

A Work Project, presented as part of the requirements for the Award of a Master's degree in
Management and Finance from the Nova School of Business and Economics.

INDUSTRY NOTE: THE AUTOMOTIVE SECTOR AND ITS IMPORTANCE TO THE
ECONOMY
CASE STUDY: A NEW ERA FOR MERCEDES-BENZ AND DAIMLER TRUCK BEGINS

ALICIA HENRY, 54133

TILL KARL VON DER HEYDEN,
53603

Work project carried out under the supervision of:

Paulo Soares de Pinho

19/12/2023

Abstract

The 2021 automotive industry underwent transformative changes driven by electric vehicles, autonomous technology, and digitalization. Manufacturers navigated challenges like semiconductor shortages and pandemic impacts, adopting adaptive measures. Notably, Daimler AG's historic realignment on February 01, 2022, led to its renaming as Mercedes-Benz Group AG, with separate entities for commercial trucks and luxury cars. This strategic move addresses distinct approaches for net zero emissions but raises uncertainties about its effectiveness and expected positive changes. Spin-offs became crucial strategies amid industry shifts, enhancing competitiveness and profitability. The case study explores Daimler's restructuring, emphasizing its potential impact on the evolving automotive landscape.

Keywords

- Daimler AG
- Daimler Truck AG
- Mercedes-Benz AG
- Spin-Off
- Automotive Industry
- OEM

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

The automotive industry and its vital role in the economy

The automotive industry has been a cornerstone of modern economies for over a century. From Henry Ford's mass-produced "*Model T*" to current electric vehicles (EVs), automobiles have transformed transportation and played a key role in shaping the global economy. The automotive industry is a significant driver of economic growth and fosters international cooperation, creating a network of economic interdependencies that contribute to global stability. The industry is also a powerful job creator, providing nearly 13mn jobs in Europe, accounting for 7% of all EU employment. [1] Renowned for its leading role in technological innovation, it consistently pushes the boundaries of engineering to create safer, more efficient, and environmentally friendly vehicles. This drive leads to progress in Artificial Intelligence (AI) and renewable energy technologies. However, the industry grapples with environmental concerns, shifting consumer preferences, and disruptive technologies, which in return demand constant adaptation.

Key markets

Key markets in the automotive industry include Europe, the U.S., and China. Due to the ongoing recovery from the pandemic and global supply chain challenges, 11.3mn cars worldwide were cut down from manufacturing in 2021. [2] The industry faced difficulties returning to pre-pandemic levels, worsened by a semiconductor shortage. Global new car sales experienced a modest 3.6% increase to 65.9mn units in 2021, primarily influenced by a low comparison base in 2020. The estimated size of the automotive market in 2021 is approx. \$2,738.4bn, with a projected CAGR of 3.01% until 2028. **Exhibits 1-2** provide an overview of the world's recent passenger car registrations across all markets and global car production by region. [3]

European market

With an annual investment of €58.8bn in 2021 in R&D, the automotive sector is Europe's most critical private contributor to innovation. This substantial commitment represents 32% of the

EU's overall R&D expenditure. [4] Yet, the EU's automotive sector encountered challenges in 2021 and struggled to return to pre-pandemic levels. New car registrations witnessed a 2.4% decline, amounting to 9.7mn in 2021, with Germany experiencing the most significant drop at 10.1%. [5] Car production followed a familiar trend, witnessing a 7.1% decrease to 10mn cars manufactured. [6] The U.S. emerges as the most valuable export market, registering a 9.1% increase, closely followed by China, with a significant growth of 16.5%. [7] A summary of the Top-10 destinations for EU passenger car exports is shown in **Exhibit 3**. Examining the van segment, the results for 2021 witnessed an 8.5% increase across the EU, totaling nearly 1.6mn registered light commercial vehicles. [8] EV sales in Europe reached 1.2mn, marking a significant 63% increase and capturing a 10.2% market share in 2021.

U.S. market

The U.S. stands as one of the foremost automotive markets globally. In 2021, the U.S. achieved a sales volume of 11.9mn units, reflecting a modest increase of 5.5%, primarily attributed to the abovementioned challenges in the supply chain. [9] Regarding production, U.S. plants produced approx. 6.3mn passenger cars, indicating a 3.1% increase. The U.S. market, among others, underwent a significant transformation in 2021 with President Biden's implementation of Executive Order 14037. The main goal is to ensure that half of all newly sold passenger cars and light trucks in 2023 are zero-emission vehicles (ZEVs). Additional details will be covered in the "*U.S. Government*" chapter. Consequently, substantial changes are evident in the investment landscape for automotive and mobility companies. [10]

Chinese market

The Chinese automotive market is one of the largest and most developed globally. In 2021, the market witnessed sales of over 26.7mn vehicles, representing a 32% share of the world's car production. [11] China leads in producing passenger cars, manufacturing 21.41mn vehicles, signifying that one of every four passenger cars worldwide is made in China (see **Exhibit 4**).

Following China are Japan, Germany, and then the U.S. Despite China's dominance in passenger car production, it has not secured the top market share for its car brands. Most of China's best-selling vehicles originate from joint ventures with foreign manufacturers such as General Motors or Volkswagen Group. [12] Demand increased modestly in China by 1.6% in 2021, primarily attributed to supply chain challenges. [13] The New Energy Vehicles (NEVs) segment experienced significant growth to 3,521,000 units, marking a remarkable increase of 157.5% in 2021 compared to 2020. The Ministry of Industry and Information Technology projects NEV sales to reach 5mn units in 2022. The leading NEV is SAIC-GM Wuling's Hongguang MINI EV, followed by two Tesla vehicles. [14] [15]

Main players in the industry

The Top-5 car manufacturers globally in 2021 were Volkswagen Group AG, Toyota Motor Corp, Stellantis NV, Mercedes-Benz Group AG, and Ford Motor Co in terms of revenue. Geographically, three of the world's Top-10 OEMs are based in Germany, two in the U.S., and the others in Japan, the Netherlands, China, and South Korea. [16] Regarding the highest global automotive unit sales, Toyota secured the top spot with 10,495,548 unit sales (see **Exhibit 5**). [17] The following section outlines five influential players who are shaping the industry.

Mercedes-Benz from Daimler AG

Daimler AG, a German multinational corporation renowned for manufacturing automobiles, trucks, and commercial vehicles, proudly features Mercedes-Benz as one of its leading brands. In 2021, global sales for Mercedes-Benz experienced a 5% decrease to 2,093,476 units, primarily attributed to semiconductor shortages. Nevertheless, the luxury segment, featuring Maybach, AMG, G-class electric models, and smart cars, performed well globally. Notably, the distribution of Mercedes-Benz plug-in hybrid and electric passenger cars achieved a peak of 227,458 units, reflecting a substantial increase of 69.3%. In summary, Mercedes-Benz sold 696,136 cars in Europe, 758,863 in China, and 276,102 in the U.S. [18]

BMW AG

BMW AG is another German OEM of luxury cars and motorcycles based in Munich. In 2021, BMW achieved sales of 2,521,525 vehicles, marking an 8.4% increase compared to the previous year and generating revenue of €111,239mn. Apart from the core BMW brand, there are also the MINI and Rolls-Royce brands. In 2021, the BMW brand alone sold 2,213,795 vehicles, confirming its status as the global market leader in the premium segment. [19] Most of the BMW car sales occurred in China, reaching 846,237 units, closely followed by Europe with 948,087 units. [20] The company entered the EV segment in 2014 by introducing the i3. Yet, their initial entry placed them behind luxury competitors like Mercedes-Benz. The setback originated from their unpreparedness for the industry shift, mainly due to a substantial €2bn investment in a single model, namely the i3, which proved unsuccessful in 2014. In 2021, BMW's EV sales mainly comprised hybrid models, still incorporating internal combustion engines (ICEs). [19]

Volkswagen Group AG

As the largest German car manufacturer, the Volkswagen Group encompasses ten core brands, including the Volkswagen brand, ŠKODA, SEAT, CUPRA, Audi, Lamborghini, Bentley, and the Sport Luxury Brand Group Porsche. [21] The company maintained its global lead among all OEMs in terms of revenue. In 2021, the Group reported revenue of \$295.850mn, signifying a substantial 16.4% increase from the previous year, primarily attributed to strong sales in their luxury segment, featuring brands like Bentley and Lamborghini. Additionally, Volkswagen solidified its dominance in the European EV market, commanding a robust market share of around 25%. In the U.S., the Group has a solid second-place position after Tesla, holding a market share of 7.5% in the EV segment. [16] Despite a 14% squeeze in sales, China maintained its position as the most crucial single-country market for Volkswagen. The Group sold 8,882,000 vehicles globally, reflecting a 4.5% decrease compared to the previous year. [22]

Tesla Inc.

Tesla, a growing U.S. car manufacturer, focuses exclusively on EVs and technological innovation, setting it apart from the players above. Tesla's first EV was introduced in 2008, marking the beginning of its substantial growth under the leadership of founder Elon Musk. Over the years, the company has become the market leader in the rapidly growing EV segment. Tesla secured \$53.8bn in revenue in 2021, reflecting a notable 70.64% growth in sales, solidifying its position as the largest EV manufacturer in revenue and market share. Tesla sold 936,172 vehicles in 2021, reflecting an 80% increase, with a notable portion sold in China. [23]

Toyota Motor Corporation

Another influential player is the Japanese Toyota Motor Corporation, which sold 10,495,548 cars in 2021, marking a substantial increase of 10.1%. Most of these sales were attributed to the Toyota brand, reaching 9,615,157 units. [24] With this outcome, Toyota remained the largest car manufacturer, with the U.S. serving as the most significant new car market. In the U.S., 2,332,262 Toyota cars were sold, while in Europe, only 1,037,126, and in China, 1,944,010. [25] While Toyota was the largest car manufacturer globally in terms of unit sales in 2021, the company slightly trailed the Volkswagen Group in terms of revenue.

