required to allow the business to run its day-to-day operations. It is calculated by subtracting the current liabilities from the current assets.

Several balance sheet line items construct the net working capital. However, for this estimation, only Inventories, Trade receivables and Trade payables were forecasted in particular, while the other line items were forecasted using a trailing three year average. The Days Inventory Outstanding ("DIO") is a financial metric that shows how many days a company holds its inventory before selling it and is, therefore, a good proxy for the operational efficiency of a company (see Equation 8). The Days Receivables Outstanding ("DRO") indicates the period between a company's invoice and the receipt of payment (see Equation 9). Lastly, the turnover ratio Days Payables Outstanding ("DPO") represents the period the company requires to pay its suppliers (Equation 10).

Equation 7: Days Inventory Outstanding

$$DIO = \left(\frac{Average\ Inventory}{Cost\ of\ Goods\ Sold}\right) * Days$$

Equation 8: Days Receivables Outstanding

$$DRO = \left(\frac{Average\ Trade\ receivables}{Cost\ of\ Goods\ Sold}\right) * Days$$

Equation 9: Days Payables Outstanding

$$DPO = \left(\frac{Average\ Trade\ payables}{Revenue}\right) * Days$$

whereas:

Average = Ending value – beginning value (from the balance sheet)

Days = number of days in the year

BMW shows a significantly higher average value for DIO than Sixt in the historical period (85 vs 28, respectively) (see Table 35). In addition, the DRO and DPO of Sixt are substantially higher than those for BMW (see Table 51).

4.5. Discounted Cash Flow Analysis

As addressed in the literature review, the DCF has limitations with regard to the assumption of a constant capital structure. After all, forecasts were conducted only with information that is publicly available, so a precise determination of the companies' future capital structure poses a significant challenge. In their annual report, BMW denotes that the company follows a dynamic capital structure, and Sixt does not disclose any information regarding this topic. As the analysis shows, the capital structure of both companies only changes with very little volatility, so a constant capital structure will be assumed for the forecasting period, resulting in the application of a constant WACC.

Two different methods were used to determine an implied diluted share price. First, the Gordon Growth method, which is based on the calculation of the unlevered free cash flow (uFCF) with the following formula:

Equation 10: Unlevered Free Cash Flow

$$uFCF = EBIT\ (1 - T_C) + D\&A + Change\ in\ NWC - CapEx$$

whereas:

EBIT (1-Tc) = Net operating profit after tax

The uFCF is constructed over six periods, after which a terminal value ("TV") is used to capture future cash flows in perpetuity. This terminal value is calculated with the following formula:

Equation 11: Terminal Value in Perpetuity

$$TV = \left(\frac{uFCF_6 * (1+g)}{r_{WACC} - g}\right)$$

whereas:

$uFCF_6$ = *the unlevered free cash in year 6*

g = terminal free cash flow growth rate

r_{WACC} = *weighted average cost of capital*

The uFCF, as well as the TV, are then discounted using the WACC discount rate to obtain a PV of future cash flows:

Equation 12: Present Value of Unlevered Free Cash Flows

$$PV = \left(\frac{uFCF_t}{(1+r_{wacc})^t}\right)$$

whereas:

$uFCF_t$ = *unlevered free cash flow in year t*

r_{WACC} = *weighted average cost of capital*

t = year of cash flow

Second, the Exit multiple method determines a company's terminal value by multiplying an Enterprise Value/EBITDA ("EV/EBITDA") multiple with the forecasted Earnings before Interest, Taxes, Depreciation and Amortisation ("EBITDA") value of the last forecasted year.

4.5.1. BMW AG

The tax rate used in this calculation is the historical average of the effective tax rate, which amounts to 24.1%. For the detailed WACC calculation, please refer to section 4.3.1.. To forecast the last unlevered free cash flow into perpetuity, the Terminal FCF growth rate is set to half the usual, targeted inflation rate of 1%. This is standard practice amongst industry experts. BMW had an actual enterprise value ("EV") as of the valuation date of EUR 130,534m. This is calculated via the Equity bridge method:

Equation 13: Equity Bridge

$$\begin{aligned} Enterprise\ value &= Equity\ value + Preferred\ Stock + MV\ Debt + Minority\ interest \\ &- Cash\ and\ Cash\ Equivalents \end{aligned}$$

The equity value can be computed by multiplying a company's outstanding shares with the current share price, which equals the market capitalisation. The closing share price on December 31 was EUR 79.55 for preferred stock and EUR 83.38 for common stock, translating into a market capitalisation of EUR 49,855m (excl. the MCap of preferred stock (EUR 4,696m)). The EV/EBITDA multiple used in the exit multiple method equals 5.5x. Following both approaches described in section 4.5. a first valuation range can be set for BMW by dividing the equity value by the total diluted shares outstanding:

Table 1: BMW - Discounted Cash Flow result

	Gordon Growth Method:	Exit Multiple Method:
Terminal EBITDA Multiple:		*5.5x*
Implied Terminal Value:		154,687
(+) PV of Terminal Value:	98,394	105,095
(+) Sum of PV of Free Cash Flows:	42,980	42,980
Implied EV (in EURm):	**141,374**	**148,076**
(+) Cash & Cash-Equivalents:	13,340	13,340
(-) Preferred Stock:	(4,696)	(4,696)
(-) Market Value of Total Debt:	(85,160)	(85,160)
(-) Minority Interest:	(4,163)	(4,163)
Implied Equity Value (in EURm):	**60,695**	**67,397**
Diluted shares outstanding:	657	657
Implied diluted share price:	**€92.39**	**€102.59**

Source: S&P CapitalIQ, own calculations

For a complete overview of the DCF-analysis, please see Table 52.

4.5.2. SIXT SE

The tax rate used in this calculation is the historical average of the effective tax rate, which amounts to 25.64% (see section 4.3.2. for the detailed WACC calculation). The Terminal FCF growth rate used to forecast the last unlevered free cash flow into perpetuity is the same as for BMW (1%). Sixt has an actual enterprise value at the valuation date of EUR 5,720m.

Sixt's closing share price on December 31 was EUR 54.50 for preferred stock and EUR 85.95 for common stock, which translates into a market capitalisation of EUR 2,610m (excl. the MCap of preferred stock (EUR 903m)). The EV/EBITDA multiple used in the exit multiple method equals 7.9x.

Following the same approach as discussed earlier and also applied in BMW’s valuation, a first valuation range for Sixt could be determined by dividing the equity value by the total diluted shares outstanding:

Table 2: Sixt - Discounted Cash Flow results

	Gordon Growth Method:	Exit Multiple Method:
Terminal EBITDA Multiple:		*7.9x*
Implied Terminal Value:		7,383
(+) PV of Terminal Value:	4,628	4,163
(+) Sum of PV of Free Cash Flows:	2,579	2,579
Implied EV (in EURm):	**7,206**	**6,742**
(+) Cash & Cash-Equivalents:	27	27
(-) Preferred Stock:	(903)	(903)
(-) Market Value of Total Debt:	(2,233)	(2,233)
(-) Minority Interest:	-	-
Implied Equity Value (in EURm):	**4,096**	**3,632**
Diluted shares outstanding:	47	47
Implied diluted share price:	**€87.26**	**€77.37**

Source: S&P CapitalIQ, own calculations

For a complete overview of the DCF-analysis, please see Table 55.

4.6. Comparable Companies Analysis

Next to the DCF-analysis a Comparables analysis was conducted. It involves retrieving the Enterprise value, Revenue, EBITDA, Equity value and Net income and calculating the following financial KPIs:

Equation 14: Key performance indicators

Enterprise Value/Revenue – Multiple ("EV/Revenue")

Enterprise Value/EBITDA – Multiple

Price/Earnings - Multiple ("P/E", Equity Value divided by Net income)

It is important to note that unlike for the EV/EBITDA and EV/Revenue, where the Enterprise value is calculated, the P/E-ratio determines a company's equity value. A "reverse"-Equity bridge can then be used to calculate the firm's implied EV (please see Equation 13). The following analyses are based on EVs, revenues, EBITDAs, Equity values and Net incomes of the (reported) FY22 financial statements or values.

4.6.1. BMW AG

BMW's Comparables group is constructed with the same twelve companies as in the process of the WACC calculation. Despite the median being unaffected by outliers, Tesla Inc was excluded from the median and average statistics, as the company showed significant outliers for the EV/EBITDA and P/E-multiple and to maintain consistency. In addition, Renault SA was excluded solely from the P/E-multiple average, as it was also deviating substantially from the other Comparables. As a result, the multiples in Table 53 could be determined.

As the peer group only incorporates 12 companies, the EV/EBITDA-multiple was adjusted in accordance with industry multiples retrieved from Refinitiv to reflect a better picture of the industry's performance (8.0x). The EV/Revenue-multiple is based on the peer group's average (1.0x). Lastly, the P/E-multiple (8.9x) is based on the average, as it is closer to Refinitiv's reported industry multiple of 13.1x (see Table 54). This led to the following valuation range being determined through the multiplication of the multiples' denominator and division with the diluted shares outstanding (657m):

Table 3: BMW - Valuation range

	EV/EBITDA	EV/Revenue	P/E
Implied Equity value (in EURm):	69,929	66,627	80,735
Implied diluted share price:	€106.44	€101.42	€122.89

4.6.2. SIXT SE

Sixt's Comparables group is constructed with the same seven companies as in the process of the WACC calculation. Despite the median being unaffected by outliers, Uber Technologies Inc and GreenMobility S/A were excluded from the median and average statistics, as the companies showed significant outliers for two or all three multiples and to maintain consistency. In addition, Tourism Holdings Ltd was excluded solely from the P/E-multiple average, as it was also deviating substantially from the other Comparables. As a result, the multiples in Table 56 could be determined.

As the peer group only incorporates seven companies, the EV/EBITDA-multiple was adjusted for the same reason as for BMW (11.2x). The EV/Revenue-multiple was set to 2.3x, equal to the median. For the P/E-Multiple (11.6x), the Refinitiv industry multiple was taken, as it is closer to Sixt's P/E-ratio of 9.1x, and the multiples from the Comparables group are substantially lower (see Table 57).

This led to the following valuation range being determined through the multiplication of the multiples' denominator and division with the diluted shares outstanding (47m):

Table 4: Sixt - Valuation range

	EV/EBITDA	EV/Revenue	P/E
Implied Equity value (in EURm):	5,038	3,903	4,475
Implied diluted share price:	€107.33	€83.14	€95.32

4.7. Valuation of the combined firm

4.7.1. WACC Assumptions

First, as already thoroughly discussed in the literature review and this prior valuation part, the weighted average cost of capital is one of the most critical components of every valuation. As now two companies are combined, just assuming the WACC of the Acquirer to be equal to the WACC of the combined firm is not sufficient. To determine the magnitude of the influence of both companies on the combined firm, the average enterprise values from all valuation techniques performed for the stand-alone firms were averaged, added together and then weighted. As a result, BMW makes up approximately 95% of the combined stand-alone EVs, while Sixt accounts for the remaining 5% (see Table 61).

In a first step, the previously determined levered betas of both separate entities were again unlevered (see Equation 4). Second, these unlevered betas were averaged and weighted according to their summed EV share. The final unlevered beta for the combined is then the average of the average unweighted beta and the sum of both weighted betas (see Table 64). In the next step, this unlevered beta was again re-levered using the capital structure of the new combined firm. It must be noted that in the process of merging both firms, the equity from preferred stock was converted into common stock. Consequently, the new equity of the merged firm is the sum of both market capitalisations.

The new effective tax rate was calculated by combining all line items of the income statement, dividing the summed income taxes expense by the earnings before taxes (incl. unusual items), and then taking an average over the forecasted period, which amounts to around 22%. The final new levered beta equals 1.69; the calculation can be seen in Table 65.

The new cost of debt was constructed by applying the weights determined by summing both stand-alone average EVs, resulting in a weighted pre-tax cost of debt of 3.5% (see Table 62). Lastly, the combined firm's cost of equity is constructed with the MRP of 7.34%[7] and Rf-rate of 2.03%[8] and equals 14.4% (see Table 63).

Combining all WACC inputs described above, the merged firm's cost of capital can be estimated at 7.40% (see Table 66).

[7] see section 4.1.2. for the derivation of the MRP
[8] see section 4.1.1. for the derivation of the Rf-rate

4.7.2. *Discounted Cash Flow Analysis – Combined firm without Synergies*

The intrinsic value of the combined firm without synergies is equal to the sum of both firms' stand-alone intrinsic values. This amounts to an EV of EUR 148,580m (see Table 7).

4.7.3. *Discounted Cash Flow Analysis – Combined firm with Synergies*

Synergies are a common topic in Mergers and Acquisitions. As discussed in the literature review earlier, synergies are an increased merged firm's value compared to two stand-alone firms. However, it is more than just an increase in value. Synergies describe the excess value created, which is often depicted by saying: 1+1=3.

4.7.3.1. *Synergy assumptions*

To determine the combined company's value, synergy assumptions had to be made. All synergies are constructed with phase-in periods, which spread the impact of the synergy over the forecasting period.

Firstly, the Merger's impact on revenues was assumed. This Merger can be expected to positively affect revenues because an increased exposure to target groups can be assumed. Existing BMW group dealerships could also incorporate rental cars. Additionally, Sixt can be expected to offer more BMW group vehicles in their fleet, which matches their corporate strategy of increasing the share of premium- and electric vehicles. However, existing and prospective BMW customers could switch to renting vehicles instead of leasing or purchasing them. To account for both possible "directions", the expected revenue synergy is set to 0.75%. These synergies will not occur directly in the first year (2023) but rather phase in progressively over the forecasting period (FY23: 10%; FY24: 10%; FY25: 15%; FY26: 20%; FY27: 20%; FY28: 25%).

Secondly, selling and administrative expenses can be expected to decline slightly because of the Merger and have been set to a synergy effect of -2.5% over the six forecasting years. These synergies may occur primarily due to a reduction of the workforce, especially within Sixt, consolidation of buildings and an increased focus on further developing the app-based business model, supported by increased C&CE availabilities and resources through BMW.

The next expected synergy is connected to the prior: research and development ("R&D") expenses. Further developing the app will require higher investments into R&D and supposedly an increased existing workforce on this project. A shifting focus of BMW and Sixt towards autonomous vehicles and other future mobility concepts would also require higher R&D

investments for integrating those technologies within the new generation of vehicles. As a result, these synergies will increase R&D expenses by 5%.

The sources used are constructed with the Target's equity value (EUR 4,096m), advisory fees (5% from the equity value), and legal and other fees amounting to EUR 50m. As a result, EUR 4,351m in cash will be required. Integration costs will be reported as a Cash outflow from investing activities on the cash flow statement and are set to EUR -150m. The integration costs are expected to be spread until the integration is concluded by the end of FY24. These costs mainly concern combining two separate entities' organisational systems into one, as well as integrating existing mobility services into one application.

The Merger can be expected only to have a significant effect on Sixt's capital expenditures. This is due to a better bargaining position while procuring vehicles, which lowers their costs. These synergies are set to 20%, as this is a significant part of their business model.

Lastly, as part of the cash acquisition, the C&CE on the cash flow statement of the combined entity will decrease by the total cash used in the transaction, which is EUR 4,351m. This will be split into two deductions over two years (FY23: EUR -3,046m; FY24: EUR -1,305m).

As part of the Merger, two additional non-cash expenses will be incurred: the amortisation of new intangibles (EUR -11m per year) and the deprecation of PP&E write-ups (EUR -8m per year). These costs will be expensed on the income statement of the combined firm and on the cash flow statement as an outflow of the cash flow from operating activities. Please refer to Table 58 for all synergy assumptions made and Table 59 and Table 60 for the financial statements including synergy effects.

4.7.3.2. Discounted Cash Flow analysis

Incorporating the synergy assumptions characterised above into the combined firm's financial statements allows for a DCF-valuation analysis with synergetic effects. The new implied enterprise value of the combined firm amounts to EUR 150,606m (see Table 7).

4.7.4. Acquisition premiums and Earnings per Share

BMW's average price within the valuation range from all valuation methods equals EUR 105.15 (see Table 5). This is a premium of approximately 26% over last year's closing share price of common stock of EUR 83.38. Sixt's target price within the valuation range from all valuation methods equals EUR 90.09 (see Table 6). This is a premium of approximately 5% over last year's closing share price for common stock of EUR 85.95. The Merger creates a total of EUR 1,659m in net synergies after costs (see Table 68). As the valuation range has an average of EUR 90.09 and the maximum share price in the historical period was EUR 155.60, the bid-price to the Target's shareholders has been set to EUR 105. This is premium paid per share of EUR 19.05 or 22.2% over the share price as of December 31, 2022. This amounts to a total premium paid of approximately EUR 900m (see Table 69).

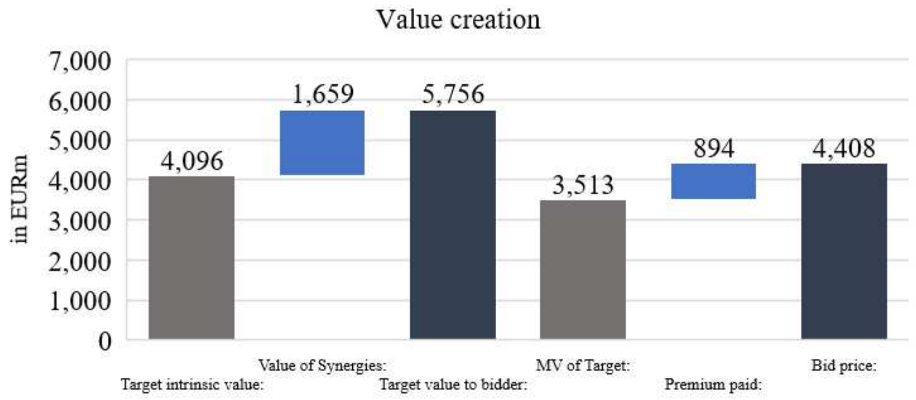
4.7.4.1. Accretion/Dilution Analysis

The accretion/dilution analysis shows how BMW's EPS will change after a successful transaction and whether this will positively affect shareholders. Table 8 shows that a merger with Sixt will be accretive to their EPS, and the EPS will grow with a CAGR of 7.9% per year from 2023 to 2028. A Merger will therefore be beneficial for BMW's shareholders.

4.7.4.2. Value creation

The value creation of this Merger can be depicted in Figure *4* below. The Target's intrinsic value as of the valuation date[9] or the equity value resulting from the stand-alone discounted cash flow analysis amounts to EUR 4,096m. The total net present value of the synergies is equal to EUR 1,659m (see Table 68), resulting in a total value to the bidder of EUR 5,756m. The market value of the Target is equal to the market capitalisation. Summed with the Premium paid (see Table 69) it results in a total bid price for the Target of EUR 4,408m. The total value captured by the Target´s shareholders is EUR 311m (Bid price minus Target intrinsic value). The total value captured by the Acquirer's shareholders is EUR 1,348m (Target value to the bidder minus the bid price).

Figure 4: Value creation



Source: Own estimates

[9] December 31, 2022

5. Limitations and Conclusion

The scope of this Thesis was to determine whether a merger between BMW and Sixt would be feasible from a strategic and financial aspect and whether shareholders would be better off with a combined firm. The previous valuation analyses have shown that a merger between BMW and Sixt would create value through synergies. Shareholders of both companies would receive a premium compared to their current share price.

Nevertheless, some limitations and further research have to be discussed. The automotive industry is of inconceivable importance for Germany and the European Union. It made up approx. 5% of the German gross domestic product ("GDP") (Statistisches Bundesamt, 2019). In addition, it makes up around 7% of the European Union's GDP and therefore has a significant multiplier effect on other industries (European Commission, 2023). The new vehicle registrations and sales of electrified vehicles statistics (see Figure 14 and Figure 15) indicate the transformation the automotive industry is experiencing. Even though solely European manufacturers led new vehicle registrations in the EU27 in 2021 (Statista, 2022), the global sale of electrified vehicles in 2022 was dominated by BYD, Tesla and SAIC-GM-Wuling (Statista, 2023). This means that incumbent manufacturers, like BMW, but also industry suppliers, are required to transform their strategies and business models to accommodate future industry trends. With more than 800k[10] employees out of 46m[11] working in the automotive industry in Germany, a downward spiral within this industry would have detrimental effects on the entire German society's wealth.

The Merger covered in this Thesis also opens up questions about the companies' existing and future business models. It can be assumed that Sixt's revenue creation is also based substantially on the sale of vehicles from its fleet. As the company does not comment on this in their annual report, this topic could not be covered in this Thesis' analyses. However, it must be questioned whether this revenue generation will continue to exist in the future, as the vehicles may not be as suitable for private use due to their development into mostly autonomous vehicles. As a result, the Merger's cannibalisation of current business models, but creation and development of new ones would require further profound analysis. Additionally, a deep-dive into the reasons for BMW's sale of DriveNow to Free2move (see section 3.1.3.) would have to be studied.