Global truck industry overview

While transportation alternatives encompass railways and air transport, trucks provide more efficient mobility through challenging terrains, such as hilly areas. This efficiency is a crucial factor contributing to the estimated growth until 2031 at a CAGR of 4.8%. [26] Truck logistics will be the predominant force in the market for the next five years. [27] Despite supply chain challenges, including semiconductor shortages and transportation disruptions, European commercial vehicle production witnessed a growth of 4.9% in 2021. Furthermore, new truck registrations in the EU experienced a significant increase of 16.8%, reaching 289,316 units in 2021. In contrast, sales of buses and coaches saw a more modest increase of 2.8%, totaling

29,941 units during the same period. [28] In 2021, China faced production challenges due to price inflation and disruptions in the supply chain, resulting in an 8.6% decline in commercial vehicle output to around 5.5mn units. In North America, persistent supply chain issues affected overall production. However, commercial vehicle production in North America reached almost 4.2mn units, reflecting a 9.4% increase compared to 2020 (see **Exhibit 6**). [29] In 2021, China asserted dominance in the global zero-emission heavy vehicle (ZE-HDV) market, capturing a 91.7% share. Despite Europe's commendable annual increase of heavy-duty vehicle sales by 72% over the last five years, its stake in the overall market remained modest at 4.3% (see **Exhibit 7**). [30] ZEVs are vehicles that do not release exhaust gases or other pollutants from their onboard power source. The notable growth in Europe's ZEV market is primarily observed in the bus segment, with sales volumes of zero-emission trucks, especially in the heavy truck sector, remaining comparatively low. It's noteworthy that battery electric technology is dominant in this market. However, there is emerging growth in the utilization of fuel cell technology, particularly in Europe (see **Exhibit 8**). [31] In 2021, Daimler Truck commanded one of the highest overall market shares in the European heavy-duty vehicle segment, holding 42% in buses, 20% in heavy trucks, and 27% in light and medium trucks. [32]

Main competitors

Besides Daimler Truck, the Volvo Group and Traton SE emerge as significant players in the global truck market. Volvo Group, a Swedish manufacturing company, produces, distributes, and sells trucks, buses, and construction equipment. The Group includes Volvo Trucks, Renault Trucks, Mack Trucks, Volvo Buses, and Volvo Penta. [33] As a subsidiary of the Volkswagen Group, Traton stands as one of the world's major commercial vehicle manufacturers. The brand portfolio includes Scania, MAN, and Volkswagen Truck & Bus, featuring light- and medium-duty trucks to heavy-duty trucks, vans, and buses. [34]

Car technology vs. truck technology

Both cars and trucks require diverse technologies. In the realm of truck manufacturing, two different technological preferences have emerged. One faction, led by Traton, favors batteries, recognizing their established efficiency. On the other hand, Daimler Truck and Volvo champion fuel cells, converting hydrogen into electricity and emitting only water vapor. The significant advantage of this lies in quick refueling, a crucial aspect for long-haul trucks. Electric trucks powered by batteries are three times more expensive than their diesel counterparts. Hydrogen fuel cell vehicles are expected to cost about one-third more than battery-powered ones. An important aspect is that fuel cells typically require fewer raw materials, such as lithium, which have experienced price increases. While the fundamental principles of EV technology remain consistent for both cars and trucks, there are notable differences in their application and design due to the specific requirements of each vehicle type, as illustrated in **Exhibit 9**. Consequently, the strategy of separating a truck business from the car business, already adopted by many car manufacturers, promises enhanced profitability and value. [35]

Regulations and government incentives

Car manufacturers struggle with challenges where global regulatory pressures stand out prominently. The complexity intensifies due to regional variations in regulations and diverse consumer preferences for EVs. Europe predominantly operates as a regulation-driven market with substantial subsidies, while in China, consumer demand remains robust despite reduced incentives. In the U.S., the growth of EV sales has been gradual, influenced by limited regulatory pressure and comparatively lower consumer interest. [36]

U.S. government

In the U.S., a significant initiative is embodied in the executive Order titled "*Strengthening American Leadership in Clean Cars and Trucks*," issued by President Biden. The directive targets half of all new passenger cars and light trucks sold in 2030 as ZEVs, including battery,

plug-in hybrid, or fuel-cell EVs. Moreover, it requires establishing new pollution and fuel-economy standards for all kinds of vehicles, effective from the production starting in 2027. The overarching objective is to align with the administration's goal of reducing greenhouse gases and fostering a transition from ICEs to EVs. Furthermore, on November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act, dedicating \$550bn in new expenditures over the next five years to improve U.S. infrastructure, with substantial funding directed towards the energy sector. Within this act, \$7.5 billion is allocated to establish a national network for EV charging, thus accelerating the widespread adoption of EVs. [37]

European commission

The EU is dedicated to establishing an internal vehicle market, emphasizing environmental protection, safety, and fair competition. However, to meet the 1.5-degree climate target, ambitious emission reductions by 2030 are imperative. The Fit-for-55 package, an integral part of the European Green Deal, introduces substantial measures for the automotive sector, which accounts for 14.5% of total CO₂ emissions in the EU. Meeting these emission targets is essential for the government to achieve its mid-century goal of reaching net-zero emissions. [38]

The proposed regulation increases the CO₂ emissions reduction targets for 2030 and sets a new target of 100% by 2035. In 2035, the EU mandates that all new cars and vans entering the market must be emission-free, putting pressure on German OEMs to increase EV production. [39]

Initiated in 2017, the European Battery Alliance (EBA) aims to foster the development of an innovative, competitive, and environmentally sustainable battery ecosystem in Europe. [40]

Nevertheless, governments not only enforce regulations but also provide incentives, although these incentives vary among countries. Only twelve EU countries offer additional payments, bonuses, or premiums for purchasing an EV. [41] However, Europe has to introduce broader incentives applicable to all member countries in order to meet their anticipated goals.

Chinese government

The automotive industry is crucial in China's economy, prompting the government to implement various incentives, measures, and strategies to boost local production. "*Made in China 2025*" is a strategic initiative launched in 2015 to reduce China's dependence on foreign technology and drive Chinese technological manufacturers onto the global stage until 2025. Moreover, the Chinese government encourages foreign investments in the EV segment by reducing the entry threshold and providing tax subsidies. Nevertheless, due to unclear regulations, European companies encounter challenges in expanding within the Chinese market. [15] Car ownership in China comes with a significant cost, attributed to the high registration fees and the prevailing perception of cars as status symbols in the Chinese lifestyle. This implies that not everyone with a permit can afford to own a car. The car plate lottery policy, enforced in 2011, further complicates the situation by assigning a restricted number of license plates to residents annually in each city, with Beijing, for instance, setting an annual limit of 100,000 plates. [11]

New trends & developments

In addition to regulatory factors, the automotive sector is shaped by the ongoing pandemic, which, despite presenting challenges, has also brought a positive shift towards digitalization. The acceleration of digital transformation, fueled by AI, cloud platforms, and software integration in vehicles, is a key aspect of the industry's evolving landscape. In this era, megatrends are emerging as prominent forces in shaping the industry's future. [42]

Sustainability

Sustainability has become a key priority in the automotive industry, necessitating an expedited transition to EVs to meet ambitious climate targets. Continued government incentives supporting low-emission vehicles are anticipated to drive the production of EVs. A study from Northwestern University in 2020, indicated that replacing 25% of ICEs with EVs could result in annual savings of \$17bn in the U.S., attributed to mitigating climate change and reducing

damages from air pollution. [43] Apart from government policies, several factors influence the EV market. These include declining battery costs, the emergence of the battery-as-a-service (BaaS) model, and the rollout of 5G technology. Battery prices have significantly dropped, with a 2021 study from Bloomberg New Energy Finance showing an 89% global reduction, bringing the average price per kWh down from \$1,200 in 2010 to \$132 in 2021 (see **Exhibit 10**). [44] This drop can be attributed to advancements in cell chemistry, manufacturing techniques, and competitive pricing strategies. Lower battery prices led to substantial growth in the global EV market. In 2021, the EV stock reached 16.5mn units, marking a 61% increase from the previous year. [44] Recognizing that EV batteries comprise 35-40% of the vehicle's end value, OEMs have adopted the BaaS model¹ to boost sales. This approach can reduce the vehicle's price by up to 40%. [45] The global deployment of 5G is expected to disrupt many sectors. Key areas where 5G will have the most significant impact include manufacturing, vehicle-to-everything² (V2X) wireless communication and autonomous vehicles. [46] These factors have led to robust growth in the EV market. Sales increased from 0.12mn units in 2012 to 6.57mn in 2021, indicating a CAGR of 56% (see **Exhibit 11**). [47] Mainland China is in the lead in EVs, with a sales share of over 51% in 2021, while Germany and the U.S. are far behind with 10% each. The global outlook for EVs is promising, with sales projected to reach 25mn units by 2030. [48] As noted, Tesla claimed the lead in EV sales in 2021, delivering 936,172 units. German brands followed in the rankings, with BMW at 276,037 units and Mercedes-Benz at 228,968 units (see **Exhibit 12**). [49] The expectation is that by 2035, the key automotive markets will transition to EVs. However, the factors driving this transformation differ by region, as explained in the previous chapter “*Regulations and government incentives*”. [36]

¹ Consumers can purchase an EV without the battery, significantly reducing the upfront cost.

² V2X technology refers to the sensors, cameras, and wireless connectivity that allows vehicles to share real-time information with their drivers, other cars, pedestrians, and roadway infrastructure like traffic lights.

Customer centricity

As customer preferences evolve, they turn from offline to online channels, shifting towards personalized customer journeys rather than standard services. OEMs must adjust to these changing preferences. Connected services will be increasingly important as software advances within and around vehicles to support personalization. [50] Vehicles increasingly incorporate digital identities, encompassing features like security, entertainment, internet connectivity, app-to-vehicle communication, and V2X communication. The benefits of connectivity for customers will transform the industry and maximize vehicle profitability. [51] According to Mordor Intelligence, car connectivity is emerging as the fastest-growing feature of new vehicles. The connectivity market is projected to generate revenue of up to \$1,000.0bn by the end of 2030. [52] Sales models must adapt to satisfy evolving demands, with a growing prevalence of subscription-based and agency sales approaches. Several OEMs have explored the advantages of subscription-based models through limited-scale initiatives like Access by BMW. By 2030, subscription-based vehicle programs could represent approx. 10% of total new vehicle sales in both the U.S. and Europe. [53] Customer orientation bears central importance, not solely in direct customer interactions but also across all communication channels and internally when developing new products.