[10] Bundesministerium für Wirtschaft und Klimaschutz (BMWK), 2023
[11] Statistisches Bundesamt, 2023

The German Handelsblatt (2023) noted in a news article, analysing BMW’s financial report, that the Company’s China business supposedly accounted for 40% of the profits in 2022. This is also due to the full consolidation of the production joint venture BMW Brilliance whose revenues now, for the first time, directly counted into the FY22 consolidated firm reporting. BMW does not report a profit split. However, this may show that BMW is massively dependent on the most critical and largest automotive market in the world. It will be crucial to constantly monitor geopolitical tensions. Additionally, the Chinese manufacturers (i.e., Geely and BYD) already account for large sales within the country and are also entering into foreign markets quickly. The development of this would be subject to further investigation.

Another critical issue to consider are antitrust and competition laws. For a merger of this size (combined revenues above EUR 5b), the European Commission (“Commission”) would be responsible and apply Article 1 of the EU merger regulation (EU Commission, 2023). The Commission's decision is based on a two-phase assessment. If the Commission believes the merger to affect competition significantly, the merger will likely be prohibited. A complete legal due diligence in the process of this Merger would therefore have to be conducted in excess of the financial analysis.

Lastly, as Figure 2 shows, Sixt is still largely controlled by the founding family through its asset management, which could complicate this potential Merger. The family would have to be convinced and agree to tender their controlling stake.

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7. Appendices

7.1. Valuation Output

Table 5: BMW AG - Valuation Output

	> DCF:		> Comparables:			
	Gordon-Growth	Exit-Multiple	EV/EBITDA	EV/Revenue	P/E	Average
Implied Enterprise value (in EURm):	141,374	148,076	150,608	142,610	148,391	146,212
Implied Equity value (in EURm):	60,695	67,397	69,929	66,627	80,735	69,077
Implied diluted share price:	92.39 €	102.59 €	106.44 €	101.42 €	122.89 €	**105.15 €**

Source: Refinitiv, company information, own estimates

Table 6: Sixt SE - Valuation Output

	> DCF:		> Comparables:			
	Gordon-Growth	Exit-Multiple:	EV/EBITDA	EV/Revenue	P/E	Average
Implied Enterprise value (in EURm):	7,206	6,742	8,148	7,013	7,584	7,339
Implied Equity value (in EURm):	4,096	3,632	5,038	3,903	4,475	4,229
Implied diluted share price:	87.26 €	77.37 €	107.33 €	83.14 €	95.32 €	**90.09 €**

Source: Refinitiv, company information, own estimates

Table 7: Combined firm - Valuation Output

	> DCF without Synergies:	> DCF with Synergies:	Synergy effects:
Implied Enterprise value (in EURm):	148,580	150,606	**2,025**

Source: Refinitiv, company information, own estimates

Table 8: Combined firm - Accretion/Dilution of Earnings per share (EPS)

	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
Diluted EPS before the transaction:	15.59 €	16.68 €	18.73 €	17.22 €	20.85 €	22.45 €
Net income after transaction (EURm):	10,634	11,361	12,838	11,853	14,274	15,455
Shares outstanding (in m):	657	657	657	657	657	657
Diluted EPS after the transaction:	16.16 €	17.27 €	19.52 €	18.07 €	21.73 €	23.66 €
Accretive or Dilutive:	Accretive	Accretive	Accretive	Accretive	Accretive	Accretive
% of Accretion/Dilution:	3.6%	3.5%	4.2%	4.9%	4.2%	5.4%

Source: Refinitiv, company information, own estimates

Figure 5: BMW - Valuation range

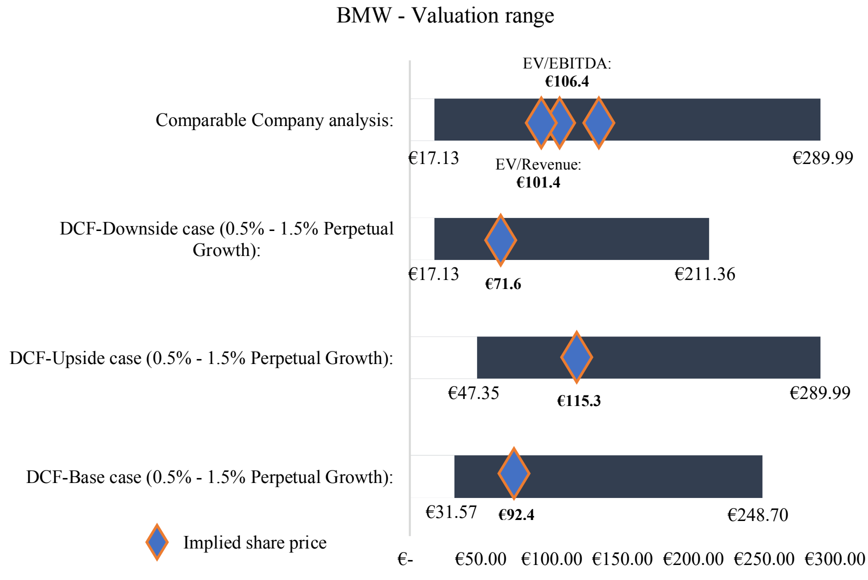
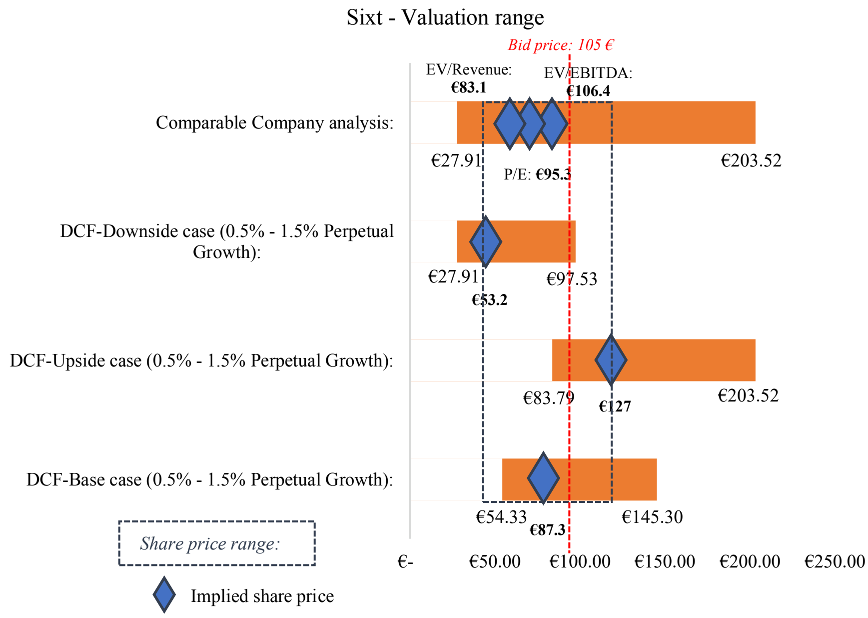


Figure 6: Sixt - Valuation range



7.2. Valuation Assumptions

Table 9: General Assumptions

Valuation Date (DD/MM/YY):	31/12/2022
set to fiscal year end of both companies	
Expected Long-Term GDP Growth:	2.00%
Risk-free Rate:	2.03%

Table 10: BMW - Assumptions

WACC - Discount Rate	
Market risk premium:	7.34%
Cost of Equity:	10.99%
Cost of Preferred Equity:	7.32%
5-Year Beta:	1.22
Pre-tax Cost of Debt:	3.45%
Effective Tax Rate:	24.10%

Valuation	
WACC:	6.65%
Last Fiscal Year:	FY22
Terminal FCF Growth Rate:	1.00%
EV/EBITDA Exit Multiple:	5.5x

Source: Refinitiv, company information, own estimates

Table 11: Sixt - Assumptions

WACC - Discount Rate	
Market risk premium:	7.34%
Cost of Equity	16.72%
Cost of Preferred Equity:	11.25%
5Y Beta - Monthly	2.00
Pre-tax Cost of Debt:	4.45%
Effective Tax Rate	25.64%

Valuation	
WACC:	10.02%
Last Fiscal Year:	FY22
Terminal FCF Growth Rate:	1.00%
EV/EBITDA Exit Multiple:	7.9x

Source: Refinitiv, company information, own estimates

Table 12: Combined firm - Assumptions

WACC - Discount Rate	
Market risk premium:	7.34%
Cost of Equity:	14.41%
Pre-tax Cost of Debt:	3.49%
Effective Tax Rate:	22.03%

Valuation	
WACC:	7.39%
Last Fiscal Year:	FY22
Terminal FCF Growth Rate:	1.00%

Source: Refinitiv, company information, own estimates

7.3. Company information

7.3.1. BMW AG

Table 13: BMW - Key performance indicators

	Historical						Projected					
	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
Revenue Growth:	n/a	(1.5%)	7.6%	(5.0%)	12.4%	28.2%	3.4%	3.1%	3.5%	3.3%	2.9%	2.8%
Operating Margin:	9.9%	9.0%	8.4%	4.9%	12.0%	9.8%	9.5%	9.4%	9.5%	7.7%	10.0%	10.1%
EBITDA Margin:	13.5%	13.0%	11.1%	9.2%	16.0%	13.2%	13.4%	13.6%	14.0%	13.1%	15.8%	16.4%
Net Income Margin:	8.7%	7.2%	4.7%	3.8%	11.1%	12.6%	7.0%	7.2%	7.8%	7.0%	8.2%	8.6%
Effective Tax Rate:	18.7%	26.3%	30.1%	26.1%	22.4%	21.0%	24.1%	24.1%	24.1%	24.1%	24.1%	24.1%
D&A % Revenue:	3.5%	3.6%	4.0%	4.3%	3.9%	3.4%	3.9%	4.2%	4.5%	5.4%	5.8%	6.2%
CapEx % Revenue:	(7.2%)	(8.0%)	(6.6%)	(6.2%)	(6.0%)	(6,3%)	(6.3%)	(6.8%)	(7.5%)	(8.2%)	(8.7%)	(9.3%)
Total BV Debt/Equity:	1.74	1.82	1.97	1.75	1.39	1.08	1.03	0.96	0.90	0.82	0.76	0.70
Total BV Debt/Capital:	0.64	0.65	0.66	0.64	0.58	0.52	0.51	0.49	0.47	0.45	0.43	0.41
Total BV Equity/Capital:	0.36	0.35	0.34	0.36	0.42	0.48	0.49	0.51	0.53	0.55	0.57	0.59

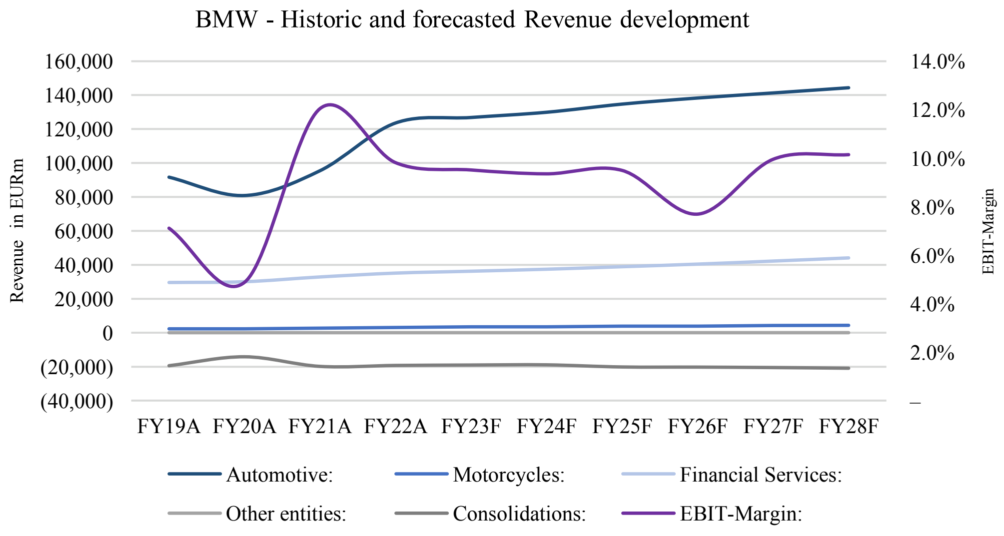
Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Table 14: BMW - Revenue Forecast

	Historical						Projected					
in EURm	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
Automotive:	85,742	85,846	91,682	80,853	95,476	123,602	126,852	129,937	134,737	138,333	141,320	144,374
Motorcycles:	2,272	2,173	2,368	2,284	2,748	3,176	3,338	3,579	3,804	3,992	4,167	4,347
Financial Services:	27,567	27,705	29,598	30,044	32,867	35,122	36,245	37,422	38,896	40,425	42,215	44,085
Other entities:	7	6	5	3	5	8	6	6	6	7	6	7
Consolidations:	(17,306)	(18,875)	(19,443)	(14,194)	(19,857)	(19,298)	(19,054)	(18,952)	(20,197)	(20,286)	(20,545)	(20,936)
EBIT-Margin:	10.1%	9.4%	7.1%	4.9%	12.0%	9.8%	9.5%	9.4%	9.5%	7.7%	10.0%	10.1%

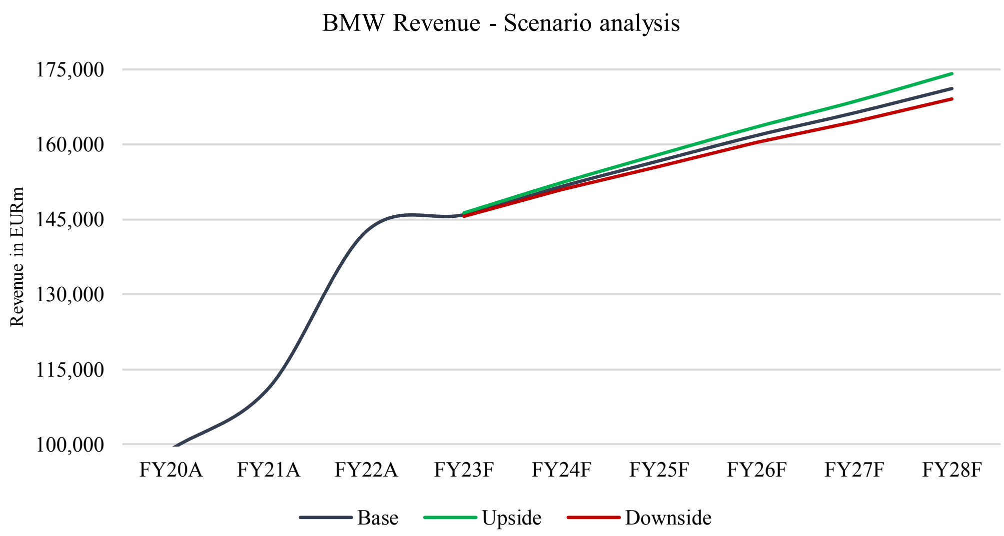
Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Figure 7: BMW - Revenue development



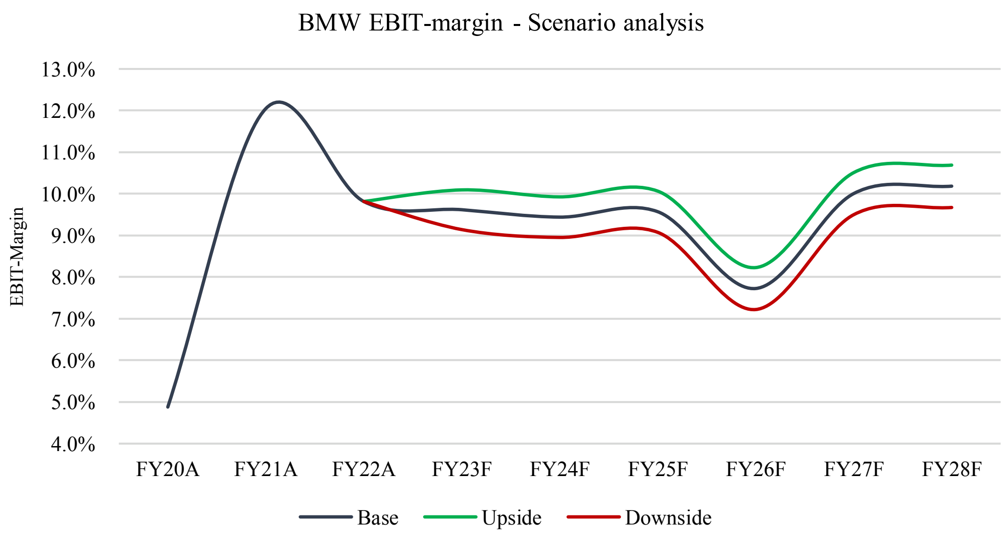
Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Figure 8: BMW - Revenue scenario analysis



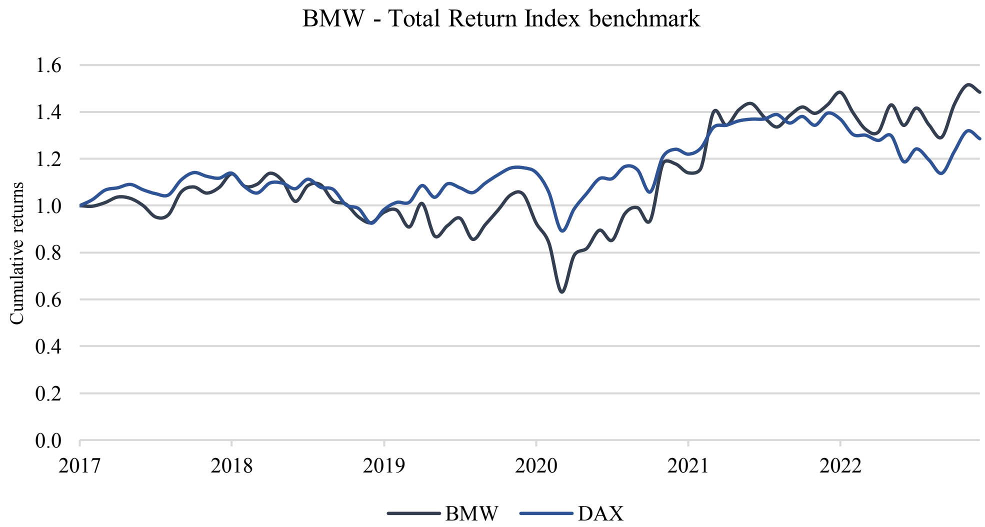
Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Figure 9: BMW - EBIT-margin scenario analysis



Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Figure 10: BMW- Total Return Index benchmark



Source: Refinitiv

7.3.2. SIXT SE

Table 15: Sixt - Key performance indicators

	Historical						Projected					
	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
Revenue Growth:	n/a	12.6%	(14.6%)	(38.5%)	48.9%	34.6%	2.1%	10.7%	10.4%	6.5%	(0.6%)	8.8%
Operating Margin:	13.2%	13.3%	14.6%	(0.0%)	20.6%	19.0%	16.6%	16.9%	17.3%	14.2%	15.6%	15.9%
EBITDA Margin:	13.8%	13.8%	18.8%	8.3%	25.9%	23.6%	20.6%	20.3%	20.3%	17.7%	18.9%	18.8%
Net Income Margin:	7.4%	14.5%	9.4%	(2.2%)	13.7%	12.5%	8.9%	8.4%	9.0%	6.7%	7.4%	7.9%
Effective Tax Rate:	28.9%	17.9%	26.9%	21.2%	29.2%	29.9%	25.6%	25.6%	25.6%	25.6%	25.6%	25.6%
D&A % Revenue:	0.6%	0.6%	4.2%	8.3%	5.4%	4.5%	4.0%	3.4%	2.9%	3.4%	3.3%	2.9%
CapEx % Revenue:	(1.8%)	(1.8%)	(1.6%)	(1.4%)	(1.5%)	(2.1%)	(3.0%)	(2.6%)	(2.9%)	(2.8%)	(2.6%)	(2.3%)
Total BV Debt/Equity:	1.93	1.89	2.15	1.70	1.14	1.26	0.92	0.91	0.88	0.86	0.88	0.87
Total BV Debt/Capital:	0.68	0.67	0.70	0.63	0.53	0.56	0.49	0.49	0.48	0.47	0.48	0.47
Total BV Equity/Capital:	0.32	0.33	0.30	0.37	0.47	0.44	0.51	0.51	0.52	0.53	0.52	0.53

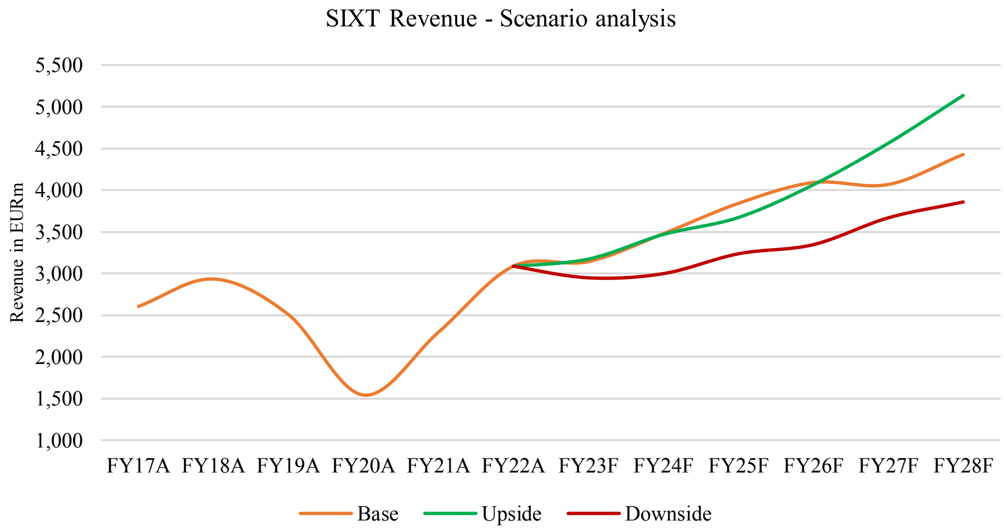
Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Table 16: Sixt - Revenue forecast

	Historical						Projected					
in EURm	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
Revenue by Segment:							3,225	3,530	3,873	3,971	4,120	4,415
Revenue by Fleet:							3,058	3,424	3,807	4,209	4,013	4,439
Average Revenue:	2,602	2,930	2,502	1,532	2,282	3,066	3,141	3,477	3,840	4,090	4,067	4,427
Other revenue:	2	3	3	8	11	21	11	13	14	15	13	14
Total Revenue:	**2,604**	**2,933**	**2,505**	**1,540**	**2,294**	**3,087**	**3,152**	**3,489**	**3,854**	**4,105**	**4,080**	**4,440**

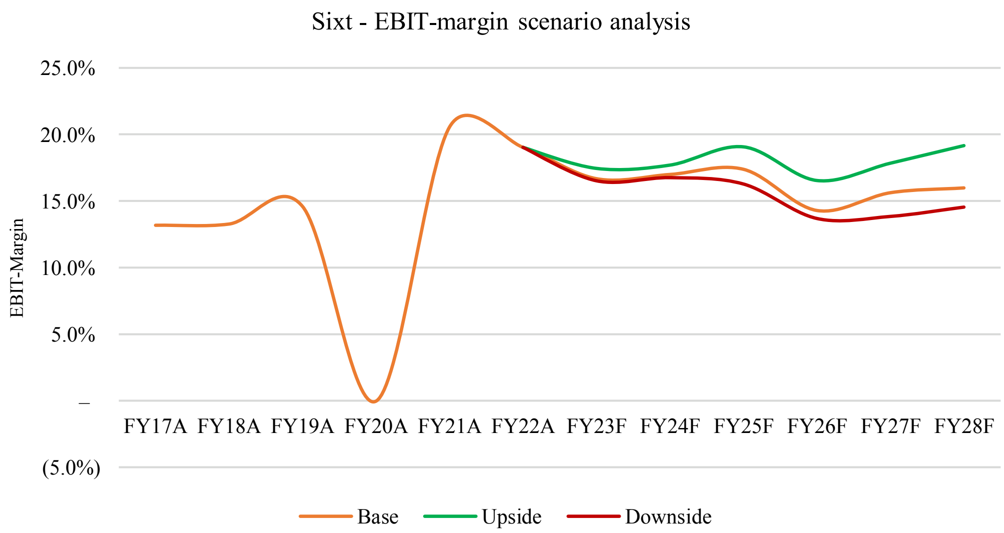
Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Figure 11: Sixt - Revenue scenario analysis



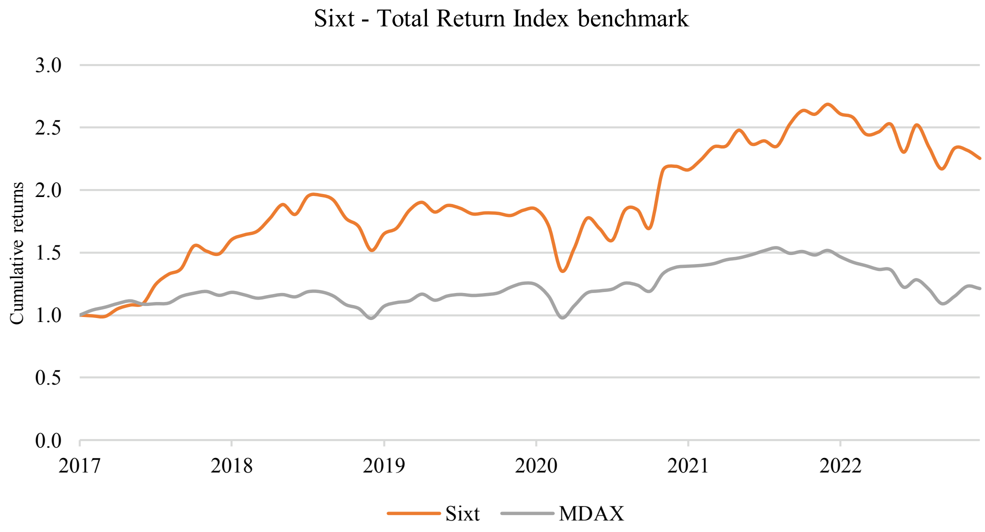
Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Figure 12: Sixt - EBIT-margin scenario analysis



Source: S&P CapitalIQ, Refinitiv, company information, own estimates

Figure 13: Sixt – Total Return Index benchmark



Source: Refinitiv

7.4. Bayerische Motoren Werke AG - Valuation Inputs

7.4.1. Market Values of Debt

Table 17: BMW - Market values of debt of peer group companies

Company Name	Total Debt (EURm)	Cost of Debt	Effective Tax Rate	Net non-operating interest expense	Weighted Average maturity (years):	Market Value of Debt
Honda Motor Co Ltd	60,190	3.72%	28.92%	(125)	3.43	52,715
Hyundai Motor Co	80,523	4.87%	28.48%	(226)	4.09	65,481
Mercedes Benz Group AG	125,843	2.56%	30.11%	(375)	4.44	110,932
Tesla Inc	6,012	5.04%	11.02%	(326)	5.02	3,280
Toyota Motor Corp	196,828	3.98%	27.96%	(241)	3.31	172,265
Stellantis NV	33,582	3.56%	13.28%	(601)	6.24	23,691
Ford Motor Co	121,474	5.29%	(0.3%)	(1,586)	6.70	77,260
General Motors Co	96,216	5.06%	21.79%	(836)	7.59	60,998
Geely Automobile Holdings Ltd	624	4.92%	6.69%	(37)	100.00	(735)
Dongfeng Motor Group Co Ltd	6,558	5.30%	10.83%	(140)	1.76	5,760
Volkswagen AG	207,383	3.50%	23.34%	(1,818)	17.50	90,161
Renault SA	61,655	4.04%	50.98%	(301)	3.85	51,872

Source: Refinitiv

Table 18: BMW - Maturity profile of financial debt

Maturity	Volume (EURm)	Maturity in Years	Average maturity
2023	10,268	1	0.22
2024	11,802	2	0.50
2025	8,005	3	0.51
2026	4,590	4	0.39
2027	3,531	5	0.37
2028	2,879	6	0.37
2029	2,614	7	0.39
2030	1,031	8	0.17
2031	1,054	9	0.20
2032	952	10	0.20
2033	500	11	0.12
	47,225		3.44

Source: Refinitiv

Table 19: BMW - Market value of debt

in EURm	
Total Debt:	94,196
Weighted average maturity (years):	3.44
Cost of Debt:	3.45%
Net interest expense:	416
Market Value of Debt:	85,160

Source: Refinitiv, own estimates

7.4.2. Cost of Debt

Table 20: BMW - Solvency ratings

Moody's Long-term rating:	A2
S&P Long-term rating:	A

Table 21: BMW - Incremental borrowing rate

Risk-free rate:		2.03%
Default spread:	A2/A	1.42%
Incremental borrowing rate:		**3.45%**

Source: Refinitv, Company information

7.4.3. Cost of Equity and preferred equity

Table 22: BMW - Cost of Equity

Risk-free rate:	2.03%
Market risk premium:	7.34%
BMW 5Y Beta:	1.22
Cost of Equity	**11.0%**

Source: Refinitiv, own estimates

Table 23: BMW - Cost of preferred equity

Share price as at December 31:	€79.55
PS-Dividend:	€5.82
Cost of Preferred equity:	**7.3%**

Source: Refinitiv, own estimates

7.4.4. Weighted average cost of capital

Table 24: BMW - Unlevered beta calculation

as of December 31 EURm unless stated otherwise	Levered Beta	MV Debt	%Debt-to-capital	MV Equity	%Equity-to-capital	Tax Rate	Debt-to-Equity	Unlevered Beta
Honda Motor Co Ltd	1.20	52,715	0.49	54,551	0.51	28.9%	0.97	0.71
Hyundai Motor Co	1.02	65,481	0.64	36,966	0.36	28.5%	1.77	0.45
Mercedes-Benz Group AG	1.36	110,932	0.79	29,087	0.21	30.1%	3.81	0.37
Tesla Inc	2.02	3,280	0.05	65,688	0.95	11.0%	0.05	1.93
Toyota Motor Corp	0.85	172,265	0.33	356,698	0.67	28.0%	0.48	0.63
Stellantis NV	1.37	23,691	0.12	178,016	0.88	13.3%	0.13	1.23
Ford Motor Co	1.54	77,260	0.65	41,541	0.35	(0.7%)	1.86	0.54
General Motors Co	1.34	60,998	0.59	42,611	0.41	21.8%	1.43	0.63
Geely Automobile Holdings Ltd.	1.50	(735)	(0.02)	47,145	1.02	6.7%	(0.02)	1.52
Dongfeng Motor Gropu Ltd.	0.98	5,760	0.30	13,625	0.70	10.8%	0.42	0.71
Volkswagen AG	1.38	90,161	0.95	4,653	0.05	23.3%	19.38	0.09
Renault SA	1.85	51,872	0.47	58,361	0.53	51.0%	0.89	1.29
Median	**1.37**	**56,857**	**0.48**	**44,878**	**0.52**	**23,0%**	**0.93**	**0.67**

Source: Refinitiv

Name	Ticker	Unlevered Beta	MV Debt	Mkt. Cap. PS	Mkt. Cap. CS	MV Equity	%D/C	%PE/C	%E/C	Tax Rate	Debt-to-Equity	Levered Beta

BMW AG	XETR:BMW	0.67	85,160	4,696	49,855	54,551	0.61	0.03	0.36	24%	1.56	1.56

Source: Company information, Refinitiv, own estimates

Table 25: BMW - Levered beta calculation

Table 26: BMW - WACC calculation

Cost of Equity (beta = 1.22):	11.0%
Cost of Equity (beta = 1.56):	13.48%
Weighted average cost of capital (beta = 1.56):	**6.65%**
Refinitiv WACC:	*5.70%*

7.4.5. Forecasts and Assumptions

7.4.5.1. Automotive

Table 27: BMW - Dealerships per brand

in k	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
BMW	3,400	3,500	3,500	3,500	3,600	3,600	3,600	3,600	3,600	3,625	3,625	3,625
MINI	1,580	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
Rolls-Royce	140	140	150	140	150	150	150	150	160	160	150	160
Automotive:	**5,120**	**5,240**	**5,250**	**5,240**	**5,350**	**5,350**	**5,350**	**5,350**	**5,360**	**5,385**	**5,375**	**5,385**
> Number of BMW dealerships (scenario):												
Base							3,600	3,600	3,600	3,625	3,625	3,625
Upside							3,625	3,625	3,625	3,650	3,650	3,650
Downside							3,575	3,575	3,575	3,600	3,600	3,600
Selected Number:							**3,600**	**3,600**	**3,600**	**3,625**	**3,625**	**3,625**
> Number of MINI dealerships (scenario):												
Base							1,600	1,600	1,600	1,600	1,600	1,600
Upside							1,625	1,625	1,625	1,625	1,625	1,625
Downside							1,575	1,575	1,575	1,575	1,575	1,575
Selected Number:							**1,600**	**1,600**	**1,600**	**1,600**	**1,600**	**1,600**
> Number of Rolls-Royce dealerships (scenario):												
Base							150	150	160	160	150	160
Upside							160	160	160	160	170	170
Downside							150	150	150	150	155	155
Selected Number:							**150**	**150**	**160**	**160**	**150**	**160**

Source: Company information, own estimates

Table 28: BMW - Units delivered

in k	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
BMW	2,088	2,118	2,185	2,029	2,214	2,101	2,107	2,112	2,116	2,121	2,125	2,129
MINI	372	364	347	293	302	293	284	276	267	258	249	240
Rolls-Royce	3	4	5	4	6	6	6	7	7	8	8	9
Automotive:	**2,464**	**2,486**	**2,538**	**2,325**	**2,522**	**2,400**	**2,398**	**2,395**	**2,390**	**2,386**	**2,382**	**2,378**
> Units delivered BMW (scenario):												
Base							2,107	2,112	2,116	2,121	2,125	2,129
Upside							2,108	2,114	2,120	2,125	2,130	2,136
Downside							2,106	2,110	2,114	2,117	2,120	2,123
Selected Number:							**2,107**	**2,112**	**2,116**	**2,121**	**2,125**	**2,129**
> % Growth Units delivered BMW (scenario):												
Base							*0.30%*	*0.25%*	*0.20%*	*0.20%*	*0.20%*	*0.20%*
Upside							*0.35%*	*0.30%*	*0.25%*	*0.25%*	*0.25%*	*0.25%*
Downside							*0.25%*	*0.20%*	*0.15%*	*0.15%*	*0.15%*	*0.15%*
Selected Number:							***0.3%***	***0.3%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***
> Units delivered MINI (scenario):												
Base							284	276	267	258	249	240
Upside							286	278	273	270	272	276
Downside							283	274	265	255	246	237
Selected Number:							**284**	**276**	**267**	**258**	**249**	**240**
> % Growth Units delivered MINI (scenario):												
Base							*(3.00%)*	*(3.00%)*	*(3.25%)*	*(3.25%)*	*(3.50%)*	*(3.50%)*
Upside							*(2.75%)*	*(2.75%)*	*(3.00%)*	*(3.00%)*	*(3.25%)*	*(3.25%)*
Downside							*(3.25%)*	*(3.25%)*	*(3.50%)*	*(3.50%)*	*(3.75%)*	*(3.75%)*
Selected Number:							***(3.0%)***	***(3.0%)***	***(3.3%)***	***(3.3%)***	***(3.5%)***	***(3.5%)***
> Units delivered Rolls-Royce (scenario):												
Base							6	7	7	8	8	9
Upside							6	7	7	8	8	9
Downside							6	7	7	8	8	9
Selected Number:							**6**	**7**	**7**	**8**	**8**	**9**
> % Growth Units delivered Rolls-Royce (scenario):												
Base							*6.0%*	*6.3%*	*6.5%*	*6.8%*	*7.0%*	*7.5%*
Upside							*6.5%*	*6.8%*	*7.0%*	*7.3%*	*7.5%*	*8.0%*
Downside							*5.5%*	*5.8%*	*6.0%*	*6.3%*	*6.5%*	*7.0%*
Selected Number:							***6.0%***	***6.3%***	***6.5%***	***6.8%***	***7.0%***	***7.5%***

Source: Company information, own estimates

Table 29: Estimated Revenue per brand

	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
> Estimated Average BMW Group List Carprices (in EURk):	*ref. Year*					
BMW	55	57	59	61	62	63
MINI	25	26	27	28	29	30
Rolls-Royce	300	309	317	321	325	328
> Estimated % Price increase BMW Group:						
Base		*4,0%*	*3,5%*	*2,5%*	*2,0%*	*2,0%*
Upside		*5,0%*	*4,5%*	*3,5%*	*3,0%*	*3,0%*
Downside		*3,0%*	*2,5%*	*1,5%*	*1,0%*	*1,0%*
Selected Number:		***4,0%***	***3,5%***	***2,5%***	***2,0%***	***2,0%***
> Units delivered per dealership (in units):						
BMW	585	587	588	585	586	587
MINI	178	172	167	161	156	150
Rolls-Royce	43	45	45	48	55	55
> Estimated Revenue per dealership (in EURk):						
BMW	32 702	33 472	34 730	35 594	36 294	37 009
MINI	4 579	4 663	4 723	4 733	4 713	4 689
Rolls-Royce	11 993	13 173	14 030	14 845	16 052	17 337
> Estimated Revenue per brand (in EURm):						
BMW	117 727	120 500	125 029	128 433	131 264	134 156
MINI	7 327	7 461	7 556	7 573	7 541	7 502
Rolls-Royce	1 799	1 976	2 151	2 326	2 515	2 716
Automotive:	**126 852**	**129 937**	**134 737**	**138 333**	**141 320**	**144 374**

Source: Company information, own estimates

7.4.5.2. Motorcycles

Table 30: BMW – Motorcycles revenue forecast

	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
> Units delivered segment (in k):												
Motorcycles:	164	166	175	169	194	203	205	210	215	220	225	230
> Units delivered BMW Motorrad (scenario):												
Base							205	210	215	220	225	230
Upside							210	215	220	225	230	235
Downside							200	205	210	215	220	225
Selected Number:							**205**	**210**	**215**	**220**	**225**	**230**
> Number of dealerships (in units):												
Motorcycles:	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,220	1,220	1,220	1,250
> Number of BMW Motorrad dealerships (scenario):												
Base							1,200	1,200	1,220	1,220	1,220	1,250
Upside							1,200	1,200	1,250	1,250	1,250	1,300
Downside							1,200	1,200	1,200	1,200	1,200	1,200
Selected Number:							**1,200**	**1,200**	**1,220**	**1,220**	**1,220**	**1,250**
> Units delivered per dealership (in units):												
Motorcycles:	137	138	146	141	162	169	171	175	176	180	184	184
> Estimated Average BMW Motorrad List Motorcycle price (in EURk):							*ref. Year*					
Motorcycles:							17	17	18	19	19	19
> Estimated % Price Increase BMW Motorrad:												
Base								*4,5%*	*4,3%*	*2,5%*	*2,0%*	*2,0%*
Upside								*4,8%*	*5,0%*	*4,0%*	*3,0%*	*3,0%*
Downside								*4,3%*	*4,0%*	*3,5%*	*3,0%*	*2,5%*
Selected Number:								***4,5%***	***4,3%***	***2,5%***	***2,0%***	***2,0%***
> Estimated Revenue per dealership (in k):												
Motorcycles:							2,782	2,983	3,153	3,290	3,416	3,534
> Estimated Revenue (in EURm):												
Motorcycles:							**3,338**	**3,579**	**3,804**	**3,992**	**4,167**	**4,347**

Source: Company information, own estimates

Table 31: BMW - Financial Services revenue forecast

	FY17A	FY18A	FY19A	FY20A	FY21A	FY22A	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
> Contract portfolio (in k):												
Financial Services:	5,381	5,708	5,515	5,860	5,982	5,974	6,000	6,025	6,050	6,075	6,100	6,125
> Number of contracts (in k):												
Base							6,000	6,025	6,050	6,075	6,100	6,125
Upside							6,050	6,075	6,100	6,125	6,150	6,175
Downside							5,950	5,975	6,000	6,025	6,050	6,075
Selected Number:							**6,000**	**6,025**	**6,050**	**6,075**	**6,100**	**6,125**
> Revenue per contract (in EURk):												
Financial Services:	5	5	5	5	5	6	6	6	6	7	7	7
> % Growth Revenue per contract:												
Base							*3.0%*	*3.0%*	*3.5%*	*3.5%*	*4.0%*	*4.0%*
Upside							*3.5%*	*3.5%*	*4.0%*	*4.0%*	*4.5%*	*4.5%*
Downside							*2.5%*	*2.5%*	*3.0%*	*3.0%*	*3.5%*	*3.5%*
Selected Number:							***3.0%***	***3.0%***	***3.5%***	***3.5%***	***4.0%***	***4.0%***
> Estimated Revenue (in EURm):												
Financial Services:							**36,245**	**37,422**	**38,896**	**40,425**	**42,215**	**44,085**