Intelligent industry

Intelligent industry represents the next digital engineering and manufacturing stage, promising significant advancements in industrial processes, business models, and consumption routines. In this evolving landscape, the future will not simply rely on automated factories but also on fostering closer cooperation among machines, workers, and customers to navigate the growing complexity of products and operations. [51] Recent trends show clear progress toward an intelligent industry. For instance, the proportion of companies with ongoing smart factory initiatives expanded from 43% in 2017 to 68% in 2019. [54] This development underscores the

shift toward an intelligent industry, where data represents the most critical input. The upcoming digital engineering and manufacturing era will leverage technologies like AI, the cloud, and the Internet of Things (IoT) to establish a data- and software-driven industry. The IoT is another way vehicles stay connected and become more advanced. It helps manage traffic congestion and improves road safety through fleet management. [55] Another trend is autonomous or self-driving vehicles. These vehicles incorporate standalone features designed to address human limitations. This level of interaction between the driver and the car has also given rise to human-machine interfaces (HMI) within vehicles, enabling feedback mechanisms to enhance overall driving safety. [51] Smart products and systems will enhance uptime, cut costs, improve efficiency, and deliver increased value for companies, customers, and partners.

Industry outlook

The world economy is anticipated to grow slower in 2022, following a strong rebound in the previous year, influenced by ongoing Covid-19 measures and supply chain challenges. However, increasing vaccination rates are anticipated to drive global growth later in the year. Substantial savings in households of industrialized nations during the pandemic are expected to fuel consumption, particularly in the Eurozone, where private consumption is a crucial economic driver for 2022. Globally, the economy is projected to grow by around 4%, with the U.S. economy expected to see approx. 3.5% growth. After a slowdown in 2021, China is expected to gradually ease its economic policy, resulting in a growth rate of 5%, slightly lower than the preceding year. [56] Considering these macroeconomic factors, the global automobile market will likely experience growth in 2022. Nonetheless, the persisting semiconductor supply bottlenecks are expected to continue impacting the market. [57] Moreover, EV manufacturers face shortages of essential materials like lithium and cobalt, which are vital for battery manufacturing. The expanding demand-supply gap may increase prices for new and used car models, leading to extended customer waiting periods. Global light vehicle sales are expected

to reach 79.9mn units in 2021, up from 75.2mn in 2020 (see **Exhibit 13**). By comparison, in 2017 and 2018, the global light vehicle market exceeded 90mn units. Forecasts for 2022 predict the global light vehicle market will increase to about 84mn units. [58] The premium market segment is anticipated to outpace overall passenger car growth due to rising global demand for premium small- and compact-sized cars, and premium SUVs. In response to this trend, the German automotive industry is introducing new products as a significant player in the global premium segment. [59] The German automotive industry will perform best in developing markets in the upcoming years. Domestically, the sector will consolidate its leading market position, primarily due to gain in the premium market segment. The European share of value added in the premium segment will surpass regions where this segment carries less weight. Meanwhile, China will continue to excel in the volume segment. The U.S. vehicle market is on an upswing, retaining its significance for German OEMs. [60] Despite steady economic and infrastructural growth, China is still a very underpenetrated market, with market penetration represented by the number of cars per thousand inhabitants, at about 210 (refer to **Exhibit 14**). [61] There is potential for further penetration, particularly as the Chinese become increasingly affluent. On a global scale, Europe emerges as the most promising destination for car investments in terms of value-added opportunities. [62]

Trend of spin-offs and reasons behind it

A corporate spin-off can free a parent company and a divested business unit from financial and bureaucratic burdens, enabling them to pursue yet restricted strategies. For genuine success, the parent company, the spun-off entity, and their investors should experience improved outcomes like greater autonomy and efficiency. [63] Spin-offs are conducted for four primary reasons: to enhance a company's focus on its core business and streamline operations, unlock hidden value in undervalued divisions, gain tax advantages, and achieve strategic flexibility in corporate restructuring efforts. [64] Two additional motivations for pursuing spin-offs are improving

equity-based compensation efficiency and strengthening acquisition capabilities through equity. Spin-offs can enhance the effectiveness of equity-based compensation programs in both businesses by directly linking the granted equity to the performance of the specific business. Additionally, creating a separately publicly traded stock for part of the parent's businesses can empower the parent and the spin-off company to execute acquisitions more effectively. [65] More companies are opting for spin-offs to facilitate focused growth strategies for each entity. As of November 2021, 205 spin-off transactions have been announced globally, either pending or completed, representing the highest number since 2011 (see **Exhibit 15**). [66] In recent years, the automotive sector has witnessed several spin-offs. Some of them are briefly outlined below.

On June 28, 2019, Volkswagen's truck subsidiary, Traton, conducted an IPO, which ranked among the largest in Europe for that year. [67] The main drivers behind this decision were to unleash Traton's full value potential and grant it greater autonomy, bolstering its growth outlook. Furthermore, the IPO sought to give Traton improved access to capital markets and enhance its competitive standing within the global commercial vehicle market. [68]

On December 23, 2021, CNH Industrial N.V. announced that its shareholders' meeting approved the demerger of the Iveco Group business from CNH Industrial. [69] The spin-off should enable Iveco Group to operate independently, enhancing service to on-highway customers, especially in alternative fuels and propulsion. Iveco also expects increased innovation, faster product development, and improved customer responsiveness. [70]

On February 1, 2022, Daimler AG was renamed Mercedes-Benz Group AG, reaffirming its commitment to the automotive industry. This transition followed the successful IPO of Daimler Truck AG in December 2021. [71] The upcoming case study will dive deeper into the comprehensive analysis of Daimler's spin-off, exploring all its details and specifics.

Exhibits

Exhibit 1: Overview of the world's passenger car registrations across all markets

	2021	2020	% change 21/20	% share 2021
EUROPE	14,297,619	14,534,450	-1.6	21.7
European Union	9,700,192	9,939,418	-2.4	14.7
EFTA	427,512	387,634	+10.3	0.6
United Kingdom	1,647,181	1,631,064	+1.0	2.5
Russia	1,535,861	1,495,520	+2.7	2.3
Turkey	559,251	605,945	-7.7	0.8
Ukraine	100,266	82,758	+21.2	0.2
Others: Europe	327,356	392,111	-16.5	0.5
NORTH AMERICA	13,971,411	13,163,433	+6.1	21.2
of which the U.S.	11,856,503	11,233,815	+5.5	18.0
SOUTH AMERICA	2,767,266	2,504,902	+10.5	4.2
of which Brazil	1,552,266	1,611,530	-3.7	2.4
ASIA	31,744,920	30,726,835	+3.3	48.2
China	20,101,579	19,789,306	+1.6	30.5
Japan	3,695,167	3,838,728	-3.7	5.6
India	3,014,122	2,385,741	+26.3	4.6
South Korea	1,491,831	1,648,679	-9.5	2.3
Others: Asia	3,442,221	3,064,381	+12.3	5.2
MIDDEL EAST/ AFRICA	3,097,458	2,639,239	+17.4	4.7
WORLD	65,878,674	63,568,859	+3.6	100.0

Source: Acea: Economic and Market Report State of the EU auto industry Full-year 2021, p. 5.

Exhibit 2: Car production worldwide

	2021	2020	% change 21/20	% share 2021
EUROPE	13,318,257	14,118,338	-5.7	21.1
European Union	10,012,259	10,779,146	-7.1	15.9
United Kingdom	853,495	909,802	-6.2	1.4
Russia	1,343,911	1,252,300	+7.3	2.1
Turkey	788,233	845,103	-6.7	1.2
Ukraine	7,342	4,193	75.1	0.01
Others: Europe	313,017	327,794	-4.5	0.5
NORTH AMERICA	9,454,621	9,688,779	-2.4	15.0
of which the U.S.	6,329,936	6,139,465	+3.1	10.0
SOUTH AMERICA	1,949,161	1,752,090	+11.2	3.1
of which Brazil	1,707,881	1,607,175	+6.3	2.7
ASIA	36,808,736	34,506,898	+6.7	58.3
China	20,737,612	19,362,886	+7.1	32.8
Japan	6,617,765	6,962,099	-4.9	10.5
India	3,561,580	2,777,840	+28.2	5.6
South Korea	3,186,801	3,228,296	-1.3	5.0
Indonesia	865,857	546,379	+58.5	1.4
Thailand	728,962	625,626	+16.5	1.2
Others: Asia	1,110,159	1,003,772	+10.6	1.8
MIDDEL EAST/ AFRICA	1,621,738	1,408,721	+15.1	2.6
of which Iran	979,969	866,202	+13.1	1.6
WORLD	63,152,513	61,474,826	+2.7	100

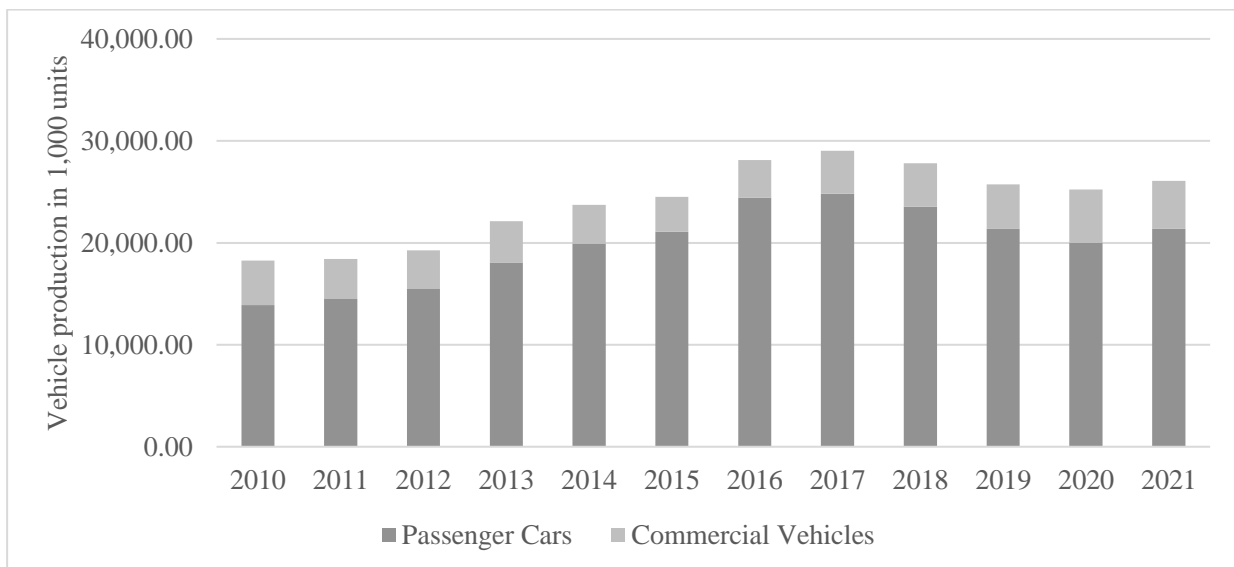
Source: Acea: Economic and Market Report State of the EU auto industry Full-year 2021, p. 9.