Source: Company information, own estimates

7.4.5.3. Schedules and Net working capital

Table 32: BMW - Debt schedule

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Debt - BoP:							94,196	94,669	96,618	97,603	98,220	98,651
Debt Issued:	23,955	30,762	150,822	165,196	21,090	16,050	27,359	29,060	28,209	27,784	27,571	27,678
Debt Repaid:	(19,932)	(23,725)	(143,500)	(171,532)	(26,434)	(27,337)	(26,886)	(27,111)	(27,224)	(27,168)	(27,139)	(27,154)
Debt[1]:	**93,558**	**104 329**	**116,740**	**106,376**	**103,463**	**94,196**	**94,669**	**96,618**	**97,603**	**98,220**	**98,651**	**99,175**
Interest rate:							*3%*	*3%*	*3%*	*3%*	*3%*	*3%*
Interest Exp.:							(3,259)	(3,301)	(3,351)	(3,379)	(3,397)	(3,413)
Cash[1]:	**7,183**	**8,994**	**9,961**	**10,674**	**12,538**	**13,340**	**14,112**	**19,364**	**26,868**	**32,878**	**41,730**	**50,411**
Interest rate:							*3%*	*3%*	*3%*	*3%*	*3%*	*3%*
Interest Income:							474	578	798	1,031	1,287	1,590
Net Debt[1]:							**80,557**	**77,254**	**70,735**	**65,342**	**56,922**	**48,764**
Net interest expense/income:							**(2,785)**	**(2,723)**	**(2,554)**	**(2,348)**	**(2,110)**	**(1,824)**

Source: S&P CapitalIQ, Company information, own estimates
[1]: End of period

Table 33: BMW - PP&E, CapEx and D&A schedule

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Net PP&E - BoP:							32,005	35,526	39,433	44,165	48,582	53,440
Capital Expenditures:							9,281	10,302	11,830	13,250	14,575	16,032
Depreciation & Amortisation[1]:							(5,761)	(6,395)	(7,098)	(8,833)	(9,716)	(10,688)
Net PP&E - EoP:	**18,438**	**21,788**	**23,156**	**21,772**	**22,323**	**32,005**	**35,526**	**39,433**	**44,165**	**48,582**	**53,440**	**58,784**
Capital Expenditure:	7,112	7,777	6,902	6,150	6,619	9,050	9,281	10,302	11,830	13,250	14,575	16,032
% PP&E:	*39%*	*36%*	*30%*	*28%*	*30%*	*28%*	*29%*	*29%*	*30%*	*30%*	*30%*	*30%*
Depreciation & Amortisation[1]:	(3,395)	(3,504)	(4,202)	(4,246)	(4,358)	(4,827)	(5,761)	(6,395)	(7,098)	(8,833)	(9,716)	(10,688)
% PP&E:	*(18%)*	*(16%)*	*(18%)*	*(20%)*	*(20%)*	*(15%)*	*(18%)*	*(18%)*	*(18%)*	*(20%)*	*(20%)*	*(20%)*

Source: S&P CapitalIQ, Company information, own estimates
[1]: excl. on Goodwill and Intangibles

Table 34: BMW - Equity schedule

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Retained earnings:	50,993	55,830	57,667	59,550	71,705	85,425						
Net income:	8,589	6,974	4,915	3,775	12,382	17,941	10,244	10,957	12,306	11,316	13,699	14 ,748
Dividends:	(2,324)	(2,630)	(2,303)	(1,646)	(1,253)	(3,827)	(5,481)	(2,459)	(2,630)	(2,953)	(2,716)	(3,288)
Share buybacks:	0	0	0	0	0	1,278	0	0	0	0	0	0
Cumulative retained earnings:	**50,710**	**55,054**	**57,666**	**59,795**	**70,924**	**86,316**	**91,079**	**99,578**	**109,254**	**117,617**	**128600**	**140,061**

Source: S&P CapitalIQ, Company information, own estimates

Table 35: BMW - Net working capital

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Inventory:	12,683	13,639	15,083	14,078	15,524	19,481	22,866	25,235	26,133	27,584	27,637	28,287
Trade Receivables:	2,663	2,455	2,415	2,198	2,167	4,013	4,247	5,383	5,575	5,885	5,896	6,035
Other current assets:	50,967	59,650	63,171	54,857	55,944	55,370	53,659	54,818	54,682	54,440	54,609	54,566
Current assets[1]:	66,313	75,744	80,669	71,133	73,635	78,864	80,772	85,436	86,390	87,909	88,142	88,887
Trade Payables:	(8,882)	(8,719)	(9,239)	(7,752)	(10,038)	(13,268)	(13,325)	(13,704)	(14,217)	(14,689)	(15,113)	(15,497)
Other current liabil.[2]:	(32,297)	(35,476)	(38,509)	(37,960)	(38,482)	(43,649)	(39,650)	(39,935)	(40,429)	(40,916)	(40,233)	(40,378)
Current liabilities[1]:	(41,179)	(44,195)	(47,748)	(45,712)	(48,520)	(56,917)	(52,975)	(53,639)	(54,646)	(55,605)	(55,346)	(55,875)
NWC:	**25,134**	**31,549**	**32,921**	**25,421**	**25,115**	**21,947**	**27,796**	**31,796**	**31,744**	**32,304**	**32,796**	**33,012**
Change in NWC:	486	6,415	1,372	(7,500)	(306)	(3,168)	5,849	4,000	(52)	560	492	216
DIO:		(85)	(87)	(91)	(88)	(73)	(70)	(75)	(75)	(75)	(75)	(75)
DRO:		(17)	(15)	(14)	(13)	(13)	(13)	(16)	(16)	(16)	(16)	(16)
DPO:		(33)	(31)	(31)	(29)	(30)	(33)	(33)	(33)	(33)	(33)	(33)

Source: S&P CapitalIQ, Company information, own estimates

[1]*: only working capital items*

[2]*: liabilities*

7.5. SIXT SE – Valuation inputs

7.5.1. Market Values of Debt

Table 36: Sixt - Market values of debt of peer group companies

EURm unless stated otherwise	Total Debt	Cost of Debt	Effective Tax Rate	Net non-operating interest expense	Weighted Average maturity (years):	Market Value of Debt
Auto1 Group SE	388	4.83%		(15)	0.00	388
Avis Budget Group Inc	13,546	2.43%	24.88%	(195)	4.92	11,139
Hertz Global Holdings Inc	10,759	2.47%	46.56%	(413)	6.00	7,018
UBER Technologies Inc	8,366	6.60%		(425)	4.66	4,549
Tourism Holdings Ltd	107	5.04%		(6)	0.00	107
LYFT Inc	650	5.61%		(45)	3.00	430
GreenMobility A/S	15	6.73%		(0)	0.00	15

Source: Refinitiv

Table 37: Sixt - Maturity profile of financial debt

Maturity	Volume (EURm)	Maturity in Years	Average maturity
2023	75	1	0.12
2024	550	2	1.76
	625		1.88

Source: Refinitiv

Table 38: Sixt - Market value of debt

in EURm	
Total Debt:	2,498
Weighted average maturity (years):	1.88
Cost of Debt:	4.45%
Net interest expense:	(39)
Market Value of Debt:	2,233

Source: Refinitiv, own estimates

7.5.2. Cost of Debt

Table 39: Sixt - Incremental borrowing rate

Risk-free rate:		2.03%
Default spread:	Ba1/BB+	2.42%
Incremental borrowing rate		**4.45%**

Source: Refinitiv, Basiszinskurve.de

7.5.3. Cost of Equity and preferred equity

Table 40: Sixt - Cost of Equity

Risk-free rate:	2.03%
Market risk premium:	7.34%
Sixt 5Y Beta - Monthly:	2.00
Cost of Equity	**16.7%**

Source: Refinitiv, own estimates

Table 41: Sixt - Cost of preferred equity

Share price as at December 31:	€54.50
PS-Dividend:	€6.13
Cost of Preferred Stock	**11.2%**

Source: Refinitiv, own estimates

7.5.4. Weighted average cost of capital

Table 42: Sixt - Unlevered beta calculation

as at December 31	Levered Beta	MV Debt	%Debt-to-capital	MV Equity	%Equity-to-capital	Tax Rate	Debt-to-Equity	Unlevered Beta
Auto1 Group SE	2.01	388	0.20	1,556	0.80	–	0.25	1.61
Hertz Global Holdings Inc	2.04	11,139	0.83	2,246	0.17	15.9%	4.96	0.39
UBER Technologies Inc	1.20	7,018	0.14	42,749	0.86	1.9%	0.16	1.03
Tourism Holdings Ltd	1.94	4,549	0.94	303	0.06	–	14.99	0.12
Avis Budget Group Inc	2.33	107	0.01	10,723	0.99	24.2%	0.01	2.31
LYFT Inc	1.74	430	0.11	3,334	0.89	(0.4%)	0.13	1.54
GreenMobility A/S	1.13	15	0.43	19	0.57	1.1%	0.77	0.64
Median	**1.94**	**430**	**0.20**	**2,246**	**0.80**	**1.10%**	**0.25**	**1.03**

Source: Refinitiv

Table 43: Sixt - Levered beta calculation

Name	Ticker	Unlevered Beta	MV Debt	Mkt. Cap. PS	Mkt. Cap. CS	MV Equity	%D/C	% PE/C	%E/C	Tax Rate	Debt-to-Equity	Levered Beta
SIXT SE	XETR:SIX2	1.03	2,233	903	2,610	3,513	0.39	0.16	0.45	25.6%	0.64	1.81

Source: Company information, Refinitiv, own estimates

Table 44: Sixt - WACC calculation

Cost of equity (beta = 2.00):	16.7%
Cost of equity (beta = 1.81):	15.3%
Weighted average cost of capital (beta = 1.81):	**10.0%**
Refinitiv WACC:	*10.80%*

7.5.5. Forecasts and Assumptions

7.5.5.1. Revenue

Table 45: Statista - Revenue estimates

	Historical						Projected					
in USDm	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
> Revenue of the car rentals market:												
Worldwide Revenues:		88,455	89,336	56,633	70,713	80,736	104,035	108,100	111,992	115,657	119,335	
% Growth			*1.0%*	*(36.6%)*	*24.9%*	*14.2%*	*28.9%*	*3.9%*	*3.6%*	*3.3%*	*3.2%*	
Germany Revenues:	3,080	3,300	3,210	1,650	2,510	2,220	3,220	3,310	3,490	3,570		
% Growth		*7.1%*	*(2.7%)*	*(48.6%)*	*52.1%*	*(11.6%)*	*45.0%*	*2.8%*	*5.4%*	*2.3%*		
North America Revenues:							29,940	30,395	30,857	31,326	31,802	32,286
% Growth												
> Revenue of the global travel and tourism market from 2017 to 2026:												
Revenues:	691,900	719,060	720,200	296,940	430,810	637,640	755,930	855,400	924,270	949,580		
% Growth		*3.9%*	*0.2%*	*(58.8%)*	*45.1%*	*48.0%*	*18.6%*	*13.2%*	*8.1%*	*2.7%*		

Table 46: Sixt - Revenue by segment

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Segment Germany:	1,526	1,636	1,032	705	776	937	909	1,045	1,149	977	733	586
Segment Europe:	771	929	1,048	584	955	1,293	1,325	1,358	1,426	1,497	1,610	1,731
Segment North America:	322	382	493	267	591	927	1,043	1,173	1,349	1,551	1,823	2,141
Other:	0	0	29	28	33	42	38	40	44	47	48	51
Reconciliations:	(17)	(18)	(101)	(52)	(72)	(132)	(89)	(86)	(95)	(101)	(93)	(94)
Total Revenue:	2,602	2,930	2,502	1,532	2,282	3,066	**3,225**	**3,530**	**3,873**	**3,971**	**4,120**	**4,415**
> Revenue Multiplier Segment Germany												
Base							0.97	1.15	1.10	0.85	0.75	0.80
Upside							0.96	0.97	0.98	1.00	1.05	1.10
Downside							0.93	0.93	0.95	0.95	0.98	0.98
Selected Number:							**0.97**	**1.15**	**1.10**	**0.85**	**0.75**	**0.80**
> Revenue Multiplier Segment Europe:												
Base							1.03	1.03	1.05	1.05	1.08	1.08
Upside							1.05	1.05	1.08	1.08	1.10	1.10
Downside							1.00	1.00	1.03	1.03	1.05	1.05
Selected Number:							**1.03**	**1.03**	**1.05**	**1.05**	**1.08**	**1.08**
> Revenue Multiplier Segment North America:												
Base							1.13	1.13	1.15	1.15	1.18	1.18
Upside							1.15	1.15	1.18	1.18	1.20	1.20
Downside							1.10	1.10	1.13	1.13	1.15	1.15
Selected Number:							**1.13**	**1.13**	**1.15**	**1.15**	**1.18**	**1.18**

Source: S&P CapitalIQ, Refinitiv, own estimates

Table 47: Sixt - Revenue by fleet size

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Revenue:	2,603	2,930	2,501	1,532	2,282	3,066	3,058	3,424	3,807	4,209	4,013	4,439
Total Revenue:	2,603	2,930	2,501	1,532	2,282	3,066	**3,058**	**3,424**	**3,807**	**4,209**	**4,013**	**4,439**
> Average Fleet Size (incl. Franchise):												
Group vehicles:	114,300	131,300	150,700	113,800	125,300	138,400	143,798	149,407	155,235	161,290	167,581	174,118
F&C[1] partners:	124,400	138,800	133,800	91,600	116,700	132,500	134,182	135,886	137,611	139,358	141,127	142,919
Fleet size:	238,700	270,100	284,500	205,400	242,000	270,900	277,981	285,293	292,846	300,648	308,709	317,037
> Fleet size Group vehicles (scenario):												
Base							143,798	149,407	155,235	161,290	167,581	174,118
Upside							144,490	150,849	157,487	164,417	171,653	179,206
Downside							143,106	147,973	153,005	158,208	163,588	169,151
Selected Number:							**143,798**	**149,407**	**155,235**	**161,290**	**167,581**	**174,118**
> Fleet size Franchise vehicles (scenario):												
Base							134,182	135,886	137,611	139,358	141,127	142,919
Upside							134,845	137,231	139,659	142,131	144,646	147,206
Downside							133,520	134,547	135,583	136,626	137,678	138,737
Selected Number:							**134,182**	**135,886**	**137,611**	**139,358**	**141,127**	**142,919**
> Average Revenue per vehicle in total fleet:												
Average Revenue:	11	11	9	7	9	11	**11**	**12**	**13**	**14**	**13**	**14**
		(5.8%)	*(205.4%)*	*(133.3%)*	*197.3%*	*188.7%*						
> Average Revenue per vehicle in total fleet (scenario):												
Base							11	12	13	14	13	14
Upside							11	12	12	13	14	15
Downside							10	10	11	11	12	12
Selected Number:							**11**	**12**	**13**	**14**	**13**	**14**

Source: S&P CapitalIQ, Refinitiv, own estimates

[1]: Franchisees and cooperation

7.5.5.2. *Schedules and Net working capital*

Table 48: Sixt - Debt schedule

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Debt - BoP:							2,498	2,675	2,860	3,034	3,206	3,379
Total Debt Issued:	699	838	661	766	345	670	685	677	674	675	675	675
Total Debt Repaid:	(535)	(386)	(343)	(948)	(833)	(478)	(507)	(493)	(500)	(503)	(502)	(501)
Debt[1]:	**2,277**	**2,725**	**3,422**	**2,371**	**1,995**	**2,498**	**2,675**	**2,860**	**3,034**	**3,206**	**3,379**	**3,553**
Interest rate:							*4%*	*4%*	*4%*	*4%*	*4%*	*4%*
Net Interest expense:							(115)	(123)	(131)	(139)	(147)	(154)
Cash[1]:	**88**	**146**	**171**	**753**	**266**	**27**	**765**	**892**	**1,593**	**1,980**	**2,587**	**3,216**
Interest Rate:							*4%*	*4%*	*4%*	*4%*	*4%*	*4%*
Interest Income:							18	37	55	80	102	129
Net Debt[1]:							**1,910**	**1,968**	**1,441**	**1,225**	**792**	**338**
Net interest expense/income:							(97)	(86)	(76)	(59)	(45)	(25)

Source: S&P CapitalIQ, Compny information, own estimates

[1]: End of period

Table 49: Sixt - PP&E, CapEx and D&A schedule

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Net PP&E - BoP:							627	571	514	437	384	319
Capital Expenditures:							82	86	77	79	69	64
Depreciation & Amortisation[1]:							(138)	(143)	(154)	(131)	(134)	(112)
Net PP&E - EoP:	**177**	**198**	**601**	**540**	**537**	**627**	**571**	**514**	**437**	**384**	**319**	**271**
Capital Expenditure:	46	54	40	22	35	65	82	86	77	79	69	64
% PP&E:	*26%*	*27%*	*7%*	*4%*	*7%*	*10%*	*13%*	*15%*	*15%*	*18%*	*18%*	*20%*
Depreciation & Amortisation:	(16)	(17)	(104)	(128)	(123)	(140)	(138)	(143)	(154)	(131)	(134)	(112)
% PP&E:	*(9%)*	*(9%)*	*(17%)*	*(24%)*	*(23%)*	*(22%)*	*(22%)*	*(25%)*	*(30%)*	*(30%)*	*(35%)*	*(35%)*

Source: S&P CapitalIQ, Compny information, own estimates

[1]: excl. on Goodwill and Intangibles

Table 50: Sixt - Equity schedule

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Retained earnings:	211	212	209	212	226	207	1,349	1,528	1,746	2,016	2,226	2,456
Net income:	192	426	234	(33)	313	386	281	292	347	301	310	440
Dividends:	(78)	(92)	(101)	(1)	(1)	(174)	(102)	(74)	(77)	(91)	(80)	(82)
Share buybacks:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative retained earnings:	392	726	859	825	1,137	1,349	1,528	1,746	2,016	2,226	2,456	2,814

Source: S&P CapitalIQ, Company information, own estimates

Table 51: Sixt - Net working capital

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Inventory:	76	98	102	81	27	50	98	123	141	160	159	172
Trade Receivables:	496	561	766	530	515	536	873	1,100	1,269	1,439	1,430	1,542
Other receivables:	284	282	335	133	72	193	216	205	192	169	175	192
Other current assets:	2,076	2,605	3,033	2,291	3,005	4,015	3,510	3,762	3,636	3,699	3,668	3,683
Current assets[1]:	2,931	3,545	4,236	3,034	3,619	4,794	4,697	5,190	5,239	5,468	5,432	5,589
Trade Payables:	(691)	(644)	(833)	(423)	(402)	(637)	(777)	(825)	(932)	(983)	(972)	(1,058)
Other current liabilities:	(317)	(327)	(338)	(231)	(344)	(361)	(319)	(340)	(353)	(343)	(343)	(345)
Current liabilities[1]:	(1,008)	(972)	(1,171)	(654)	(746)	(998)	(1,097)	(1,165)	(1,285)	(1,326)	(1,315)	(1,403)
NWC:	**1,924**	**2,574**	**3,065**	**2,380**	**2,873**	**3,796**	**3,601**	**4,025**	**3,953**	**4,141**	**4,117**	**4,186**
Change in NWC:	11	650	491	(685)	493	923	(195)	424	(71)	188	(24)	70
DIO:	(21)	(21)	(37)	(49)	(27)	(14)	(24)	(26)	(27)	(26)	(26)	(26)
DRO:	(134)	(130)	(246)	(344)	(263)	(189)	(217)	(231)	(238)	(235)	(233)	(232)
DPO:	(97)	(83)	(108)	(149)	(66)	(61)	(90)	(87)	(88)	(87)	(87)	(87)