Exhibit 3: Top-10 – Destinations for EU passenger car exports

Trade in value (in €mn)	Jan-Dec 2021	Jan-Dec 2020	% change 21/20	% share 2021
U.S.	25,510	23,371	+9.1	20.3
China	21,180	18,178	+16.5	16.9
United Kingdom	20,301	28,106	-27.8	16.2
Switzerland	6,408	6,278	+2.1	5.1
South Korea	6,351	6,829	-7.0	5.1
Japan	6,091	5,630	+8.2	4.9
Turkey	4,655	5,953	-21.8	3.7
Norway	4,307	3,112	+38.4	3.4
Russia	3,030	2,145	+41.3	2.4
Australia	2,610	2,074	+25.9	2.1

Source: Acea: Economic and Market Report State of the EU auto industry Full-year 2021, p. 14.

Exhibit 4: Production of cars in China from 2010 to 2021 by type (in 1000 units)



Source: <https://www.statista.com/statistics/281133/car-production-in-china/>

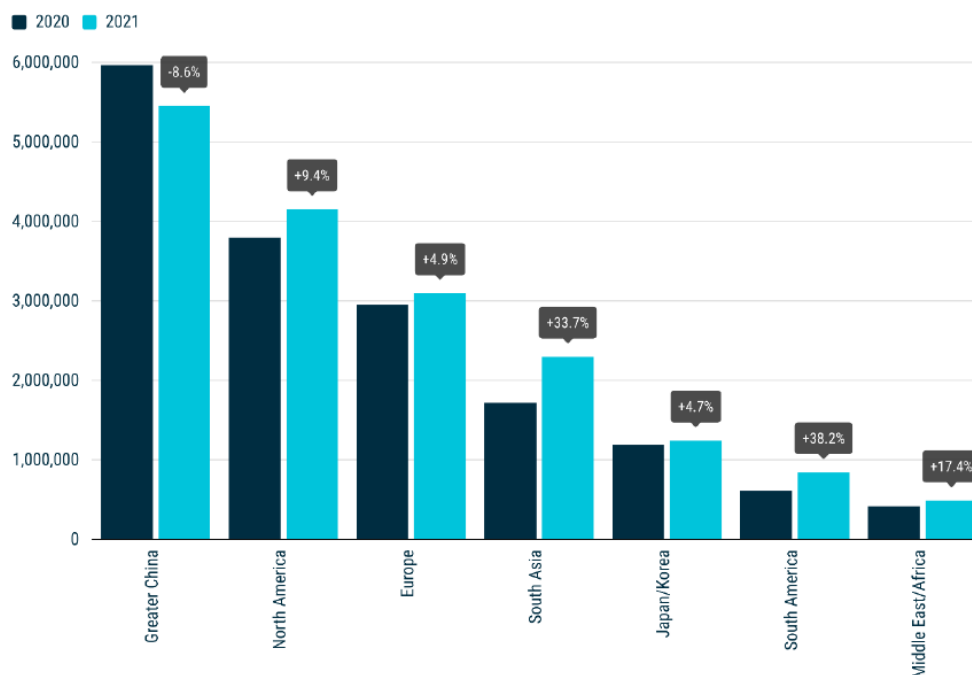
Exhibit 5: Overview of global car and van unit sales in 2021 by car manufacturer

	Manufacturer	2021 sales	Position change	Change from 2020
1	Toyota Motor Corp	10,495,548	(same)	11.8%
2	Volkswagen Group	8,610,100	(same)	-5.5%
3	Renault Nissan Mitsubishi Alliance	7,680,014	(same)	-1.3%
4	Hyundai Motor Group	6,667,085	+1	5.0%
5	Stellantis	6,583,269	+1	5.2%
6	General Motors	6,291,000	-2	-7.9%
7	Honda	4,121,000	(same)	-6.5%
8	Ford Motor Company	3,942,000	(same)	-5.9%
9	Suzuki	2,763,000	+1	12.9%
10	BMW	2,521,514	+1	8.5%

Note: Mercedes-Benz reported global sales of 2,093,476 cars, reflecting a 5% decline compared to FY20. Consequently, Mercedes-Benz fell out of the Top-10 van and luxury car makers, with rival BMW rejoining the chart.

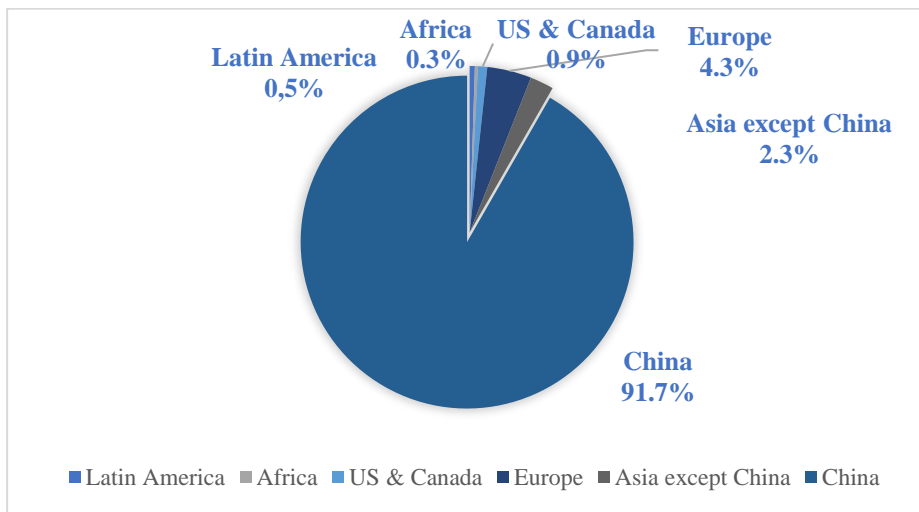
Source: <https://www.carexpert.com.au/car-news/who-won-the-automotive-global-sales-race-in-2021>

Exhibit 6: World commercial vehicle production by region



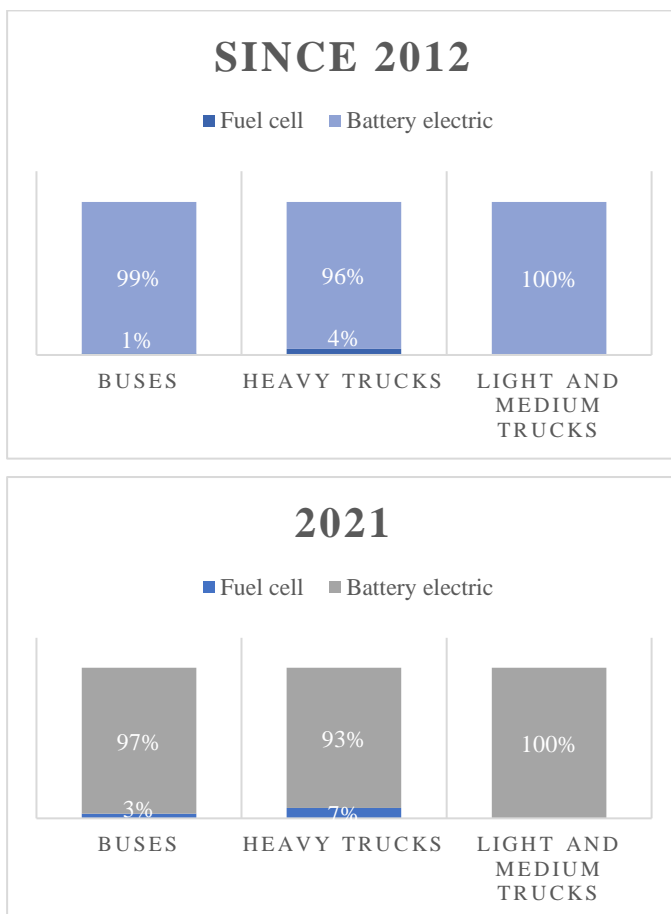
Source: Acea: Economic and Market Report State of the EU auto industry Full-year 2021, p. 21.

Exhibit 7: Shares of zero-emission heavy-duty vehicle sales by region in 2019–2021



Source: International Council on Clean Transportation; Zero-emission bus and truck market in Europe: A 2021 update, p. 1.

Exhibit 8: Technology shares of zero-emission heavy-duty vehicle sales in Europe

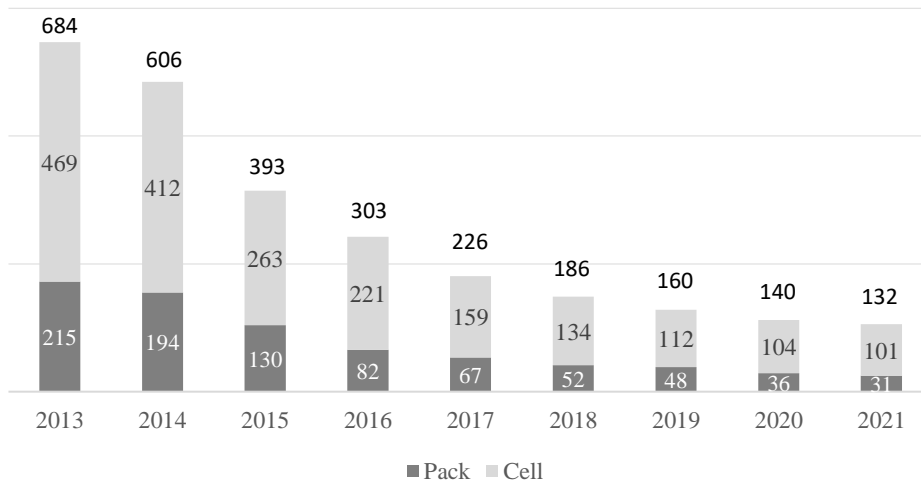


Source: International Council on Clean Transportation; Zero-emission bus and truck market in Europe: A 2021 update, p. 3.

Exhibit 9: Differences between car and truck development and technology priorities

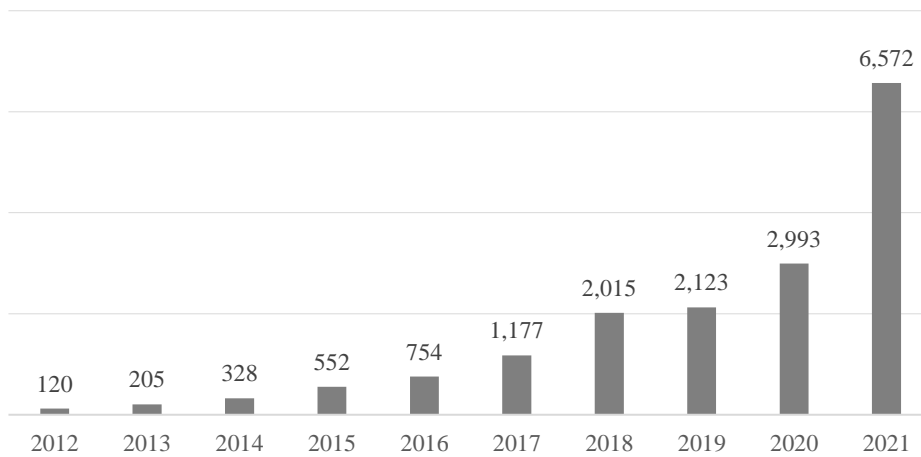
	Cars	Trucks
Product	Luxury segment	Investment good
Customers	Mainly private (B2C)	Mainly business (B2B)
Battery size and capacity	Cars generally have smaller battery capacities. Electric cars often focus on optimizing for efficiency and range within urban or suburban environments.	Trucks, especially long-haul and heavy-duty trucks, require more extensive and powerful batteries to accommodate the higher energy demands of transporting heavy loads over long distances.
Transformation	Focus on battery electric vehicles & car software	Battery, fuel cell (Hydrogen), software customer solutions
Range and charging infrastructure	Electric cars are designed for shorter commutes and often have a range suitable for daily driving needs. Charging infrastructure is more established in urban and suburban areas.	Long-haul trucks must cover much greater distances, so their electric counterparts require a more extended driving range. Developing charging infrastructure for electric trucks, especially for heavy-duty applications, is also a critical consideration.
Payload and weight distribution	Electric cars are typically lighter and have a more compact design. The weight distribution is optimized for passenger comfort and safety.	Trucks, particularly those employed for transporting goods, must consider the payload's weight. Proper weight distribution within the truck itself and the cargo it carries is vital for ensuring stability and efficiency.
Cost consideration	Electric car costs are generally more accessible to a broader consumer base, with various models available at different price points.	Trucks, especially heavy-duty models, can be more expensive due to the larger and more powerful battery systems or fuel cell technology required. However, operational cost savings over time, such as lower fuel and maintenance costs, can offset the initial investment.

Exhibit 10: Development of the volume-weighted average battery pack and cell price since 2013 (in \$/kWh)



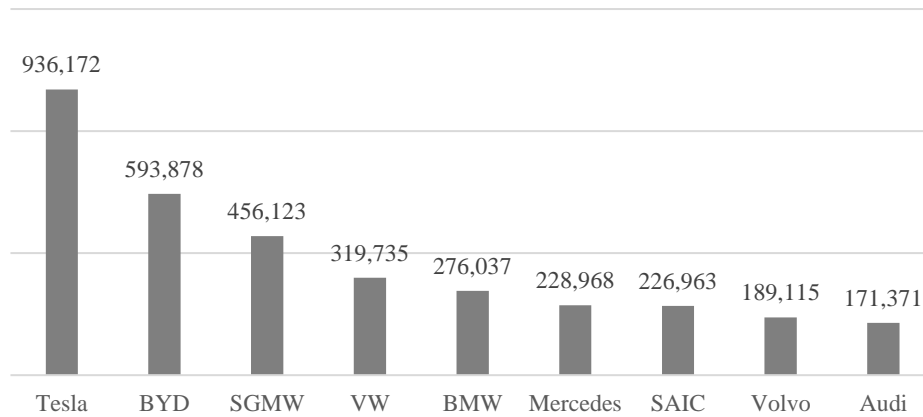
Source: BNEF; International Energy Agency (IEA); CleanTechnica; McKinsey (2022)

Exhibit 11: Development of the global plug-in EV sales since 2012 (in thousand units)



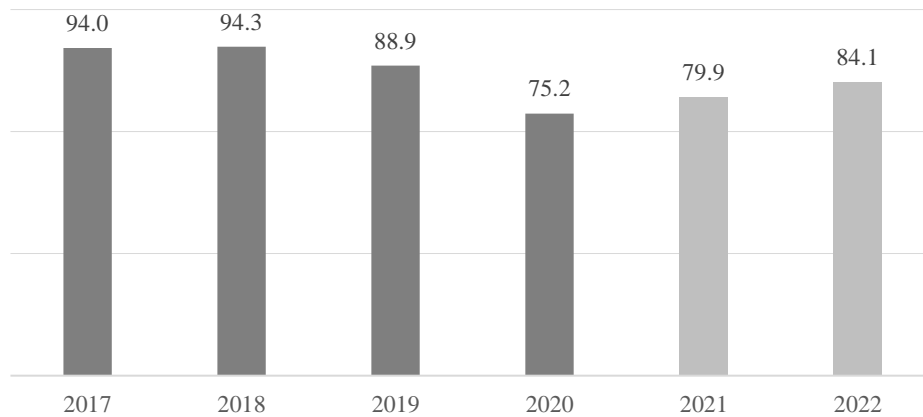
Source: International Energy Agency (IEA)

Exhibit 12: Top-10 brands with number of EV sales in 2021



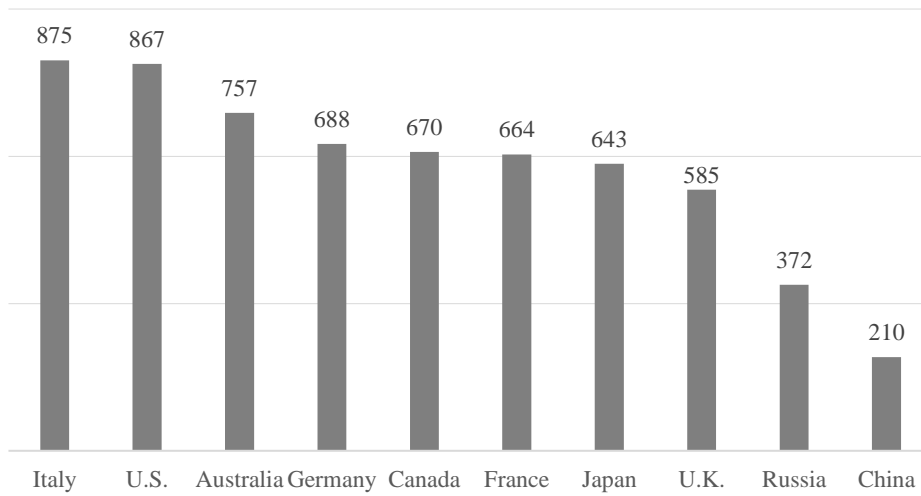
Source: CleanTechnica (2022)

Exhibit 13: Development and forecast of global light vehicle sales (in million units)



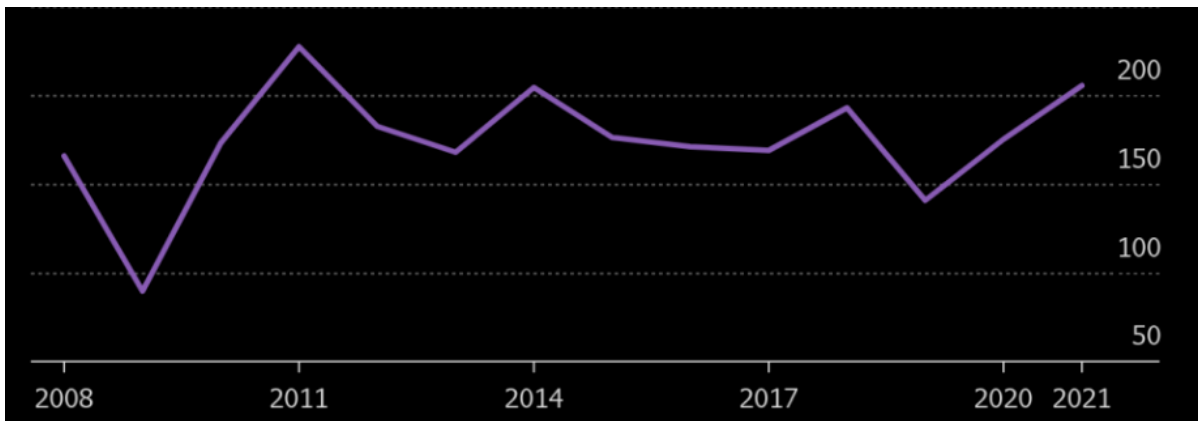
Source: GlobalData (2022)

Exhibit 14: Number of global registered vehicles per country in 2016 (per 1,000 inhabitants)



Source: WHO, Global Health Observatory (2022); United Nations - Population Division (2022)

Exhibit 15: Development of the number of global spin-off transactions since 2008



Source: Bloomberg as of Nov. 15, 2021

Bibliography

- [1] The European Automobile Manufacturers' (2023): Association, "Facts about the automobile industry," <https://www.acea.auto/fact/facts-about-the-automobile-industry/>; Accessed 10.09.23.. [Online]. <https://www.acea.auto/fact/facts-about-the-automobile-industry/>; 10.09.23.
- [2] Mathilde (2023): Carlier, "Automotive industry worldwide - statistics & facts," Statista, <https://www.statista.com/topics/1487/automotive-industry/#topicOverview>; 12.09.23.
- [3] European Automobile Manufacturers' (2022): Association, "Economic and Market Report: State of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p. 4.
- [4] Association and European Automobile Manufacturers' (2022):, "Economic and Market Report: State of the EU auto industry Full year-2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.26.
- [5] Association and European Automobile Manufacturers' (2022):, "Economic and Market Report: State of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.4+7.
- [6] Association and European Automobile Manufacturers' (2022):, "Economic and Market Report of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.11.
- [7] Association and European Automobile Manufacturers' (2022):, "Economic and Market Report: State of the EU auto industry Full-years 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.12+14.
- [8] Association and European Automobile Manufacturers' (2022):, "Economic and Market Report: State of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.17.
- [9] European Automobile Manufacturers' (2022): Association, "Economic and Market Report: State of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.5+9.