Source: S&P CapitalIQ, Company information, own estimates

[1]: only working capital items

7.6. Valuations

7.6.1. BMW AG

Table 52: BMW - Discounted Cash Flow analysis

	Historical						Projected						TV
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**	**Perpetuity**
Revenue:	**98,282**	**96,855**	**104,210**	**98,990**	**111,239**	**142,610**	**147,388**	**151,992**	**157,247**	**162,470**	**167,163**	**171,877**	
Revenue Growth Rate:	*4.4%*	*(1.5%)*	*7.6%*	*(5.0%)*	*12.4%*	*28.2%*	*3.4%*	*3.1%*	*3.5%*	*3.3%*	*2.9%*	*2.8%*	
EBIT:	**9,899**	**9,121**	**7,411**	**4,830**	**13,400**	**13,999**	**14,022**	**14,219**	**14,934**	**12,499**	**16,641**	**17,437**	
Margin:	*10.1%*	*9.4%*	*7.1%*	*4.9%*	*12.0%*	*9.8%*	*9.5%*	*9.4%*	*9.5%*	*7.7%*	*10.0%*	*10.1%*	
Growth Rate:	*n/a*	*(7.9%)*	*(18.7%)*	*(34.8%)*	*177.4%*	*4.5%*	*0.2%*	*1.4%*	*5.0%*	*(16.3%)*	*33.1%*	*4.8%*	
Effective tax rate:	*18.7%*	*26.3%*	*30.1%*	*26.1%*	*22.4%*	*21.0%*	*24.1%*	*24.1%*	*24.1%*	*24.1%*	*24.1%*	*24.1%*	
Taxes[1]:	**(1,855)**	**(2,397)**	**(2,228)**	**(1,263)**	**(3,001)**	**(2,934)**	**(3,379)**	**(3,426)**	**(3,598)**	**(3,012)**	**(4,010)**	**(4,202)**	
NOPAT:	**8,044**	**6,724**	**5,183**	**3,567**	**10,399**	**11,065**	**10,643**	**10,793**	**11,335**	**9,487**	**12,632**	**13,235**	
> Adjustments for non-cash exp.:													
(+) D&A:	**3,395**	**3,504**	**4,202**	**4,246**	**4,358**	**4,827**	**5,761**	**6,395**	**7,098**	**8,833**	**9,716**	**10,688**	
% of Revenue:	*3.5%*	*3.6%*	*4.0%*	*4.3%*	*3.9%*	*3.4%*	*3.9%*	*4.2%*	*4.5%*	*5.4%*	*5.8%*	*6.2%*	
(+) Change in NWC:	**486**	**6,415**	**1,372**	**(7,500)**	**(306)**	**(3,168)**	**5,849**	**4,000**	**(52)**	**560**	**492**	**216**	
(-) CapEx:	**(7,112)**	**(7,777)**	**(6,902)**	**(6,150)**	**(6,619)**	**(9,050)**	**(9,281)**	**(10,302)**	**(11,830)**	**(13,250)**	**(14,575)**	**(16,032)**	
% Revenue:	*7.2%*	*8.0%*	*6.6%*	*6.2%*	*6.0%*	*6.3%*	*6.3%*	*6.8%*	*7.5%*	*8.2%*	*8.7%*	*9.3%*	
uFCF:	**4,813**	**8,866**	**3,855**	**(5,837)**	**7,832**	**3,674**	**12,972**	**10,885**	**6,551**	**5,631**	**8,265**	**8,108**	**144,823**
%Growth:	*n/a*	*84.2%*	*(56.5%)*	*(251.4%)*	*(234.2%)*	*(53.1%)*	*253.1%*	*(16.1%)*	*(39.8%)*	*(14.0%)*	*46.8%*	*(1.9%)*	1.00%
Discount Period:							1	2	3	4	5	6	6
WACC:							6.65%	6.65%	6.65%	6.65%	6.65%	6.65%	6.65%
Discount Factor:							0.938	0.879	0.824	0.773	0.725	0.679	0.679
Present Value (PV) of FCF:							**12,163**	**9,569**	**5,400**	**4,352**	**5,989**	**5,508**	**98,394**
EBITDA	***13,294***	***12,625***	***11,613***	***9,076***	***17,758***	***18,826***	***19,783***	***20,613***	***22,032***	***21,332***	***26,358***	***28,125***	
%Growth:	*3.7%*	*(5.0%)*	*(8.0%)*	*(21.8%)*	*95.7%*	*6.0%*	*5.1%*	*4.2%*	*6.9%*	*(3.2%)*	*23.6%*	*6.7%*	

Source: S&P CapitalIQ, Company information, own estimates

[1]*: excl. effect of interest*

Table 53: BMW - Comparable Company analysis

			Enterprise value/Revenue			Enterprise value/EBITDA			Price/Earnings Multiple		
in EURm unless stated otherwise	**Equity Value**	**Enterprise Value**	**FY20**	**FY21**	**FY22**	**FY20**	**FY21**	**FY22**	**FY20**	**FY21**	**FY22**
Honda Motor Co Ltd*	36,966	80,421	0.8 x	0.7 x	0.7 x	10.2 x	6.9 x	6.9 x	44.9 x	24.1 x	29.0 x
Hyundai Motor Co	29,087	100,189	1.3 x	1.2 x	1.0 x	19.6 x	11.8 x	9.0 x	27.4 x	8.0 x	5.4 x
Mercedes-Benz Group AG	65,688	169,505	1.4 x	1.3 x	1.1 x	6.8 x	8.6 x	5.3 x	18.1 x	2.9 x	4.5 x
Stellantis NV	41,541	20,755	0.2 x	0.1 x	0.1 x	2.2 x	0.9 x	0.7 x	1432.5 x	2.9 x	2.5 x
Ford Motor Co	42,611	39,552	0.4 x	0.3 x	0.3 x	4.4 x	4.8 x	2.3 x	-38.0 x	2.8 x	-22.6 x
General Motors Co	47,145	39,450	0.4 x	0.4 x	0.3 x	2.1 x	1.7 x	1.9 x	8.4 x	5.6 x	5.0 x
Geely Automobile Holdings Ltd.	13,625	10,478	0.9 x	0.8 x	0.5 x	8.0 x	7.6 x	7.5 x	19.4 x	21.4 x	18.3 x
Dongfeng Motor Gropu Ltd.	4,653	2,531	0.2 x	0.2 x	0.2 x	5.7 x	5.5 x	17.9 x	3.4 x	3.1 x	3.2 x
Volkswagen AG	58,361	74,625	0.3 x	0.3 x	0.3 x	2.0 x	1.6 x	1.5 x	6.6 x	3.8 x	3.8 x
Renault SA	9,107	8,109	0.2 x	0.2 x	0.2 x	1.8 x	1.6 x	1.0 x	-1.1 x	10.3 x	-276.0 x
Toyota Motor Corp*	178,016	408,896	7.6 x	6.9 x	6.3 x	59.5 x	42.6 x	49.6 x	48.8 x	29.9 x	40.4 x
Tesla Inc	356,698	925,233	33.4 x	20.3 x	11.9 x	261.8 x	111.8 x	56.5 x	589.6 x	76.3 x	29.8 x
Maximum	65,688	169,505	1.4 x	1.3 x	1.1 x	19.6 x	11.8 x	17.9 x	1432.5 x	24.1 x	29.0 x
75th Percentile	49,949	85,363	1.0 x	0.9 x	0.7 x	8.5 x	7.8 x	7.8 x	31.8 x	13.0 x	8.6 x
Median	**39,254**	**39,501**	**0.4 x**	**0.4 x**	**0.3 x**	**5.7 x**	**5.5 x**	**5.3 x**	**18.1 x**	**5.6 x**	**4.5 x**
Average	**47,891**	**86,774**	**1.2 x**	**1.1 x**	**1.0 x**	**11.1 x**	**8.5 x**	**9.4 x**	**142.7 x**	**10.4 x**	**8.9 x**
25th Percentile	12,496	9,886	0.2 x	0.2 x	0.2 x	2.1 x	1.6 x	1.4 x	2.3 x	2.9 x	-3.8 x
Minimum	4,653	2,531	0.2 x	0.1 x	0.1 x	1.8 x	0.9 x	0.7 x	-38.0 x	2.8 x	-276.0 x
BMW AG	54,551	130,534	1.3 x	1.2 x	0.9 x	14.4 x	7.4 x	5.5 x	14.5 x	4.4 x	3.0 x

Source: Refiinitiv, Company information, own estimates

Table 54: BMW - Multiples used

EV/EBITDA		EV/Revenue		P/E	
Median EV/EBITDA of Comparables:	5.3 x	Median EV/Revenue of Comparables:	0.3 x	Median P/E of Comparables:	4.5 x
Average EV/EBITDA of Comparables:	9.4 x	Average EV/Revenue of Comparables:	1.0 x	Average P/E of Comparables:	8.9 x
Terminal EV/EBITDA Multiple:	**8.0 x**	**Terminal EV/Revenue Multiple:**	**1.0 x**	**Terminal P/E Multiple:**	**8.9 x**
Refinitiv Industry Multiple:	8.4 x	*Refinitiv Industry Multiple:*	2.4 x	*Refinitiv Industry Multiple:*	13.1 x

Source: Refinitiv, own estimates

7.6.2. SIXT SE

Table 55: Sixt - Discounted Cash Flow analysis

	Historical						Projected						TV
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**	**Perpetuity**
Group Revenue:	**2,604**	**2,933**	**2,505**	**1,540**	**2,294**	**3,087**	**3,152**	**3,489**	**3,854**	**4,105**	**4,080**	**4,440**	
Revenue Growth Rate:	*4.4%*	*12.6%*	*(14.6%)*	*(38.5%)*	*48.9%*	*34.6%*	*2.1%*	*10.7%*	*10.4%*	*6.5%*	*(0.6%)*	*8.8%*	
EBIT:	**343**	**389**	**366**	**(1)**	**472**	**587**	**524**	**591**	**668**	**619**	**644**	**827**	
Operating Margin:	*13.2%*	*13.3%*	*14.6%*	*(0.0%)*	*20.6%*	*19.0%*	*16.6%*	*16.9%*	*17.3%*	*15.1%*	*15.8%*	*18.6%*	
Growth Rate:	*n/a*	*13.4%*	*(6.1%)*			*24.6%*	*(10.8%)*	*12.8%*	*13.0%*	*(7.3%)*	*4.1%*	*28.5%*	
Effective tax rate:	*28.9%*	*17.9%*	*26.9%*	*21.2%*	*29.2%*	*29.9%*	*25.6%*	*25.6%*	*25.6%*	*25.6%*	*25.6%*	*25.6%*	
Taxes:	**(99)**	**(70)**	**(98)**	**0**	**(138)**	**(176)**	**(134)**	**(152)**	**(171)**	**(159)**	**(165)**	**(212)**	
NOPAT:	**244**	**319**	**267**	**(0)**	**334**	**412**	**389**	**439**	**496**	**460**	**479**	**615**	
> Adjustments for non-cash exp.:													
(+) D&A:	**16**	**17**	**104**	**128**	**123**	**140**	**138**	**143**	**154**	**131**	**134**	**112**	
% of Revenue:	*0.6%*	*0.6%*	*4.2%*	*8.3%*	*5.4%*	*4.5%*	*4.4%*	*4.1%*	*4.0%*	*3.2%*	*3.3%*	*2.5%*	
(+) Change in NWC:	**11**	**650**	**491**	**(685)**	**493**	**923**	**(195)**	**424**	**(71)**	**188**	**(24)**	**70**	
(-) Capital Expenditures:	**(46)**	**(54)**	**(40)**	**(22)**	**(35)**	**(65)**	**(82)**	**(86)**	**(77)**	**(79)**	**(69)**	**(64)**	
% Revenue:	*1.8%*	*1.8%*	*1.6%*	*1.4%*	*1.5%*	*2.1%*	*2.6%*	*2.5%*	*2.0%*	*1.9%*	*1.7%*	*1.4%*	
Unlevered Free Cash Flow:	**224**	**933**	**824**	**(579)**	**914**	**1,410**	**250**	**921**	**502**	**700**	**520**	**733**	**8,207**
%Growth:	*n/a*	*315.5%*	*(11.7%)*	*(170.3%)*	*(257.9%)*	*54.2%*	*(82.2%)*	*267.6%*	*(45.5%)*	*39.5%*	*(25.8%)*	*41.0%*	1.00%
Discount Period:							1	2	3	4	5	6	6
Discount Rate (WACC):							10.02%	10.02%	10.02%	10.02%	10.02%	10.02%	10.02%
Cumulative Discount Factor:							0.909	0.826	0.751	0.683	0.620	0.564	0.564
Present Value (PV) of FCF:							**228**	**761**	**377**	**478**	**322**	**413**	**4,628**
EBITDA	***359***	***406***	***470***	***128***	***594***	***728***	***662***	***734***	***822***	***750***	***778***	***939***	
%Growth:	*3.7%*	*13.2%*	*15.7%*	*(72.8%)*	*365.4%*	*22.4%*	*(9.0%)*	*10.8%*	*12.0%*	*(8.7%)*	*3.8%*	*20.6%*	

Source: S&P CapitalIQ, Company information, own estimates

Table 56: Sixt - Comparable Company analysis

			Enterprise value/Revenue			Enterprise value/EBITDA			Price/Earnings Multiple		
in EURm unless stated otherwise	**Equity Value**	**Enterprise Value**	**FY20**	**FY21**	**FY22**	**FY20**	**FY21**	**FY22**	**FY20**	**FY21**	**FY22**
Auto1 Group SE	1,556	1,512	0.5 x	0.3 x	0.2 x	-37.4 x	-12.2 x	-8.2 x	-10.8 x	-4.2 x	-6.3 x
Avis Budget Group Inc	10,723	11,085	2.5 x	1.4 x	1.0 x	10.4 x	3.4 x	2.3 x	-29.6 x	8.2 x	4.1 x
Hertz Global Holdings Inc	2,246	14,091	3.3 x	2.2 x	1.7 x	12.3 x	7.0 x	3.8 x	-2.4 x	1.8 x	1.6 x
Tourism Holdings Ltd	303	587	2.5 x	2.8 x	2.8 x	9.2 x	28.2 x	19.6 x	26.6 x	-35.9 x	-91.3 x
LYFT Inc	3,334	5,141	2.7 x	1.8 x	1.3 x	-4.1 x	-8.1 x	-4.3 x	-4.9 x	-46.3 x	16.9 x
UBER Technologies Inc	42,749	50,649	5.6 x	3.3 x	1.7 x	-17.9 x	-27.5 x	-752.8 x	-7.7 x	-25.8 x	-5.0 x
GreenMobility A/S	19	415	89.1 x	49.4 x	31.7 x	-64.4 x	-96.6 x	-87.4 x	-2.5 x	-2.9 x	-1.9 x
Maximum	10,723	14,091	3.3 x	2.8 x	2.8 x	12.3 x	28.2 x	19.6 x	26.6 x	8.2 x	16.9 x
75th Percentile	10,723	12,588	3.0 x	2.5 x	2.3 x	11.3 x	17.6 x	11.7 x	12.1 x	5.0 x	10.5 x
Median	**2,246**	**5,141**	**2.5 x**	**1.8 x**	**1.3 x**	**9.2 x**	**3.4 x**	**2.3 x**	**-4.9 x**	**-4.2 x**	**1.6 x**
Average	**3,632**	**6,483**	**2.3 x**	**1.7 x**	**1.4 x**	**-1.9 x**	**3.7 x**	**2.6 x**	**-11.9 x**	**-10.1 x**	**4.1 x**
25th Percentile	303	1,049.5	1.5 x	0.8 x	0.6 x	-20.7 x	-10.1 x	-6.3 x	-20.2 x	-41.1 x	-48.8 x
Minimum	19	586.6	0.5 x	0.3 x	0.2 x	-37.4 x	-12.2 x	-8.2 x	-29.6 x	-46.3 x	-91.3 x
SIXT SE	**3,513**	**5,720**	**3.7 x**	**2.5 x**	**1.9 x**	**44.8 x**	**9.6 x**	**7.9 x**	**-105.5 x**	**11.2 x**	**9.1 x**

Source: Refinitiv, Company information, own estimates

Table 57: Sixt - Multiples used

EV/EBITDA	
Median EV/EBITDA:	1.3 x
Average EV/EBITDA:	1.4 x
SIXT SE Multiple:	7.9 x
Refinitiv Industry Multiple:	11.2 x
Terminal EV/EBITDA:	**9.0 x**

EV/Revenue	
Median EV/Revenue:	2.3 x
Average EV/Revenue:	2.6 x
Refinitiv Industry Multiple:	2.4 x
Terminal EV/ Revenue:	**2.3 x**

P/E	
Median P/E:	4.1 x
Average P/E:	1.6 x
Refinitiv Industry Multiple:	11.6 x
Terminal P/E:	**11.6 x**

Source: Refinitiv, own estimates

7.6.3. *Combined firm*

7.6.3.1. *Synergies*

Table 58: Combined firm - Synergy assumptions

in EURm unless stated otherwise		**Projected**					
Item	**Expected Synergy**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Income Statement							
Phase in period:	*100%*	10%	10%	15%	20%	20%	25%
Revenue Synergy	**0.75%**	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%
> Cost items:							
Phase in period:	*100%*	10%	15%	20%	25%	20%	10%
Selling and administrative expenses Synergies:	**(2.50%)**	(0.3%)	(0.3%)	(0.4%)	(0.5%)	(0.5%)	(0.6%)
Phase in period:	*100%*	10%	10%	15%	20%	20%	25%
R&D expenses:	**5.00%**	0.5%	0.5%	0.8%	1.0%	1.0%	1.3%
Cash Flow statement							
Phase in period:	*100%*	35%	30%	20%	15%		
Integration Costs:	**(€150)**	(€53)	(€45)	(€30)	(€23)		
Phase in period:	*100%*	10%	15%	25%	20%	15%	15%
Sixt CapEx Synergies:	**20.00%**	2.0%	2.0%	3.0%	4.0%	4.0%	5.0%
Phase in period:	*100%*	70%	30%				
Cash Acquisition:	**(€4,351)**	(€3,046)	(€1,305)				

Table 59: Combined firm - Income Statement with Synergies

	Projected					
in EURm	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
> Income Statement						
(+) Revenue BMW:	147,388	151,992	157,247	162,470	167,163	171,877
(+) Revenue Sixt:	3,152	3,489	3,854	4,105	4,080	4,440
(+) Revenue Synergies:	113	117	181	250	257	331
Total Revenue:	**150,653**	**155,598**	**161,282**	**166,824**	**171,500**	**176,648**
(-) Cost of Sales:	(120,697)	(124,884)	(129,122)	(136,480)	(136,739)	(140,471)
(-) Selling and administrative expenses:	(13,134)	(13,514)	(13,999)	(14,459)	(14,830)	(15,234)
(-) Depreciation & Amortisation expenses:	(138)	(143)	(154)	(131)	(134)	(112)
(-) Other Operating Expenses / (Income):	(2,024)	(2,132)	(2,225)	(2,387)	(2,255)	(2,237)
(+) Selling and administrative expenses Synergies:	33	34	52	72	74	95
(+) R&D expenses Synergies:	(10)	(11)	(17)	(24)	(23)	(28)
(-) Amortisation of new intangibles:	(11)	(11)	(11)	(11)	(11)	(11)
(-) Depreciation of PP&E Write-Up:	(8)	(8)	(8)	(8)	(8)	(8)
Consolidated EBIT:	**14,663**	**14,930**	**15,799**	**13,397**	**17,575**	**18,643**
(+/-) Net interest expense:	(2,906)	(2,864)	(2,717)	(2,538)	(2,330)	(2,081)
(+/-) Income/(Loss) from affiliates:	295	304	314	325	334	344
(+/-) Currency exchange gains (loss):	(304)	(311)	(320)	(332)	(341)	(350)
(+/-) Other non-operating income:	1,769	1,824	1,887	1,950	2,006	2,063
EBT excl. unusual items:	**13,516**	**13,883**	**14,964**	**12,802**	**17,244**	**18,619**
Impairment of Goodwill:	0	0	0	0	0	0
Gain (Loss) On Sale Of Invest.:	2,121	2,631	3,276	3,950	2,994	3,213
Gain (Loss) On Sale Of Assets:	(49)	(66)	(61)	(54)	(57)	(60)
Legal Settlements:	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)
Asset Writedown	(8)	(8)	(3)	(3)	(6)	(5)
Other Unusual Items	0	0	0	0	0	0
(+/-) Unusual items:	664	1,157	1,813	2,492	1,531	1,748
EBT Incl. Unusual Items:	**14,180**	**15,040**	**16,777**	**15,294**	**18,775**	**20,367**
(+/-) Income Tax expense:	(3,233)	(3,357)	(3,601)	(3,062)	(4,132)	(4,447)
Earnings from Cont. Ops.:	10,947	11,684	13,176	12,232	14,643	15,921
(+/-) Earnings of Discontinued Ops.:	0	0	0	0	0	0
(+/-) Extraord. Item & Account. Change:	0	0	0	0	0	0
Net Income to Company:	**10,947**	**11,684**	**13,176**	**12,232**	**14,643**	**15,921**
(+/-) Minority Int. in Earnings:	(305)	(314)	(324)	(335)	(344)	(354)
Net Income:	**10,643**	**11,370**	**12,851**	**11,897**	**14,299**	**15,567**