- [10] Levi McAllister, Sandra Moser, Russel Franklin, and et al. (2022); "Automotive Industry 2021 Year in Review," Morgan Lewis, <https://www.morganlewis.com/pubs/2022/01/2021-year-in-review-automotive-industry>; p.2.
- [11] Linguerri and Lorenzo (2023); "Inside Chinese car market: the rise of homegrown players and the impact of Covid-19," Daxue Consulting, <https://daxueconsulting.com/chinese-automakers-compete-for-first-place/>; Accessed 11.09.23.
- [12] Statista Research Department (2023); "Production of cars in China from 2010 to 2021, by type (in 1,000 units) ," <https://www.statista.com/statistics/281133/car-production-in-china/>; Accessed 09.09.23.
- [13] European Automobile Manufacturers' (2022): Association, "Economic and Market Report: State of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.5.
- [14] Automotive Industry Portal Marketlines (2022); "2021 Chinese market: New vehicle sales up 3.8% to 26,275,000 units, NEV sales 3,521,000 units ," https://www.marklines.com/en/report/rep2267_202202; 09.09.23.
- [15] EAC International Consulting (2022); "China Automotive Industry in 2021," <https://eac-consulting.de/the-state-of-chinas-automotive-industry-in-2021/>; 09.09.23.
- [16] Global Data (2023); "Top 10 Automotive OEMs in the World in 2021 by Revenue," <https://www.globaldata.com/companies/top-companies-by-sector/automotive/global-oems-by-revenue/>; 12.09.23.
- [17] Derek (2022): Fung, "Who won the global automotive sales race in 2021?," CarExpert Research, buy & sell with confidence, <https://www.carexpert.com.au/car-news/who-won-the-automotive-global-sales-race-in-2021>; 15.09.23.
- [18] Car Sales Statistics: (2022); "2021 (Full Year) Global: Mercedes-Benz and Smart Sales Worldwide by Region and Model," <https://www.best-selling-cars.com/brands/2021-full-year-global-mercedes-benz-and-smart-sales-worldwide-by-region-and-model/>; 15.09.23.

- [19] BMW Group Pressclub Global (2022):, "Electro-offensive and number one in premium segment: BMW Group posts strong sales for 2021," <https://www.press.bmwgroup.com/global/article/detail/T0364013EN/electro-offensive-and-number-one-in-premium-segment:-bmw-group-posts-strong-sales-for-2021?language=en>; 15.09.23.
- [20] Car Sales Statistics: (2022):, "2021 (Full Year) Global: BMW and Mini Brand Sales by Country and Models," <https://www.best-selling-cars.com/brands/2021-full-year-global-bmw-and-mini-brand-sales-by-country-and-models/>; 15.09.23.
- [21] Volkswagen Group (2023):, "Profile: The Volkswagen Group," <https://www.volkswagen-group.com/en/profile-15933>; 15.09.23.
- [22] Car Sales Statistics (2022):, "2021 (Full Year) Global: Volkswagen Group Worldwide Deliveries by Brand and Market," <https://www.best-selling-cars.com/brands/2021-full-year-global-volkswagen-group-worldwide-deliveries-by-brand-and-market/>; 15.09.23.
- [23] Grant (2023): Morris, "Top Tesla facts and statistics," Energysage, <https://www.energysage.com/blog/tesla-facts-and-statistics/>; 15.09.23.
- [24] Toyota Motor Corporation (2022):, "Sales, Production, and Export Results for 2021 (January - December)," <https://global.toyota/en/company/profile/production-sales-figures/202112.html>; 15,09,23.
- [25] Car Sales Statistics (2022):, "2021 (Full Year) Global: Toyota Worldwide Car Sales, Production, and Exports," <https://www.best-selling-cars.com/brands/2021-full-year-global-toyota-worldwide-car-sales-production-and-exports/>; 15.09.23.
- [26] Allied Market Research (2022):, "Heavy Duty Truck Market Size, Share, Competitive Landscape and Trend Analysis Report," <https://www.alliedmarketresearch.com/heavy-duty-truck-market-A10093>; 30.09.23.
- [27] Research and Markets (2021):, "Global Truck Market Report 2021: Market was Valued at \$809.46 Billion in 2020 and is Expected to Grow at a CAGR of 7.50% to 2026," <https://www.prnewswire.com/news-releases/global-truck-market-report-2021-market-was-valued-at-809-46-billion-in-2020-and-is-expected-to-grow-at-a-cagr-of-7-50-to-2026--301452319.html>; 30.09.23.

- [28] European Automobile Manufacturers' (2022): Association, "Economic and Market Report: State of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.18-19.
- [29] European Automobile Manufacturers' (2022): Association, "Economic and Market Report: State of the EU auto industry Full-year 2021," https://www.acea.auto/files/economic_and_market_report-full-year_2021.pdf; p.18-20.
- [30] Eamonn (2022): Mulholland, "Zero-emission bus and truck market in Europe: A 2021 update Fact sheet," The international Council on Clean Transportation, <https://theicct.org/publication/ze-bus-and-truck-update-europe-2021-nov22/>; p.1.
- [31] Eamonn (2022): Mulholland, "Zero-emission bus and truck market in Europe: A 2021 update Fact sheet," The international Council on Clean Transportation, <https://theicct.org/publication/ze-bus-and-truck-update-europe-2021-nov22/>; p.2-3.
- [32] Eamonn (2022): Mulholland, "Zero-emission bus and truck market in Europe: A 2021 update Fact sheet," The international Council on Clean Transportation, <https://theicct.org/publication/ze-bus-and-truck-update-europe-2021-nov22/>; p.5.
- [33] AB Volvo (2023):, "About Us: Volvo Group," <https://www.volvogroup.com/en/about-us.html>; 29.11.23.
- [34] Traton (2023):, "Brands," <https://traton.com/en/company/brands.html>; 30.09.23..
- [35] Jack (2022): Ewing, "Truck Makers face a Tech Dilemma: Batteries or Hydrogen?," The New York Times, <https://www.nytimes.com/2022/04/11/business/electric-hydrogen-trucks.html>; 30.11.23.
- [36] Andreas Cornet, Julian Conzade, Patrick Schaufuss, and et al. (2021), "Why the automotive future is electric," McKinsey & Company Automotive & Assembly, <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/why-the-automotive-future-is-electric>; 30.09.23.
- [37] Levi McAllister, Sandra Moser, Russel Franklin, and et al. (2022):, "Automotive industry 2021 Year in Review," Morgan Lewis,

- <https://www.morganlewis.com/pubs/2022/01/2021-year-in-review-automotive-industry>; p.3-5.
- [38] European Commission (2022);, "CO₂ emission performance standards for cars and vans," https://climate.ec.europa.eu/eu-action/transport/road-transport-reducing-co2-emissions-vehicles/co2-emission-performance-standards-cars-and-vans_en; 01.10.23.
- [39] Council of the European Union (2023);, "Infographic - Fit for 55: why the EU is toughening CO₂ emission standards for cars and vans," <https://www.consilium.europa.eu/en/infographics/fit-for-55-emissions-cars-and-vans/>; 01.10.23.
- [40] European Commission (2022);, "European Battery Alliance," https://single-market-economy.ec.europa.eu/industry/strategy/industrial-alliances/european-battery-alliance_en; 01.10.23.
- [41] Wallbox (2022);, "EV and EV Charger Incentives in Europe: A Complete Guide for Businesses and Individuals," <https://blog.wallbox.com/en/ev-and-ev-charger-incentives-in-europe-a-complete-guide-for-businesses-and-individuals/>; 01.10.23.
- [42] Capgemini (2022);, "Finding a new balance in the automotive industry Driving responsible innovation and transformation for the next decade," <https://www.capgemini.com/fr-fr/wp-content/uploads/sites/6/2021/05/Rapport-New-Balance-in-the-Automotive-Industry.pdf>; p.9.
- [43] Statista (2022);, "Industry & Markt: e-Mobility - In-depth Market Insights & Data Analysis," p.25.
- [44] Statista (2022);, "Industry & Markt: e-Mobility - In-depth Market Insights & Data Analysis," p.30.
- [45] Statista (2022);, "Industry & Markt: e-Mobility - In-depth Market Insights & Data Analysis," p.33.
- [46] Statista (2022);, "Industry & Markt: e-Mobility - In-depth Market Insights & Data Analysis," p.31.

- [47] Statista (2022);, "Industry & Market: e-Mobility - In-depth Market Insights & Data Analysis," p.14.
- [48] Statsista (2022);, "Industry & Market: e-Mobility - In-depth Market Insights & Data Analysis," p.17.
- [49] Statista (2022);, "Industry & Market: e-Mobility - In-depth Market Insights & Data Analysis," p.21.
- [50] Capgemini (2022);, "Finding a new balance in the automotive industry Driving responsible innovation and transformation for the next decade," <https://www.capgemini.com/fr-fr/wp-content/uploads/sites/6/2021/05/Rapport-New-Balance-in-the-Automotive-Industry.pdf>; p.3.
- [51] The Automotive Consulting Enterprises.Inc (2022);, "The Top Five Car Trends of 2021 in the Automotive Industry," <https://www.theacegrp.com/the-top-five-car-trends-of-2021-in-the-automotive-industry/>; 18.09.23.
- [52] Germany Trade & Invest (GTAI) (2022);, "INDUSTRY OVERVIEW The Automotive Industry in Germany," https://www.gtai.de/resource/blob/64100/8fc3cff5774c2ec699172cd823a0ec0e/20220711_IO_Automotive_WEB.pdf; p.5.
- [53] Forbes (2018);, "Your Next Car Could Be A Flexible Subscription Model," <https://www.forbes.com/sites/sarwantsingh/2018/07/30/your-next-car-could-be-a-flexible-subscription-model/?sh=64f35e324ffa>; 18.09.23.
- [54] Forbes (2018);, "The Myth Of Jobs That Don't Exist Yet," <https://www.forbes.com/sites/dereknewton/2018/12/28/the-myth-of-jobs-that-dont-exist-yet/?sh=7cb7b29670ec>; 18.09.23.
- [55] Capgemini (2022);, "Finding a new balance in the automotive industry Driving responsible innovation and transformation for the next decade," <https://www.capgemini.com/fr-fr/wp-content/uploads/sites/6/2021/05/Rapport-New-Balance-in-the-Automotive-Industry.pdf>; p.15.

- [56] Mercedes-Benz Group AG (2022);, "Annual Report 2021 Mercedes-Benz Group," <https://group.mercedes-benz.com/documents/investors/reports/annual-report/mercedes-benz/mercedes-benz-ir-annual-report-2021-incl-combined-management-report-mbg-ag.pdf>; p.150.
- [57] The Economist Intelligence Unit Limited (2021);, "Automotive in 2022 A report by EIU," <https://www.eiu.com/n/campaigns/automotive-in-2022/>; p.1-2.
- [58] David (2021): Leggett, "2022 and the global sales picture," Just Auto, <https://www.just-auto.com/features/2022-and-the-global-sales-picture/>; 15.09.23.
- [59] Germany Trade & Invest (GTAI) (2022);, "INDUSTRY OVERVIEW The Automotive Industry in Germany," https://www.gtai.de/resource/blob/64100/8fc3cff5774c2ec699172cd823a0ec0e/20220711_IO_Automotive_WEB.pdf; p.4.
- [60] Germany Trade & Invest (GTAI) (2022);, "INDUSTRY OVERVIEW The Automotive Industry in Germany," https://www.gtai.de/resource/blob/64100/8fc3cff5774c2ec699172cd823a0ec0e/20220711_IO_Automotive_WEB.pdf; p.10.
- [61] Our World in Data (2017);, "Registered vehicles per 1,000 people, 2017," <https://ourworldindata.org/grapher/registered-vehicles-per-1000-people>; 21.09.23.
- [62] Germany Trade % Invest (GTAI) (2022);, "INDUSTRY OVERVIEW The Automotive Industry in Germany," https://www.gtai.de/resource/blob/64100/8fc3cff5774c2ec699172cd823a0ec0e/20220711_IO_Automotive_WEB.pdf; p.10.
- [63] Obi Ezekoye and Anthony (2019): Luu, "Strategy & Corporate Finance Practice: A case for restructuring before spin-off," Mc Kinsey & Company, <https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/A%20case%20for%20restructuring%20before%20spin%20off/A-case-for-restructuring-before-spin-off.pdf>; p.2.

- [64] FINRA (2016):, "Splitting the Difference: Four Reasons Why Corporations Pursue Spinoffs," <https://www.finra.org/investors/insights/splitting-difference-four-reasons-why-corporations-pursue-spinoffs>; 15.09.23.
- [65] Lipton, Rosen & Katz (2021): Wachtell, "Spin-Off Guide," https://www.wlrk.com/docs/Spin-Off_Guide_2021.pdf; p.3.
- [66] Grace Maral (2021): Burnett, "ANALYSIS: YTD Spinoff Deal Count Is the Highest Since 2011," Bloomberg Law, <https://news.bloombergtax.com/bloomberg-law-analysis/analysis-ytd-spinoff-deal-count-is-the-highest-since-2011>; 10.10.23.
- [67] Financial Times (2019):, "Volkswagen prices Traton IPO at €27, the low end of range," <https://www.ft.com/content/2e63f626-9913-11e9-9573-ee5cbb98ed36>; 10.10.23.
- [68] Traton (2019):, "Volkswagen plans dual listing for TRATON SE. Volkswagen plans public offering of existing shares.," <https://traton.com/en/newsroom/press-releases/press-release-03062019.html>; 10.10.23.
- [69] Prandi and Roberta (2021):, "CNH Industrial approves Iveco spin-off," Diesel Progress, <https://www.dieselprogress.com/news/cnh-industrial-approves-iveco-spin-off/8017173.article>; 10.10.23.
- [70] IVECO (2022):, "IVECO ready for ‘spin-off’ from CNH Industrial," <https://www.iveco.com.au/press-release/iveco-ready-for-spin-off-from-cnh-industrial>; 10.10.23.
- [71] Mercedes Benz Group (2022):, "A new era begins: Daimler embarks as Mercedes-Benz Group.," <https://group.mercedes-benz.com/company/news/daimler-becomes-mercedes-benz-group.html>; 10.10.23.

A new era for Mercedes-Benz and Daimler Truck begins

Today, on February 01, 2022, Ola Källenius, Chairman of the Board of Management of Mercedes-Benz Group AG, reflects on the challenging yet promising times ahead. This historic date marks the completion of the landmark realignment of Daimler AG, as the company is officially renamed Mercedes-Benz Group AG. This pivotal step follows the decision to split Daimler into two independent entities: Daimler Truck AG and Mercedes-Benz Group AG. [1]

Exhibit 1 provides a timeline highlighting the key milestones of this transformation. [2]

Källenius characterized the official completion of the spin-off as a historic one:

“Benz Cars & Vans and Daimler Trucks & Buses are different businesses with specific customer groups, technology paths and capital needs. Both companies operate in industries that are facing major [...] changes. Given this context, we believe they will be able to operate most effectively as independent entities.” [2]

He envisions that the new *“Project Focus”* strategy will enable both companies to concentrate on their core businesses. [3] With the completed spin-off, he anticipates accelerating R&D efforts toward achieving net-zero emissions, emphasizing hydrogen-based fuel-cell electric engines, electric motors powered by batteries, and advanced mobility solutions, including autonomous software-driven vehicles. [4]

As the spin-off is completed, one question remains: Had the decision been right? Would the separation yield the much-anticipated effects? Källenius claimed that part of Daimler Truck's value lay hidden underneath the shadows of the Daimler Group's automotive conglomerate. Did Källenius accurately assess the situation?

To simplify, references in the following will be made to either Mercedes-Benz AG or Daimler Truck AG from December 01, 2021, onwards. Before the spin-off, references are made to the former Daimler AG.

Company background of Daimler AG

Daimler AG specialized in manufacturing passenger and commercial vehicles and offered mobility and financial services. Headquartered in Stuttgart, the parent company oversaw governance, strategy, and management for its brands, Daimler Truck and Mercedes-Benz. Through a restructuring in 2019, assets and liabilities were transferred to two wholly-owned subsidiaries. The operational activities were organized under three legally independent entities supervised by Daimler AG: Mercedes-Benz AG managed activities within Mercedes-Benz Cars & Vans, Daimler Truck AG oversaw Daimler Trucks & Buses, and Daimler Mobility AG primarily handled financing services for the company (see **Exhibit 2**). [5]

Company overview: Mercedes-Benz AG

Mercedes-Benz is one of the most globally accomplished automotive enterprises. Daimler AG was renamed as Mercedes-Benz Group AG with effect from February 01, 2022, in the context of "*Project Focus*". [6] For further details on the project, refer to **Exhibit 3**. The company focuses on high-end passenger cars and premium vans as it is renowned as one of the world's most precious luxury automotive brands. [7] In 2019, Källenius took on the position of Chairman of the Board of Management at Daimler AG and currently serves as the Chairman of the Board of Management for the newly established entity, Mercedes-Benz AG. He played a pivotal role in steering this strategic organizational shift. As of December 2021, Mercedes-Benz has a global workforce of 172,425 employees and maintains an extensive production network spanning Europe, North and South America, Asia, and Africa. [8] Mercedes-Benz reported sales of 2.75mn vehicles in 2021, showing a slight decrease of 90,000 units compared to 2020. [9] The total revenues for the Group in 2021 amounted to €167.971mn, with the majority contributed by Mercedes-Benz Cars & Vans at €109.648mn. [10] For a comprehensive overview of the company's key financials, refer to **Exhibit 4-7**.

Mercedes-Benz origin: “your good star on every street” and its way to success

“It’s not the idea, it’s the implementation that counts” – Gottlieb Daimler.

The legacy of Mercedes-Benz goes back 135 years, tracing its roots to the visionary inventors Gottlieb Daimler and Karl Benz. Throughout its history, the company has consistently achieved groundbreaking milestones in automotive engineering. The Mercedes-Benz saga started on November 28, 1890, when Gottlieb Daimler, in collaboration with Max Duttchenhofer, founded the *“Daimler-Motoren-Gesellschaft”* (DMG). Daimler, guided by Wilhelm Maybach, steadfastly concentrated on vehicle production, leading to notable success, including introducing the belt-driven car—a key milestone in DMG's foray into mass production. [11]

In 1896, DMG achieved another milestone by constructing the world's first truck. Five years later, introducing the first Mercedes car signaled the end of the era of horse-drawn carriages in automobile manufacturing. In September 1902, DMG secured the patent for the iconic *“Mercedes”* brand name. The sole missing ingredient was a unique trademark, driving the adoption of the three-pointed star as the company's symbol in June 1909. Several years later, in 1926, the two oldest automotive companies, DMG and Benz & Cie, forged a joint venture, giving rise to the name Daimler-Benz and directing a new era in automotive history. [11]

Under Wilhelm Kissel's leadership in the late 1920s, the company streamlined operations, reducing models to four by 1928, a strategic move that helped navigate the Great Depression. However, it wasn't until 1955, accompanied by the slogan *“your good star on every street”*, that the Mercedes star gained widespread recognition, symbolizing prosperity. [12] By 1954, with a turnover of one billion Deutsche Mark, the demand for Mercedes-Benz vehicles surpassed manufacturing capacity, prompting the acquisition of Auto-Union in 1958. In the mid-1970s, Daimler-Benz saw a substantial change in its shareholder makeup. The Quandt Family sold their 14% stake to the Government of Kuwait, and Deutsche Bank acquired the 29% block of shares. This move resulted in the establishment of Mercedes-Automobile-Holding, and within

this new corporate structure, Mercedes-Benz was founded on June 29, 1989. Starting in July 1989, Daimler-Benz AG was a managing holding entity, overseeing entities like Mercedes-Benz AG and Deutsche Aerospace AG. In 1993, Daimler-Benz AG was listed on the New York Stock Exchange (NYSE). [13] Half a decade later, in 1998, the historical merger with Chrysler Corporation was declared and the name DaimlerChrysler AG was established. This significant merger, coupled with the acquisition of stakes in Asian automotive giants Mitsubishi Motors and Hyundai Motor Company, bore the ambition of solidifying the entity's reputation as a premier global automotive group. Fast forward to October 2007, the evolution continued as DaimlerChrysler AG transitioned and emerged as a new identity Daimler AG. The driving force behind this renaming was the need to clearly distinguish between the corporate brand, Daimler, and the diverse product brands within the Group. [14]