Source: Own estimates

Table 60: Combind firm - Cash flow statement with Synergies

	Projected					
in EURm	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Net Income:	10,643	11,370	12,851	11,897	14,299	15,567
Depreciation & Amort.:	5,899	6,537	7,252	8,964	9,851	10,800
Amort. of Goodwill and Intangibles:	400	400	400	400	400	400
(+) Amortisation of new intangibles:	11	11	11	11	11	11
(+) Depreciation of PP&E Write-Up:	8	8	8	8	8	8
(+) Depreciation & Amortisation:	6,318	6,956	7,671	9,383	10,270	11,218
(+/-) Change in Trade receivables:	(281)	(1,162)	(210)	(329)	(10)	(151)
(+/-) Change in Inventories:	(3,723)	(2,595)	(1,068)	(1,622)	(44)	(762)
(+/-) Change in Trade payables:	198	427	619	523	414	469
(+/-) Change in Other Operating Assets:	2,193	(1,400)	275	203	(143)	10
Other Amortization:	2,233	2,273	2,341	2,381	2,307	2,325
(Gain) Loss From Sale Of Assets:	6	6	6	6	6	6
(Gain) Loss On Sale Of Invest.:	0	0	0	0	0	0
Net (Increase)/Decrease in Loans Orig/Sold:	871	1,979	1,426	1,541	1,454	1,600
(Income) Loss on Equity Invest.:	(619)	(740)	(695)	(488)	(635)	(640)
Asset Writedown & Restructuring Costs:	10	11	4	5	8	7
Net Cash From Discontinued Ops.:	67	48	57	57	57	55
Other Operating Activities:	(2,949)	(2,305)	(2,579)	(2,849)	(2,671)	(2,601)
(+/-) Other Operating CF items:	(381)	1,271	560	652	526	752
Cash inflow / outflow from operating activities:	**14,966**	**14,868**	**20,699**	**20,707**	**25,310**	**27,104**
(-) CapEx BMW:	(9,281)	(10,302)	(11,830)	(13,250)	(14,575)	(16,032)
(-) CapEx Sixt:	(82)	(86)	(77)	(79)	(69)	(64)
(+) Sixt CapEx Synergies:	2	2	2	3	3	3
(-) Capital Expenditures:	(9,361)	(10,386)	(11,905)	(13,325)	(14,641)	(16,093)
(+/-) Other investing CF items:	1,654	2,164	2,068	2,543	2,107	2,221
(-) Integration costs:	(53)	(45)	(30)	(23)		
(-) Acquisition costs:	(3,046)	(1,305)				
Cash inflow / outflow from investing activities:	**(10,806)**	**(9,572)**	**(9,867)**	**(10,805)**	**(12,534)**	**(13,872)**
(+) Total Debt Issued:	28,043	29,738	28,883	28,459	28,246	28,353
(-) Total Debt Repaid:	(27,392)	(27,604)	(27,724)	(27,671)	(27,641)	(27,654)
(+/-) Net Change in Debt:	651	2,134	1,159	788	605	698
(+) Issuance of Common Stock:	0	0	0	0	0	0
(-) Repurchase of Common Stock:	0	0	0	0	0	0
(-) Total Dividends Paid:	(5,583)	(2,533)	(2,707)	(3,045)	(2,795)	(3,370)
(-) Special Dividend Paid:	0	0	0	0	0	0
(+/-) Other Financing activities:	(622)	(685)	(806)	(948)	(765)	(801)
Cash inflow / outflow from financing activities:	**(5,554)**	**(1,084)**	**(2,354)**	**(3,204)**	**(2,956)**	**(3,472)**
Foreign Exchange Rate Adj.:	(13)	(9)	(56)	7	(18)	(19)
Misc. Cash Flow Adj.:	(44)	(31)	(29)	(29)	(33)	(30)
Change in cash and cash equivalents:	(1,451)	4,170	8,393	6,676	9,770	9,711
Beginning Cash and Cash Equivalents:	13,367	11,916	16,086	24,480	31,156	40,926
Cash and Cash Equivalents as at 31 December:	**11,916**	**16,086**	**24,480**	**31,156**	**40,926**	**50,636**

Source: Own estimates

7.6.3.2. WACC, DCF with Synergies and Acquisition Premium

Table 61: Combined firm – Weighted beta

	Rf-rate:	MRP:	Beta:	Average EV:	Weighted Beta:
BMW AG	2.03%	7.34%	1.22	146,212	1.26
SIXT SE	2.03%	7.34%	2.00	7,339	
Combined standalone EV:				153,550	
Weight BMW:				*95.2%*	
Weight SIXT:				*4.8%*	

Table 62: Combined firm - Pre-tax cost of debt

		Weighted pre-tax Cost of Debt:
BMW AG	3.45%	3.5%
SIXT SE	4.45%	

Table 63: Combined firm - Cost of Equity

	Rf-rate:	MRP:	Beta:	Cost of Equity:
Combined Firm	2.03%	7.34%	1.69	14.4%

Table 64: Combined firm - Unlevered beta calculation

as of December 31	Levered Beta	MV Debt	D/C	MV Equity	E/C	Tax	D/E	Unlevered Beta	Weights	Weighted Beta
BMW AG	1.22	85,160	0.61	54,551	0.39	24%	1.56	0.56	95.2%	0.53
SIXT SE	2.00	2,233	0.39	3,513	0.61	26%	0.64	1.36	4.8%	0.06
Weighted average unlevered beta:								**0.96**		**0.60**

Source: Refinitiv, own estimates

Table 65: Combined firm - Levered beta calculation

as at December 31	Unlevered Beta	MV Debt	D/C	MV Equity	E/C	Tax	D/E	Levered Beta
Combined Firm	0.78	87,392	0.60	58,065	0.40	22%	1.51	1.69

Source: Refinitiv, own estimates

Table 66: Combined firm - WACC

Combined Firm	7.40%

Table 67: Combined firm - Discounted cash flow analysis with synergies

	Projected						TV
in EURm	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**Perpetuity**
Revenue:	150,653	155,598	161,282	166,824	171,500	176,648	
EBIT:	14,638	14,906	15,775	13,372	17,550	18,619	
Effective tax rate:	*22.0%*	*22.0%*	*22.0%*	*22.0%*	*22.0%*	*22.0%*	
Taxes (excl. interest effect):	(3,225)	(3,284)	(3,476)	(2,946)	(3,867)	(4,102)	
NOPAT:	**11,413**	**11,622**	**12,299**	**10,426**	**13,684**	**14,517**	
> Adjustments for Non-Cash Expenses:							
(+) Depreciation & Amorisation:	6,342	6,981	7,696	9,408	10,294	11,243	
(+) Change in Net Working Capital:	5,654	4,424	(124)	748	467	286	
(-) Capital Expenditures:	(9,363)	(10,388)	(11,907)	(13,328)	(14,644)	(16,096)	
Unlevered Free Cash Flow:	**14,046**	**12,639**	**7,964**	**7,254**	**9,801**	**9,950**	**156,973**
Discount Period:	1	2	3	4	5	6	6
Discount Rate (WACC):	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%
Cumulative Discount Factor:	0.931	0.867	0.807	0.752	0.700	0.652	0.652
Present Value (PV) of FCF:	**13,078**	**10,957**	**6,428**	**5,451**	**6,858**	**6,483**	**102,270**
EBITDA	**20,980**	**21,887**	**23,470**	**22,780**	**27,845**	**29,862**	

Source: own estimates

Table 68: Combined firm - Net synergies

	Projected					
in EURm	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Discount factor:	*0.931*	*0.867*	*0.807*	*0.752*	*0.700*	*0.652*
Integration costs:	€53	€45	€30	€23		
PV of Integration costs:	**€49**	**€39**	**€24**	**€17**		
Advisory fees (5%):	€205					
PV of Advisory fee:	**€291**					
Legal and other Fees:	**€50**					
PV of Legal fees:	**€47**					
Sum (PV):	**€366**					
Synergies:	€2,025					
Net synergies:	**€1,659**					

Source: Own estimates

Table 69: Combined firm Acquisition premium

Share price as of December 31:	€85.95
Target Bid-price:	€105.00
Acquisition premium:	22.2%
Premium per share:	€19.05
Diluted shares outstanding (in m):	47
Total premium paid (in EURm):	**€894.27**
Synergies after premium paid (in EURm):	€764.89

Source: Own estimates

7.7. Financial statements

7.7.1. BMW AG

Table 70: BMW - Income statement

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Automotive:	85,742	85,846	91,682	80,853	95,476	123,602	126,852	129,937	134,737	138,333	141,320	144,374
Motorcycles:	2,272	2,173	2,368	2,284	2,748	3,176	3,338	3,579	3,804	3,992	4,167	4,347
Financial Services:	27,567	27,705	29,598	30,044	32,867	35,122	36,245	37,422	38,896	40,425	42,215	44,085
Other entities:	7	6	5	3	5	8	6	6	6	7	6	7
Eliminations:	(17,306)	(18,875)	(19,443)	(14,194)	(19,857)	(19,298)	(19,054)	(18,952)	(20,197)	(20,286)	(20,545)	(20,936)
Group:	**98,282**	**96,855**	**104,210**	**98,990**	**111,239**	**142,610**	**147,388**	**151,992**	**157,247**	**162,470**	**167,163**	**171,877**
Cost of Goods Sold:	(55,397)	(56,435)	(60,209)	(58,450)	(61,504)	(87,605)	(119,231)	(123,145)	(127,180)	(134,244)	(134,500)	(138,042)
Gross Profit:	**18,579**	**16,905**	**16,675**	**12,211**	**20,515**	**23,004**	**28,157**	**28,848**	**30,067**	**28,226**	**32,664**	**33,835**
Cost items:	**(8,864)**	**(8,209)**	**(7,933)**	**(7,374)**	**(7,134)**	**(9,029)**	**(14,135)**	**(14,629)**	**(15,133)**	**(15,727)**	**(16,022)**	**(16,398)**
Depreciation & Amortisation:	-	-	-	-	-	-	-	-	-	-	-	-
S&A expenses:	(8,271)	(8,268)	(8,067)	(7,503)	(7,870)	(9,084)	(12,528)	(12,919)	(13,366)	(13,810)	(14,209)	(14,610)
R&D expenses:	-	-	-	-	-	-	0	0	0	0	0	0
Other operating expenses:	(593)	59	134	129	736	55	(1,607)	(1,710)	(1,767)	(1,917)	(1,813)	(1,789)
Total Costs:	**(8,864)**	**(8,209)**	**(7,933)**	**(7,374)**	**(7,134)**	**(9,029)**	(14,135)	(14,629)	(15,133)	(15,727)	(16,022)	(16,398)
Operating income:	**9,715**	**8,696**	**8,742**	**4,837**	**13,381**	**13,975**	**14,022**	**14,219**	**14,934**	**12,499**	**16,641**	**17,437**
Other cost items:	**866**	**679**	**(325)**	**424**	**2,180**	**1,807**	**(1,023)**	**(917)**	**(699)**	**(449)**	**(178)**	**136**
Net interest expense:	(132)	75	(276)	(307)	(7)	416	(2,791)	(2,741)	(2,586)	(2,399)	(2,184)	(1,926)
Income/(loss) from affiliates:	739	632	136	920	1,520	(100)	295	304	314	325	334	344
Currency exchange gains (loss):	36	50	(33)	40	28	14	(295)	(304)	(314)	(325)	(334)	(344)
Other non-operating income (expenses):	223	(78)	(152)	(229)	639	1,477	1,769	1,824	1,887	1,950	2,006	2,063
Financial Result:	**866**	**679**	**(325)**	**424**	**2,180**	**1,807**	(1,023)	(917)	(699)	(449)	(178)	136
EBT excl. unusual items:	**10,581**	**9,375**	**8,417**	**5,261**	**15,561**	**15,782**	**13,000**	**13,301**	**14,235**	**12,050**	**16,464**	**17,573**
Impairment of Goodwill:	-	-	-	-	-	-	0	0	0	0	0	0
Gain (Loss) On Sale of Invest.:	14	156	80	48	584	7,770	2,121	2,631	3,276	3,949	2,994	3,213
Gain (Loss) On Sale of Assets:	80	96	21	(87)	(85)	(43)	(49)	(66)	(61)	(54)	(57)	(60)
Legal Settlements:	-	-	(1,400)	-	-	-	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)	(1,400)
Other Unusual Items:	-	-	-	-	-	-	-	-	-	-	-	-
EBT incl. unusual items:	**10,675**	**9,627**	**7,118**	**5,222**	**16,060**	**23,509**	**13,672**	**14,466**	**16,051**	**14,544**	**18,001**	**19,326**
Income Taxes:	(2,000)	(2,530)	(2,140)	(1,365)	(3,597)	(4,927)	(3,132)	(3,205)	(3,430)	(2,903)	(3,967)	(4,234)
Earnings from cont. operations:	**8,675**	**7,097**	**4,978**	**3,857**	**12,463**	**18,582**	**10,539**	**11,261**	**12,621**	**11,641**	**14,034**	**15,092**
Effective tax rate:	*18.7%*	*26.3%*	*30.1%*	*26.1%*	*22.4%*	*21.0%*	*24.1%*	*24.1%*	*24.1%*	*24.1%*	*24.1%*	*24.1%*
Earnings of Discontinued Ops.:	-	(33)	44	-	-	-	0	0	0	0	0	0
Extraord. Item & Account. Change:	-	-	-	-	-	-	0	0	0	0	0	0
Net Income to company:	**8,675**	**7,064**	**5,022**	**3,857**	**12,463**	**18,582**	**10,539**	**11,261**	**12,621**	**11,641**	**14,034**	**15,092**
Minority Int. in Earnings:	(86)	(90)	(107)	(82)	(81)	(641)	(295)	(304)	(314)	(325)	(334)	(344)
Net Income:	**8,589**	**6,974**	**4,915**	**3,775**	**12,382**	**17,941**	**10,244**	**10,957**	**12,306**	**11,316**	**13,699**	**14,748**
Diluted EPS:	€13.07	€10.61	€7.47	€5.73	€18.77	€27.31	€15.59	€16.68	€18.73	€17.22	€20.85	€22.45

Source: S&P CapitalIQ, own estimates

Table 71: BMW - Cash flow statement

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Net Income:	8,589	6,974	4,915	3,775	12,382	17,941	10,244	10,957	12,306	11,316	13,699	14,748
Depreciation & Amort.:	*3,395*	*3,504*	*4,202*	*4,246*	*4,358*	*4,827*	*5,761*	*6,395*	*7,098*	*8,833*	*9,716*	*10,688*
Amort. of Goodwill and Intangibles:	*191*	*195*	*148*	*183*	*202*	*1,474*	*400*	*400*	*400*	*400*	*400*	*400*
Depreciation & Amort., Total:	3,586	3,699	4,350	4,429	4,560	6,301	6,161	6,795	7,498	9,233	10,116	11,088
Change in Acc. Receivable:	45	112	14	160	119	(939)	(234)	(1,137)	(192)	(310)	(11)	(139)
Change In Inventories:	(1,293)	(403)	(1,560)	370	(563)	(115)	(3,385)	(2,368)	(898)	(1,452)	(53)	(650)
Change in Acc. Payable:	1,414	(328)	429	(1,526)	1,799	531	57	379	513	472	424	384
Change in Other Net Operating Assets:	1,963	852	2,608	1,869	(2,437)	(1,154)	1,711	(1,159)	136	242	(169)	43
Other Amortization:	1,236	1,414	1,667	1,710	1,935	2,265	1,894	1,951	2,011	2,030	1,972	1,991
(Gain) Loss From Sale Of Assets:	*(43)*	*(34)*	*4*	-	-	-	4	4	4	4	4	4
(Gain) Loss On Sale Of Invest.:	-	-	-	-	-	-	-	-	-	-	-	-
Net (Increase)/Decrease in Loans Orig/Sold:	*(7,440)*	*(5,724)*	*(3,560)*	*4,192*	*965*	*1,888*	871	1,979	1,426	1,541	1,454	1,600
(Income) Loss on Equity Invest.:	*(739)*	*(632)*	*(136)*	*(920)*	*(1,520)*	*100*	(619)	(740)	(695)	(488)	(635)	(640)
Net Cash From Discontinued Ops.:	-	*33*	-	-	-	-	-	-	-	-	-	-
Other Operating Activities:	*(1,409)*	*(912)*	*(5,069)*	*(808)*	*(1,326)*	*(3,295)*	(2,625)	(2,013)	(2,315)	(2,562)	(2,379)	(2,317)
Other Operating CFs:	(9,631)	(7,269)	(8,761)	2,464	(1,881)	(1,307)	(474)	1,181	432	525	416	638
Cash inflow / outflow from operating activities:	**5,909**	**5,051**	**3,662**	**13,251**	**15,914**	**23,523**	**14,081**	**14,648**	**19,794**	**20,027**	**24,423**	**26,113**
Capital Expenditure:	(7,112)	(7,777)	(6,902)	(6,150)	(6,619)	(9,050)	(9,281)	(10,302)	(11,830)	(13,250)	(14,575)	(16,032)
Sale of Property, Plant, and Equipment:	*30*	*107*	*32*	*34*	*40*	*103*						
Cash Acquisitions:	-	*(209)*	-	-	-	*3,587*						
Divestitures:	*969*	-	-	-	-	-						
Invest. in Marketable & Equity Securt.:	*(308)*	*111*	*(1,107)*	*1,407*	*136*	*486*						
Net (Inc.) Dec. in Loans Originated/Sold:	-	-	-	-	-	-						
Other Investing Activities:	*258*	*405*	*693*	*1,073*	*43*	*102*						
Other investing CFs:	949	414	(382)	2,514	219	4,278	1,657	2,167	2,080	2,546	2,113	2,226
Cash inflow / outflow from investing activities:	**(6,163)**	**(7,363)**	**(7,284)**	**(3,636)**	**(6,400)**	**(4,772)**	**(7,624)**	**(8,135)**	**(9,750)**	**(10,704)**	**(12,462)**	**(13,806)**
Short Term Debt Issued:	-	-	-	-	-	-						
Long-Term Debt Issued:	*23,955*	*30,762*	*150,822*	*165,196*	*21,090*	*16,050*						
Total Debt Issued:	23,955	30,762	150,822	165,196	21,090	16,050	27,359	29,060	28,209	27,784	27,571	27,678
Short Term Debt Repaid:	*(3,131)*	-	-	-	-	-						
Long-Term Debt Repaid:	*(16,801)*	*(23,725)*	*(143,500)*	*(171,532)*	*(26,434)*	*(27,337)*						
Total Debt Repaid:	(19,932)	(23,725)	(143,500)	(171,532)	(26,434)	(27,337)	(26,886)	(27,111)	(27,224)	(27,168)	(27,139)	(27,154)
Issuance of Common Stock:	38	25	33	28	103	85	0	0	0	0	0	0
Repurchase of Common Stock:	-	-	-	-	-	(1,278)	0	0	0	0	0	0
Common Dividends Paid:	*(2,324)*	*(2,630)*	*(2,303)*	*(1,646)*	*(1,253)*	*(3,827)*	*(5,481)*	*(2,459)*	*(2,630)*	*(2,953)*	*(2,716)*	*(3,288)*
Total Dividends Paid:	(2,324)	(2,630)	(2,303)	(1,646)	(1,253)	(3,827)	(5,481)	(2,459)	(2,630)	(2,953)	(2,716)	(3,288)
Special Dividend Paid:	-	-	-	-	-	-	0	0	0	0	0	0
Other Financing Activities:	(165)	(136)	(262)	(300)	(241)	(1,677)	(620)	(710)	(812)	(955)	(774)	(812)
Cash inflow / outflow from financing activities:	**1,572**	**4,296**	**4,790**	**(8,254)**	**(6,735)**	**(17,984)**	**(5,628)**	**(1,219)**	**(2,456)**	**(3,292)**	**(3,058)**	**(3,576)**
Foreign Exchange Rate Adj.:	(223)	(19)	(28)	180	(307)	104	(13)	(9)	(56)	7	(18)	(19)
Misc. Cash Flow Adj.:	64	(25)	(83)	(40)	-	(10)	(44)	(31)	(29)	(29)	(33)	(30)
Change in cash and cash equivalents:	**1,159**	**1,940**	**1,057**	**1,501**	**2,472**	**861**	**772**	**5,253**	**7,504**	**6,010**	**8,852**	**8,681**
Beginning Cash and Cash Equivalents:							13,340	14,112	19,364	26,868	32,878	41,730
Cash and Cash Equivalents as at 31 December:	**7,183**	**8,994**	**9,961**	**10,674**	**12,538**	**13,340**	**14,112**	**19,364**	**26,868**	**32,878**	**41,730**	**50,411**

Source: S&P CapitalIQ, own estimates

Table 72: BMW - Balance sheet

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Assets												
Cash and Cash Equivalents:	7,183	8,994	9,961	10,674	12,538	13,340	14,112	19,364	26,868	32,878	41,730	50,411
Accounts Receivable:	*2,663*	*2,455*	*2,415*	*2,198*	*2,167*	*4,013*	4,247	5,383	5,575	5,885	5,896	6,035
Other Receivables:	*1,511*	*7,962*	*1,125*	*5,650*	*1,446*	*962*	1,204	1,083	1,144	1,113	1,128	1,121
Total Receivables:	4,174	10,417	3,540	7,848	3,613	4,975	5,451	6,466	6,718	6,998	7,024	7,155
Inventory:	12,683	13,639	15,083	14,078	15,524	19,481	22,866	25,235	26,133	27,584	27,637	28,287
Finance Div. Loans and Leases, ST:	*32,087*	*38,791*	*41,510*	*36,352*	*35,799*	*35,454*	35,868	35,707	35,676	35,751	35,711	35,713
Finance Div. Other Curr. Assets:	*1,935*	*2,685*	*2,967*	*3,745*	*3,958*	*4,188*	3,715	3,901	3,940	3,936	3,873	3,913
Other current assets:	15,434	10,212	17,569	9,110	14,741	14,766	**12,872**	**14,126**	**13,922**	**13,640**	**13,896**	**13,819**
Total current assets:	**73,496**	**84,738**	**90,630**	**81,807**	**86,173**	**92,204**	**94,884**	**104,800**	**113,258**	**120,787**	**129,871**	**139,298**
Gross Property, Plant & Equipment:	-	*57,291*	-	-	-	-						
Accumulated Depreciation:	-	*(35,503)*	-	-	-	-						
Net Property, Plant & Equipment:	18,438	21,788	23,156	21,772	22,323	32,005	35,526	39,433	44,165	48,582	53,440	58,784
Long-term Investments:	*3,459*	*3,363*	*3,902*	*4,320*	*6,353*	*1,771*	1,500	1,500	1,500	1,500	1,500	1,500
Other Intangibles:	*9,039*	*10,568*	*11,340*	*11,965*	*12,606*	*21,406*	10,316	10,316	10,316	10,316	10,316	10,316
Finance Div. Loans and Leases, LT:	*48,475*	*48,313*	*51,030*	*48,025*	*51,712*	*50,368*	50,000	50,000	50,000	50,000	50,000	50,000
Finance Div. Other LT Assets:	*36,715*	*38,662*	*43,087*	*42,450*	*45,141*	*43,311*	*43,497*	*43,600*	*43,887*	*43,574*	*43,640*	*43,675*
Deferred Tax Assets, LT:	*1,965*	*1,640*	*2,194*	*2,459*	*2,202*	*1,758*	*2,153*	*2,143*	*2,064*	*2,030*	*2,097*	*2,084*
Other Long-Term Assets:	*3,999*	*2,232*	*2,695*	*3,860*	*3,017*	*4,103*	*3,419*	*3,600*	*3,535*	*3,664*	*3,554*	*3,588*
Other non-current assets:	103,652	104,778	114,248	113,079	121,031	122,717	110,885	111,158	111,302	111,083	111,107	111,162
Total non-current assets:	**122,090**	**126,566**	**137,404**	**134,851**	**143,354**	**154,722**	**146,410**	**150,592**	**155,467**	**159,665**	**164,547**	**169,947**
Total Assets:	**195,586**	**211,304**	**228,034**	**216,658**	**229,527**	**246,926**	**241,294**	**255,392**	**268,725**	**280,452**	**294,418**	**309,245**
Liabilities												
Short-term Borrowings:	*4,461*	*2,480*	*2,615*	*550*	*1,374*	*1,712*						
Curr. Port. of LT Debt:	*26,113*	*24,729*	*31,718*	*25,209*	*26,097*	*25,259*						
Curr. Port. of Leases:	*9*	*444*	*544*	*492*	*475*	*533*						
Finance Div. Debt Current:	*10,144*	*10,961*	*11,216*	*12,735*	*13,175*	*13,223*						
Long-Term Debt:	*49,302*	*60,249*	*64,855*	*61,640*	*56,870*	*47,950*						
Long-Term Leases:	*101*	*2,068*	*2,351*	*2,019*	*1,945*	*2,231*						
Finance Div. Debt Non-Curr.:	*3,428*	*3,398*	*3,441*	*3,731*	*3,527*	*3,288*						
Total Debt:	**93,558**	**104,329**	**116,740**	**106,376**	**103,463**	**94,196**	**94,669**	**96,618**	**97,603**	**98,220**	**98,651**	**99,175**
Accounts Payable:	8,882	8,719	9,239	7,752	10,038	13,268	13,325	13,704	14,217	14,689	15,113	15,497
Accrued Exp.:	4,106	-	-	-	-	-	-	-	-	-	-	-
Finance Div. Debt Current							-	-	-	-	-	-
Finance Div. Other Curr. Liab.:	*1,631*	*1,486*	*1,426*	*1,472*	*1,494*	*1,494*	*1,472*	*1,483*	*1,486*	*1,483*	*1,481*	*1,483*
Curr. Income Taxes Payable:	*891*	*950*	*779*	*555*	*781*	*1,101*	*804*	*810*	*874*	*897*	*846*	*857*
Unearned Revenue, Current:	*2,284*	-	-	-	-	-	-	-	-	-	-	-
Other Current Liabilities:	*13,241*	*22,079*	*25,088*	*23,198*	*23,032*	*27,831*	22,762	25,277	28,385	27,895	30,950	33,076
Other current liabilities (consolidated):	*22,153*	*24,515*	*27,293*	*25,225*	*25,307*	*30,426*	25,037	27,570	30,745	30,276	33,277	35,417
Total current liabiilities:	**31,035**	**33,234**	**36,532**	**32,977**	**35,345**	**43,694**	**38,363**	**41,275**	**44,962**	**44,965**	**48,391**	**50,914**
Finance Div. Other Non-Curr. Liab.:	*428*	*155*	*149*	*195*	*187*	*176*	*177*	*184*	*181*	*179*	*180*	*181*
Unearned Revenue, Non-Current:	*4,382*	-	-	-	-	-	-	-	-	-	-	-
Pension & Other Post-Retire. Benefits:	*3,180*	*2,281*	*3,288*	*3,644*	*1,212*	*319*	*766*	*542*	*654*	*598*	*626*	*612*
Def. Tax Liability, Non-Curr.:	*2,166*	*1,762*	*632*	*509*	*1,458*	*2,765*	*1,341*	*1,518*	*1,771*	*1,849*	*1,620*	*1,689*
Other Non-Current Liabilities:	*6,629*	*11,746*	*10,786*	*11,437*	*12,730*	*14,488*	*12,360*	*12,754*	*13,083*	*13,171*	*12,842*	*12,963*
Other non-current liabilities (consolidated):	*16,785*	*15,944*	*14,855*	*15,785*	*15,587*	*17,748*	14,644	14,998	15,688	15,797	15,268	15,445
Total non-current liabilities:	**16,785**	**15,944**	**14,855**	**15,785**	**15,587**	**17,748**	**14,644**	**14,998**	**15,688**	**15,797**	**15,268**	**15,445**
Total Liabilities:	**141,378**	**153,507**	**168,127**	**155,138**	**154,395**	**155,638**	**147,675**	**152,891**	**158,253**	**158,982**	**162,310**	**165,534**
Equity												
Common Stock	658	658	659	660	661	663	663	663	663	663	663	663
Retained Earnings	50,993	55,830	57,667	59,550	71,705	85,425	91,079	99,578	109,254	117,617	128,600	140,061
Additional Paid In Capital	2,084	2,118	2,161	2,199	2,325	2,432	2,400	2,450	250	2,600	2,800	2,800
Treasury Stock	-	-	-	-	-	(1,278)	(1,278)	(1,278)	(1,278)	(1,278)	(1,278)	(1,278)
Comprehensive Inc. and Other	37	(1,338)	(1,163)	(1,518)	(325)	(117)	(781)	(685)	(477)	(515)	(614)	(573)
Total Common Equity	**53,772**	**57,268**	**59,324**	**60,891**	**74,366**	**87,125**	**92,084**	**100,728**	**108,412**	**119,087**	**130,171**	**141,673**
Minority Interest	436	529	583	629	766	4,163	1,535	1,773	2,059	2,383	1,938	2,038
Total Equity	**54,208**	**57,797**	**59,907**	**61,520**	**75,132**	**91,288**	**93,619**	**102,501**	**110,472**	**121,470**	**132,109**	**143,711**
Total Liabilities And Equity	**195,586**	**211,304**	**228,034**	**216,658**	**229,527**	**246,926**	**241,294**	**255,392**	**268,725**	**280,452**	**294,418**	**309,245**

7.7.2. SIXT SE

Table 73: Sixt - Income statement

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Total Revenue	**2,604**	**2,933**	**2,505**	**1,540**	**2,294**	**3,087**	**3,152**	**3,489**	**3,854**	**4,105**	**4,080**	**4,440**
Cost Of Goods Sold:	(1,346)	(1,486)	(986)	(689)	(724)	(1,014)	(1,467)	(1,739)	(1,942)	(2,236)	(2,239)	(2,429)
Gross Profit	**1,258**	**1,446**	**1,519**	**851**	**1,570**	**2,073**	**1,685**	**1,750**	**1,912**	**1,869**	**1,841**	**2,011**
Depreciation & Amort.	(16)	(17)	(104)	(128)	(123)	(140)	(138)	(143)	(154)	(131)	(134)	(112)
Selling General & Admin Exp.	(429)	(492)	(652)	(443)	(567)	(764)	(606)	(595)	(633)	(649)	(621)	(625)
R & D Exp.	-	-	-	-	-	-	-	-	-	-	-	-
Amort. of Goodwill and Intangibles	(8)	(9)	(8)	(6)	(5)	(7)	(7)	(6)	(6)	(7)	(6)	(6)
Other Operating Expense/(Income)	(463)	(539)	(391)	(274)	(403)	(575)	(411)	(416)	(451)	(463)	(435)	(441)
Other operating expenses	(900)	(1,040)	(1,051)	(723)	(975)	(1,345)	(1,024)	(1,017)	(1,090)	(1,119)	(1,062)	(1,072)
Total operating expenses	(915)	(1,057)	(1,155)	(851)	(1,098)	(1,485)	(1,162)	(1,160)	(1,244)	(1,250)	(1,197)	(1,184)
Operating Income	**343**	**389**	**366**	**(1)**	**472**	**587**	**524**	**591**	**668**	**619**	**644**	**827**
Net Interest Exp.	(34)	(35)	(30)	(35)	(37)	(39)	(115)	(123)	(131)	(139)	(147)	(154)
Income/(Loss) from Affiliates	(6)	(2)	-	-	-	-	0	0	0	0	0	0
Currency Exchange Gains (Loss)	(9)	(17)	(19)	(11)	(1)	(6)	(9)	(7)	(6)	(7)	(7)	(6)
Other Non-Operating Inc. (Exp.)	5	(0)	0	0	0	0	0	0	0	0	0	0
EBT Excl. Unusual Items	**299**	**334**	**316**	**(46)**	**434**	**543**	**400**	**461**	**531**	**473**	**490**	**667**
Impairment of Goodwill	-	-	-	(8)	-	-	0	0	0	0	0	0
Gain (Loss) On Sale Of Invest.	2	199	0	2	0	(0)	0	0	0	0	0	0
Asset Writedown	(14)	1	(8)	(29)	(2)	6	(8)	(8)	(3)	(3)	(6)	(5)
Other Unusual Items	-	-	-	-	10	1	0	0	0	0	0	0
EBT Incl. Unusual Items	**287**	**535**	**308**	**(82)**	**442**	**550**	**392**	**453**	**528**	**470**	**485**	**662**
Income Tax Expense	(83)	(96)	(83)	(17)	(129)	(164)	(100)	(152)	(171)	(159)	(165)	(212)
% Effective tax rate	*28.9%*	*17.9%*	*26.9%*	*21.2%*	*29.2%*	*29.9%*	*25.6%*	*25.6%*	*25.6%*	*25.6%*	*25.6%*	*25.6%*
Earnings from Cont. Ops.	204	439	225	(99)	313	386	**291**	**302**	**357**	**311**	**320**	**450**
Earnings of Discontinued Ops.	-	-	21	101	-	-	0	0	0	0	0	0
Extraord. Item & Account. Change	-	-	-	-	-	-	0	0	0	0	0	0
Net Income to Company	**204**	**439**	**247**	**2**	**313**	**386**	**291**	**302**	**357**	**311**	**320**	**450**
Minority Int. in Earnings	(12)	(13)	(13)	(35)	0	-	(10)	(10)	(10)	(10)	(10)	(10)
Net Income	**192**	**426**	**234**	**(33)**	**313**	**386**	**281**	**292**	**347**	**301**	**310**	**440**
Diluted EPS:	€4.09	€9.08	€4.99	€0.71	€6.67	€8.22	€5.99	€6.21	€7.38	€6.41	€6.59	€9.36

Source: S&P CapitalIQ, own estimates

Table 74: Sixt - Cash flow statement

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Net Income:	192	426	234	(33)	313	386	281	292	347	301	310	440
Depreciation & Amort.:	*16*	*17*	*104*	*128*	*123*	*140*	138	143	154	131	134	112
Amort. of Goodwill and Intangibles:	*1*	*2*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Depreciation & Amort., Total:	17	19	104	129	123	141	138	143	154	131	134	112
Change in Trade receivables:	(69)	(65)	(205)	154	15	(15)	(48)	(25)	(19)	(19)	1	(12)
Change in Inventories:	12	(22)	(5)	(30)	54	(23)	(337)	(226)	(169)	(171)	9	(112)
Change in Trade payables:	189	(47)	184	(352)	(21)	234	140	48	107	51	(11)	86
Change in Other Operating Assets:	(449)	(834)	(419)	844	(485)	(1,061)	482	(241)	139	(39)	26	(33)
Other Amortization:	*479*	*519*	*406*	*291*	*245*	*412*	339	322	329	350	335	334
(Gain) Loss From Sale Of Assets:	*(9)*	*(6)*	*1*	*1*	*3*	*2*	2	2	2	2	2	2
(Gain) Loss On Sale Of Invest.:	*(2)*	*(198)*	-	-	-	-	-	-	-	-	-	-
Asset Writedown & Restructuring Costs:	*14*	*2*	*8*	*38*	*2*	*(6)*	10	11	4	5	8	7
Net Cash From Discontinued Ops.:	-	-	*106*	*28*	-	-	67	48	57	57	57	55
Other Operating Activities:	*(364)*	*(140)*	*(456)*	*(401)*	*(171)*	*(270)*	(324)	(292)	(264)	(288)	(292)	(284)
Other Operating CF items:	118	177	66	(43)	79	137	93	90	129	127	110	114
Cash inflow / outflow from operating activities:	**10**	**(346)**	**(41)**	**669**	**79**	**(202)**	**750**	**80**	**687**	**381**	**579**	**594**
Capital Expenditure:	(46)	(54)	(40)	(22)	(35)	(65)	(82)	(86)	(77)	(79)	(69)	(64)
Sale of Property, Plant, and Equipment:	*2*	*0*	*3*	*2*	*0*	*0*						
Cash Acquisitions:	-	*(6)*	-	-	-	*(43)*						
Divestitures:	-	-	-	*37*	-	-						
Invest. in Marketable & Equity Securt.:	*(1)*	*209*	*(1)*	-	*(50)*	*50*						
Net (Inc.) Dec. in Loans Originated/Sold:	-	-	-	-	-	-						
Other Investing Activities:	-	*0*	*(7)*	*(4)*	-	-						
Other Investing CF items:	1	203	(5)	35	(50)	8	(3)	(3)	(12)	(3)	(5)	(6)
Cash inflow / outflow from investing activities:	**(45)**	**149**	**(45)**	**13**	**(85)**	**(57)**	**(85)**	**(88)**	**(89)**	**(81)**	**(74)**	**(69)**
Total Debt Issued:	*699*	*838*	*661*	*766*	*345*	*670*	685	677	674	675	675	675
Total Debt Repaid:	*(535)*	*(386)*	*(343)*	*(948)*	*(833)*	*(478)*	(507)	(493)	(500)	(503)	(502)	(501)
Repurchase of Common Stock:	*(1)*	*(3)*	*(3)*	*(6)*	-	-	0	0	0	0	0	0
Total Dividends Paid:	*(78)*	*(92)*	*(101)*	*(1)*	*(1)*	*(174)*	(102)	(74)	(77)	(91)	(80)	(82)
Special Dividend Paid:	-	*(96)*	-	-	-	-	0	0	0	0	0	0
Other Financing Activities:	*(7)*	*(6)*	*(106)*	*99*	*(0)*	*0*	(2)	24	6	7	9	11
Cash inflow / outflow from financing activities:	**78**	**256**	**107**	**(90)**	**(489)**	**18**	**74**	**135**	**102**	**88**	**102**	**104**
Foreign Exchange Rate Adj.:	*(1)*	*0*	*1*	*(9)*	*8*	*2*	0	0	0	0	0	0
Misc. Cash Flow Adj.:	*0*	*0*	*1*	-	*0*	-	0	0	0	0	0	0
Change in cash and cash equivalents:	**41**	**58**	**25**	**583**	**(487)**	**(239)**	**739**	**127**	**701**	**388**	**607**	**629**
Cash and cash equivalents as at 1 January:							27	765	892	1,593	1,980	2,587
Cash and cash equivalents as at 31 December:	**88**	**146**	**171**	**753**	**266**	**27**	**765**	**892**	**1,593**	**1,980**	**2,587**	**3,216**

Source: S&P CapitalIQ, own estimates

Table 75: Sixt - Balance sheet

	Historical						Projected					
in EURm	**FY17A**	**FY18A**	**FY19A**	**FY20A**	**FY21A**	**FY22A**	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Assets												
Cash and cash equivalents:	88	146	171	753	266	27	765	892	1,593	1,980	2,587	3,216
Trade receivables:	*496*	*561*	*766*	*530*	*515*	*536*	873	1,100	1,269	1,439	1,430	1,542
Other Receivables:	*284*	*282*	*335*	*133*	*72*	*193*	216	205	192	169	175	192
Total Receivables:	779	842	1,101	663	586	729	1,089	1,305	1,461	1,608	1,605	1,734
Inventory:	76	98	102	81	27	50	98	123	141	160	159	172
Other current assets:	2,076	2,605	3,033	2,291	3,005	4,015	3,510	3,762	3,636	3,699	3,668	3,683
Total current assets:	**3,019**	**3,691**	**4,407**	**3,788**	**3,885**	**4,821**	**5,463**	**6,082**	**6,831**	**7,448**	**8,019**	**8,805**
Gross Property, Plant & Equipment:	*249*	*277*	*769*	*841*	*952*	*1,164*						
Accumulated Depreciation:	*(72)*	*(79)*	*(168)*	*(301)*	*(415)*	*(537)*						
Net Property, Plant & Equipment:	177	198	601	540	537	627	571	514	437	384	319	271
Long-term Investments	3	4	2	10	3	1	*5*	*3*	*3*	*4*	*3*	*3*
Goodwill	20	28	29	18	18	25	*23*	*21*	*22*	*23*	*22*	*22*
Other Intangibles	17	22	19	10	13	18	*15*	*14*	*15*	*16*	*15*	*15*
Accounts Receivable Long-Term	3	2	1	-	-	-	*1*	*1*	*1*	*1*	*1*	*1*
Deferred Tax Assets, LT	18	30	48	44	32	12	*34*	*30*	*27*	*26*	*29*	*28*
Other Long-Term Assets	1,234	1,218	1,143	19	33	46	*658*	*530*	*465*	*407*	*204*	*58*
Other non-current assets (consolidated):	1,295	1,304	1,241	101	99	103	735	600	533	476	274	127
Total non-current assets:	**1,472**	**1,502**	**1,843**	**641**	**637**	**731**	**1,306**	**1,114**	**970**	**860**	**593**	**398**
Total assets:	**4,491**	**5,193**	**6,249**	**4,428**	**4,521**	**5,551**	**6,768**	**7,195**	**7,801**	**8,308**	**8,612**	**9,203**
Liabilities												
Short-term Borrowings:	25	-	70	88	-	112						
Curr. Port. of LT Debt:	549	430	605	268	282	591						
Curr. Port. of Leases:	2	4	94	86	110	168						
Long-Term Debt:	1,689	2,280	2,338	1,648	1,328	1,258						
Long-Term Leases:	11	11	315	281	274	369						
Total Debt:	**2,277**	**2,725**	**3,422**	**2,371**	**1,995**	**2,498**	**2,675**	**2,860**	**3,034**	**3,206**	**3,379**	**3,553**
Trade Payables:	691	644	833	423	402	637	777	825	932	983	972	1,058
Accrued Exp.:	-	-	-	66	62	144	*91*	*91*	*97*	*106*	*96*	*97*
Curr. Income Taxes Payable:	48	54	36	23	53	74	*47*	*49*	*56*	*56*	*52*	*53*
Unearned Revenue, Current:	-	-	-	21	43	-	*32*	*32*	*35*	*33*	*33*	*33*
Other Current Liabilities:	269	273	302	122	187	143	*188*	*160*	*169*	*165*	*171*	*249*
Other current liabilities (consolidated):	317	327	338	231	344	361	357	331	357	360	352	433
Total current liabilities:	**1,008**	**972**	**1,171**	**654**	**746**	**998**	**1,134**	**1,157**	**1,289**	**1,343**	**1,324**	**1,491**
Pension & Other Post-Retire. Benefits:	2	2	3	3	3	3						
Def. Tax Liability, Non-Curr.:	25	33	43	5	14	51						
Other Non-Current Liabilities:	2	20	17	1	17	22						
Total Non-Current Liabilities:	**29**	**55**	**64**	**9**	**34**	**76**	**46**	**41**	**49**	**53**	**47**	**48**
Total Liabilities:	**3,313**	**3,751**	**4,657**	**3,034**	**2,775**	**3,572**	**3,855**	**4,058**	**4,372**	**4,602**	**4,750**	**5,092**
Equity												
Common Stock:	*120*	*120*	*120*	*120*	*120*	*120*	*120*	*120*	*120*	*120*	*120*	*120*
Retained Earnings:	*211*	*212*	*209*	*212*	*226*	*207*	1,349	1,528	1,746	2,016	2,226	2,456
Additional Paid In Capital:	-	-	-	-	-	-	-	-	-	-	-	-
Treasury Stock:	-	-	-	-	-	-	-	-	-	-	-	-
Comprehensive Inc. and Other:	*727*	*985*	*1,131*	*1,062*	*1,400*	*1,652*	1,311	1,357	1,430	1,438	1,384	1,402
Total Common Equity:	1,059	1,317	1,459	1,395	1,746	1,979	2,780	3,005	3,296	3,574	3,730	3,978
Minority Interest:	119	125	133	-	-	-	133	133	133	133	133	133
Total Equity:	**1,178**	**1,442**	**1,592**	**1,395**	**1,746**	**1,979**	**2,913**	**3,138**	**3,429**	**3,706**	**3,862**	**4,111**
Total Liabilities And Equity:	**4,491**	**5,193**	**6,249**	**4,428**	**4,521**	**5,551**	**6,768**	**7,195**	**7,801**	**8,308**	**8,612**	**9,203**

Source: S&P CapitalIQ, own estimates

7.7.3. Combined firm

Table 76: Combined firm - Income statement

	Projected					
in EURm	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Automotive:	*126,852*	*129,937*	*134,737*	*138,333*	*141,320*	*144,374*
Motorcycles:	*3,338*	*3,579*	*3,804*	*3,992*	*4,167*	*4,347*
Financial Services:	*36,245*	*37,422*	*38,896*	*40,425*	*42,215*	*44,085*
Other entities:	*6*	*6*	*6*	*7*	*6*	*7*
Eliminations:	*(19,054)*	*(18,952)*	*(20,197)*	*(20,286)*	*(20,545)*	*(20,936)*
(+) Revenue BMW:	147,388	151,992	157,247	162,470	167,163	171,877
(+) Revenue Sixt:	3,152	3,489	3,854	4,105	4,080	4,440
Total Revenue:	**150,540**	**155,482**	**161,101**	**166,575**	**171,243**	**176,317**
(-) Cost of Sales:	(120,697)	(124,884)	(129,122)	(136,480)	(136,739)	(140,471)
(-) Selling and administrative expenses:	(13,134)	(13,514)	(13,999)	(14,459)	(14,830)	(15,234)
(-) Depreciation & Amortisation expenses:	(138)	(143)	(154)	(131)	(134)	(112)
(-) Other Operating Expenses / (Income):	(2,024)	(2,132)	(2,225)	(2,387)	(2,255)	(2,237)
Consolidated EBIT:	**14,546**	**14,809**	**15,601**	**13,118**	**17,285**	**18,264**
(+/-) Net interest expense:	(2,906)	(2,864)	(2,717)	(2,538)	(2,330)	(2,081)
(+/-) Income/(Loss) from affiliates:	295	304	314	325	334	344
(+/-) Currency exchange gains (loss):	(304)	(311)	(320)	(332)	(341)	(350)
(+/-) Other non-operating income:	1,769	1,824	1,887	1,950	2,006	2,063
EBT excl. unusual items:	**13,399**	**13,762**	**14,766**	**12,523**	**16,954**	**18,240**
Impairment of Goodwill:	*0*	*0*	*0*	*0*	*0*	*0*
Gain (Loss) On Sale Of Invest.:	*2,121*	*2,631*	*3,276*	*3,950*	*2,994*	*3,213*
Gain (Loss) On Sale Of Assets:	*(49)*	*(66)*	*(61)*	*(54)*	*(57)*	*(60)*
Legal Settlements:	*(1,400)*	*(1,400)*	*(1,400)*	*(1,400)*	*(1,400)*	*(1,400)*
Asset Writedown	*(8)*	*(8)*	*(3)*	*(3)*	*(6)*	*(5)*
Other Unusual Items	*0*	*0*	*0*	*0*	*0*	*0*
(+/-) Unusual items:	664	1,157	1,813	2,492	1,531	1,748
EBT Incl. Unusual Items:	**14,063**	**14,919**	**16,578**	**15,014**	**18,485**	**19,988**
(+/-) Income Tax expense:	*(3,233)*	*(3,357)*	*(3,601)*	*(3,062)*	*(4,132)*	*(4,447)*
Effective tax rate:	*23.0%*	*22.5%*	*21.7%*	*20.4%*	*22.4%*	*22.2%*
Earnings from Cont. Ops.:	**10,831**	**11,563**	**12,977**	**11,953**	**14,353**	**15,542**
(+/-) Earnings of Discontinued Ops.:	0	0	0	0	0	0
(+/-) Extraord. Item & Account. Change:	0	0	0	0	0	0
Net Income to Company:	**10,831**	**11,563**	**12,977**	**11,953**	**14,353**	**15,542**
(+/-) Minority Int. in Earnings:	(305)	(314)	(324)	(335)	(344)	(354)
Net Income:	**10,526**	**11,249**	**12,653**	**11,618**	**14,009**	**15,188**

Source: S&P CapitalIQ, own estimates

Table 77: Combined firm - Cash flow statement

	Projected					
in EURm	**FY23F**	**FY24F**	**FY25F**	**FY26F**	**FY27F**	**FY28F**
Net income:	10,526	11,249	12,653	11,618	14,009	15,188
Depreciation & Amort.:	5,899	6,537	7,252	8,964	9,851	10,800
Amort. of Goodwill and Intangibles:	400	400	400	400	400	400
(+) Depreciation & Amortisation:	6,299	6,937	7,652	9,364	10,251	11,200
(+/-) Change in Trade receivables:	(281)	(1,162)	(210)	(329)	(10)	(151)
(+/-) Change in Inventories:	(3,723)	(2,595)	(1,068)	(1,622)	(44)	(762)
(+/-) Change in Trade payables:	198	427	619	523	414	469
(+/-) Change in Other Operating Assets:	2,193	(1,400)	275	203	(143)	10
Other Amortization:	*2,233*	*2,273*	*2,341*	*2,381*	*2,307*	*2,325*
(Gain) Loss From Sale Of Assets:	*6*	*6*	*6*	*6*	*6*	*6*
(Gain) Loss On Sale Of Invest.:	*0*	*0*	*0*	*0*	*0*	*0*
Net (Increase)/Decrease in Loans Orig/Sold:	*871*	*1,979*	*1,426*	*1,541*	*1,454*	*1,600*
(Income) Loss on Equity Invest.:	*(619)*	*(740)*	*(695)*	*(488)*	*(635)*	*(640)*
Asset Writedown & Restructuring Costs:	*10*	*11*	*4*	*5*	*8*	*7*
Net Cash From Discontinued Ops.:	*67*	*48*	*57*	*57*	*57*	*55*
Other Operating Activities:	*(2,949)*	*(2,305)*	*(2,579)*	*(2,849)*	*(2,671)*	*(2,601)*
(+/-) Other Operating CF items:	(381)	1,271	560	652	526	752
Cash inflow / outflow from operating activities:	**14,831**	**14,728**	**20,482**	**20,409**	**25,002**	**26,707**
(-) Capital Expenditures:	(9,363)	(10,388)	(11,907)	(13,328)	(14,644)	(16,096)
(+/-) Other investing CF items:	1,654	2,164	2,068	2,543	2,107	2,221
Cash inflow / outflow from investing activities:	**(7,709)**	**(8,224)**	**(9,839)**	**(10,785)**	**(12,536)**	**(13,875)**
(+) Total Debt Issued:	28,043	29,738	28,883	28,459	28,246	28,353
(-) Total Debt Repaid:	(27,392)	(27,604)	(27,724)	(27,671)	(27,641)	(27,654)
(+/-) Net Change in Debt:	651	2,134	1,159	788	605	698
(+) Issuance of Common Stock:	0	0	0	0	0	0
(-) Repurchase of Common Stock:	0	0	0	0	0	0
(-) Total Dividends Paid:	(5,583)	(2,533)	(2,707)	(3,045)	(2,795)	(3,370)
(-) Special Dividend Paid:	0	0	0	0	0	0
(+/-) Other Financing activities:	(622)	(685)	(806)	(948)	(765)	(801)
Cash inflow / outflow from financing activities:	**(5,554)**	**(1,084)**	**(2,354)**	**(3,204)**	**(2,956)**	**(3,472)**
Foreign Exchange Rate Adj.:	(13)	(9)	(56)	7	(18)	(19)
Misc. Cash Flow Adj.:	(44)	(31)	(29)	(29)	(33)	(30)
Change in cash and cash equivalents:	**1,511**	**5,380**	**8,204**	**6,397**	**9,459**	**9,310**
Beginning Cash and Cash Equivalents:	*13,367*	*14,877*	*20,257*	*28,461*	*34,858*	*44,317*
Cash and Cash Equivalents as at 31 December:	**14,877**	**20,257**	**28,461**	**34,858**	**44,317**	**53,626**

Source: S&P CapitalIQ, own estimates

Table 78: Combined firm - Balance sheet

	Projected					
in EURm	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Cash and Cash Equivalents:	14,877	20,257	28,461	34,858	44,317	53,626
Inventory:	22,964	25,357	26,274	27,745	27,796	28,459
Total Receivables:	6,540	7,771	8,180	8,606	8,629	8,889
Other current assets:	55,965	57,497	57,175	57,026	57,148	57,128
Total Current Assets:	**100,346**	**110,882**	**120,089**	**128,235**	**137,891**	**148,103**
Net Property, Plant & Equipment:	36,096	39,947	44,602	48,966	53,759	59,055
Other non-current assets (consolidated):	111,620	111,758	111,835	111,559	111,381	111,289
Total non-current assets:	**147,716**	**151,705**	**156,437**	**160,525**	**165,140**	**170,344**
Total assets:	**248,063**	**262,587**	**276,526**	**288,760**	**303,031**	**318,447**
Total Debt:	97,344	99,478	100,637	101,425	102,030	102,728
Trade Payables:	14,103	14,529	15,149	15,672	16,086	16,555
Other current liabilities:	25,394	27,902	31,102	30,636	33,629	35,849
Total current liabilities:	**39,497**	**42,431**	**46,251**	**46,308**	**49,714**	**52,404**
Total non-current liabilities:	**14,689**	**15,039**	**15,738**	**15,851**	**15,315**	**15,493**
Total liabilities:	**151,530**	**156,948**	**162,625**	**163,584**	**167,060**	**170,625**
Common stock:	783	783	783	783	783	783
Retained earnings:	92,428	101,106	111,000	119,633	130,826	142,517
Other common equity:	1,653	1,843	(75)	2,245	2,291	2,351
Total Common Equity:	**94,864**	**103,733**	**111,709**	**122,661**	**133,901**	**145,651**
Minority Interest:	1,668	1,906	2,192	2,515	2,070	2,171
Total equity:	**96,532**	**105,639**	**113,901**	**125,176**	**135,971**	**147,822**
Total liabilities and equity:	**248,063**	**262,587**	**276,526**	**288,760**	**303,031**	**318,447**

Source: S&P CapitalIQ, own estimates

7.8. Additional information

Figure 14: Global PEV sales by brand

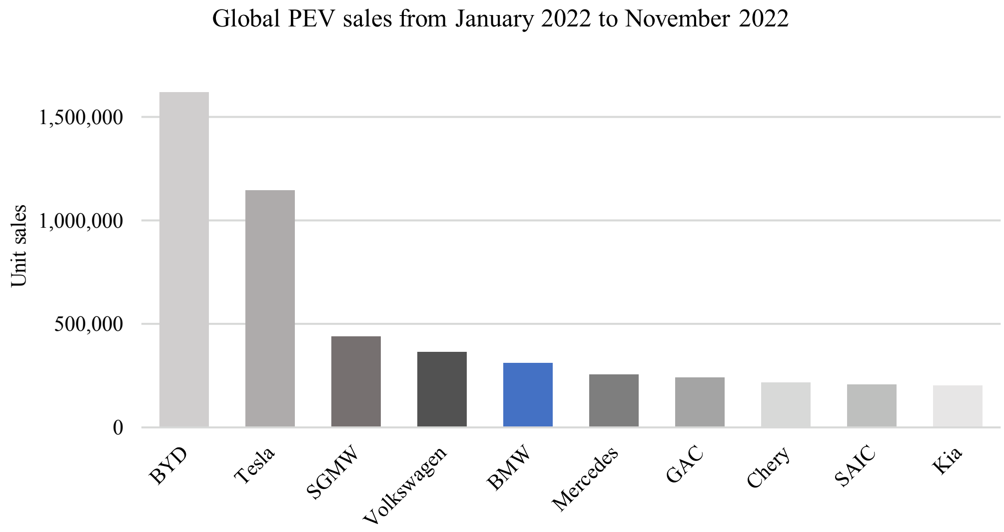
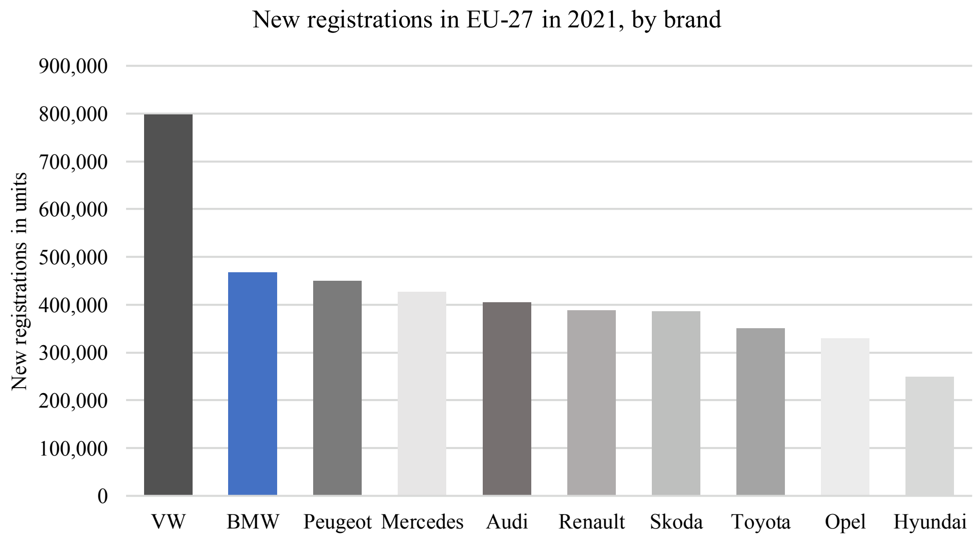


Figure 15: EU27 - New registrations by brand



Source: Statista

Table 79: BMW Group car prices (MINI and Rolls-Royce)

MINI		Rolls-Royce	
Model	**Price (2023)**	**Model**	**Price (2023)**
MINI Electric	€37,300	Phantom	€400,000
MINI 3-Door	€26,900	Phantom Extended	€450,000
MINI 5-Door	€29,200	Spectre	€400,000
MINI Cabrio	€31,800	Ghost	€300,000
MINI Cabrio Cooper SE	€60,000	Ghost Extended	€350,000
MINI Clubman	€36,200	Cullinan	€360,000
MINI Countryman	€38,600	Wraith	€290,000
MINI Countryman Plug-In Hybrid	€45,000	Dawn	€330,000
John Cooper Works	€39,800	**Median**	**€355,000**
Median	**€37,300**	**Average**	**€360,000**
Average	**€38,311**	**Manually adjusted**	€300,000
Manually adjusted	€25,000		

Source: Company information

Table 80: BMW Group car prices (BMW)

BMW	
Model	**Price (2023)**
BMW 1 Series	€30,600
BMW 1 Series M	€55,400
BMW 2 Series Active Tourer	€35,200
BMW 2 Series Active Tourer Plug-in-Hybrid	€46,650
BMW 2 Series Coupé	€40,800
BMW 2 Series Coupé M	€58,100
BMW 2 Series Gran Coupé	€58,600
BMW 3 Series Limousine M	€73,900
BMW 3 Series Limousine Plug-in-Hybrid	€54,000
BMW 3 Series Touring M	€74,900
BMW 3 Series Touring Plug-in-Hybrid	€55,300
BMW 4 Series Cabrio M	€79,200
BMW 4 Series Coupé M	€71,600
BMW 4 Series Gran Coupé M	€71,600
BMW 5 Series Limousine M	€96,000
BMW 5 Series Plug-in-Hybrid	€61,200
BMW 5 Series Touring Plug-in-Hybrid	€63,800
BMW 6er Gran Turismo	€69,800
BMW 7 Series Limousine M	€146,200
BMW 7 Series M Automobile with M Hybrid	€146,200
BMW 7 Series Plug-in-Hybrid	€116,500
BMW 8 Series Cabriolet	€114,700
BMW 8 Series Cabriolet M	€145,900
BMW 8 Series Coupé	€106,700
BMW 8 Series Coupé M	€137,900
BMW 8 Series Gran Coupé	€103,700
BMW 8 Series Gran Coupé M	€134,900
BMW i4	€56,500
BMW i4 M50	€71,100
BMW i7	€139,900
BMW iX	€77,300
BMW iX M60	€143,100
BMW iX1	€55,000
BMW iX3	€67,300
BMW X1	€42,800
BMW X1 Plug-in-Hybrid	€49,100
BMW X2	€37,750
BMW X2 M	€60,500
BMW X2 Plug-in-Hybrid	€51,050
BMW X3	€55,900
BMW X3 M	€79,300
BMW X3 Plug-in-Hybrid	€65,900
BMW X4	€59,800
BMW X4 M	€81,600
BMW X5	€86,300
BMW X5 M	€112,600
BMW X5 Plug-in-Hybrid	€92,300
BMW X6	€93,400
BMW X6 M	€115,500
BMW X7	€102,000
BMW X7 M	€132,800
BMW XM	€178,000
BMW Z4 M	€69,300
BMW Z4 Roadster	€50,200
Median	**€71,600**
Average	**€82,882**
Manually adjusted	€55,000

Source: Company information

Table 81: Discounted cash flow sensitivity analysis

BMW Enterprise value - Base case:

		Terminal Growth rate				
		0.50%	**0.75%**	**1%**	**1.25%**	**1.50%**
Weighted average cost of capital	**4.7%**	194,783	204,737	216,053	229,031	244,066
	5.7%	157,858	163,948	170,693	178,203	186,618
	6.7%	132,933	136,975	**141,374**	146,180	151,453
	7.7%	114,974	117,812	120,863	124,153	127,709
	8.7%	101,419	103,496	105,708	108,070	110,597

Source: Own estimates

Sixt Enterprise value - Base case:

		Terminal Growth rate				
		0.50%	**0.75%**	**1%**	**1.25%**	**1.50%**
Weighted average cost of capital	**8.0%**	8,914	9,142	9,386	9,648	9,931
	9.0%	7,811	7,980	8,159	8,350	8,554
	10.0%	6,941	7,070	**7,206**	7,350	7,502
	11.0%	6,239	6,340	6,445	6,556	6,673
	12.0%	5,660	5,740	5,824	5,912	6,003

Source: Own estimates