Mercedes-Benz business operations and subcompanies

As of February 01, 2022, Mercedes-Benz Group AG is structured into two primary divisions: Mercedes-Benz Cars & Vans and Mercedes-Benz Mobility. A comprehensive overview of all brands as of December 2021 is displayed in **Exhibit 8**. [15] At the core of Mercedes-Benz Cars lies a fundamental mission: to lead the way in efficient powertrain technologies, driving towards an all-electric future. The "*Mercedes me*" brand is a gateway to digital services. While pushing the boundaries of autonomous driving systems, the dedication of Mercedes-Benz Cars to the luxury segment remains persistent. In FY21, the most crucial markets for Mercedes-Benz Cars were China, with 38% of sales, the U.S., with 13%, and Germany, with 11%. [16] Mercedes-Benz Vans is an international provider of a portfolio of vans. The most dominant markets for Mercedes-Benz Vans in FY21 were Germany with 25% of unit sales, other European markets with 38%, the U.S. with 13% and China with 10%. [17] Mercedes-Benz Mobility supports global sales across the Mercedes-Benz Group with customized mobility and financial solutions, encompassing leasing and fleet management services. [18]

Company overview: Daimler Truck AG

On October 01, 1896, Gottlieb Daimler started his truck sale. Precisely 125 years later, on the same date in 2021, Daimler's shareholders, with an overwhelming majority of 99.9%, approved the spin-off of Mercedes-Benz and Daimler Truck during the Extraordinary Shareholders meeting. [19] On February 03, 2021, Daimler initially disclosed its idea to examine the potential spin-off of its truck division and started preparations for an IPO on the stock exchange. [20] Daimler Truck is one of the world's biggest commercial vehicle producers, with more than 40 locations worldwide and approx. 100,000 employees. [21] Based in Stuttgart, the company provides a range of trucks (light, medium, and heavy-duty), city and intercity buses, coaches, and personalized financial services. Coupled with the Mercedes-Benz brand, the Trucks portfolio encompasses renowned brands such as Freightliner and Fuso. [22] In FY21, Daimler Truck sold 455,400 vehicles, most in North America. An overview of the sales structure is displayed in **Exhibit 9**. [23] **Exhibits 10-12** show Daimler Truck's key financials.

Daimler Truck origin: “Trucks you can trust”

Carl Benz built the world's first bus in 1895. Daimler's first motorized truck was delivered to London one year later, making this company a pioneer in the truck and bus business. After acquiring Unimog (Universal-Motoren-Gerät) and Freightliner, Daimler experienced a sales increase, more than doubling its figures in the subsequent years. Freightliners became number one in the North American heavy-duty truck market by 1992. Another key milestone for the truck business was the acquisition of a 43% stake in Mitsubishi Fuso as part of the spin-off of Mitsubishi's truck and bus division. To improve the commercial vehicle sector in India, Daimler launched the BharatBenz brand, the first truck "*made in India*", followed by the launch of BharatBenz Buses in 2015. A comprehensive overview of all brands included in the Daimler Truck Group as of December 2021 is displayed in **Exhibit 13**. [24]

Outlook of Daimler Truck AG

The newfound independence, combined with the Group's visionary technological orientation, establishes a solid foundation for a positive outlook regarding its economic prospects. The primary objectives for Daimler Truck in the coming years are among others, optimizing the product and service portfolio to be leader in the industry transformation and realize the profit potential of the company. The three main goals are outlined in **Exhibit 14**. Yet, in FY22, Daimler Truck anticipates a substantial decrease in net profit compared to the previous fiscal year, along with a significant reduction in profit transfers. [25] Macroeconomic conditions are expected to stay relatively strong in the major truck sales markets in FY22, sustaining positive demand. However, the persisting semiconductor shortage might significantly impact market development. The company foresees a North American heavy-duty truck market volume of 255,000 to 295,000 units and a European market volume, including the U.K., Switzerland, and Norway, ranging from 240,000 to 280,000 units. Based on global economic and commercial vehicle market assumptions, Daimler Truck expects industrial business sales to fall between 500,000 and 520,000 units. [26]

Corporate Governance

“After 125 years of company history we restart as an independent entity. We are fully ready for our new journey. And we can’t wait to show to the world what we are capable of.”

-Martin Daum, Chairmen of Daimler Truck Holding- [27]

To understand if Daimler Truck is genuinely independent of Mercedes-Benz, as Martin Daum claimed on its first trading day, the corporate governance of all three companies needs to be analyzed. The corporate governance of the former Daimler AG had a dual-layer framework consisting of a Board of Management and a Supervisory Board. **Exhibit 15** shows the Management Board of the former Daimler AG. Following Källenius' leadership transition, a substantial transformation was in progress. The persistent efficiency challenges at Daimler were

decisively tackled, with the new management demonstrating effectiveness in guiding the company in a pivotal direction, signaling the ending of the era of profit warnings. [28] In 2020, Daimler AG shareholders and investor representatives raised concerns about the independence of the company's supervisory board. Bernd Pischetsrieder encountered opposition for taking leadership at the age of 73, violating the board's guideline that candidates should not exceed the age of 72 at the time of election. This is not a solitary case at Daimler AG, as the previous chief supervisor, Manfred Bischoff, was also older when he was last re-elected. Investors argued that this reflects a continuation of the *"Stuttgart old gentlemen's committee."* [28] Another blamed board member is Clemens Börsig, who chairs the Audit and Legal Affairs Committees. The criticism arises from Börsig's perceived lack of independence, as the German Corporate Governance Code recommends a maximum term of twelve years for supervisory board members, and Börsig has served for 14 years. Compounding the issue, Börsig was the chairman of Deutsche Bank's supervisory board when appointed in 2007, and given Deutsche Bank's longstanding associations with Daimler, his lack of independence seems problematic. This is particularly interesting as Börsig also plays a key role in the internal investigation of the truck cartel and the billion-dollar diesel scandal. [29] **Exhibit 16** shows the Board of Management and Supervisory Board of Mercedes-Benz after the spin-off. As per the Demerger Agreement, the composition of Daimler's Supervisory Board has to mirror that of Mercedes-Benz, leading to the retention of roles by Pischetsrieder and Börsig after the spin-off. [30]

Daimler Truck's business operations are poised to function with a fully autonomous management structure and independent Corporate Governance. This includes the appointment of an independent Chairman of the Supervisory Board, as detailed in **Exhibit 17**. Both companies have established in-house financial and mobility service units with a more streamlined corporate framework, supporting independence. Previously concentrated in Daimler AG, these units aim to enhance sales through customized funding, leasing, and

mobility offerings that improve customer retention and foster brand loyalty. [31] The company structure changed after the spin-off, impacting the independence of both Daimler Truck and Mercedes-Benz. Before the spin-off, Daimler AG held complete ownership of Mercedes-Benz AG and Daimler Truck AG, as illustrated in **Exhibit 18**. [32] As part of the spin-off, Daimler AG (Mercedes-Benz Group AG since February 01, 2022) transferred a 65% majority interest to Daimler Truck Holding AG, retaining a 35% minority shareholding (see **Exhibit 19**). [33] Mercedes-Benz maintains a minority ownership stake and commits to abstain from exerting controlling influence over Daimler Truck, a commitment solidified through executing the "*Demerger Agreement*³". [34]

Separation of the commercial vehicle business

The opportunity

“This is a historic moment for Daimler. It represents the start of a profound reshaping of the company. Mercedes-Benz Cars & Vans and Daimler Trucks & Buses are different businesses with specific customer groups, technology paths and capital needs” [35]

declared Källenius with a radiant smile after announcing the spin-off in February 2021. He vividly depicted the situation, emphasizing that Mercedes-Benz, the world's most valuable luxury car brand, provides the most desirable cars for demanding customers. At the same time, Daimler Truck delivers industry-leading transportation solutions and services to its customers. Both companies operate in industries undergoing profound technological and structural transformation. Källenius believed that they would flourish best as independent companies benefiting from solid net liquidity and free from conglomerate structures. [35]

³ The Spin-Off and Hive-Down Agreement (Demerger Agreement) is an agreement regarding the Spin-off between Daimler AG, as transferring legal entity and Daimler Truck Holding AG, as acquiring legal entity, signed on August 06, 2021.

Changes in the market environment: The business landscape has swiftly transformed since Daimler Group's 2019 restructuring. Emerging technology rivals have disrupted traditional models, intensifying the competition for capital. Customer preferences in the truck and passenger car sectors have diverged, amplified by the Covid-19 pandemic. Passenger car customers prioritize brand appeal, design, luxury, comfort, autonomous driving, and in-car entertainment. In contrast, truck customers focus on the total cost of ownership, availability, and autonomous driving features. Electrification, autonomy, and software impact both sectors but have different technological requirements, especially at the component level (sensors, powertrain, vehicle software, etc.).⁴ Passenger car sales rely heavily on B2C relationships, while trucks engage in B2B. These changing demands on technology and cooperation posed a challenge for Daimler's capital allocation between cars and trucks. The spin-off is expected to streamline capital allocation for each entity, opening doors to exciting opportunities like cooperative ventures and potential equity investments. [36]

Increased strategic focus: The decision should enable Mercedes-Benz and the spun-off Daimler Truck to independently craft their strategies, tailor business activities, and react quickly to changing markets. This move was mainly driven by the recognition of limited synergies between the passenger and commercial vehicle businesses due to disparities in customer focus, future technologies, and the complexities of the Group's administrative structures. Mercedes-Benz can sharpen its focus on the premium passenger car segment, enhancing its leadership in growth markets and innovation areas like electrification, digitization, software, and autonomous driving. As a result of the spin-off, this segment should further increase its efficiency and unlock its true value potential through improved customer focus and refined market positioning. [37] However, the separation also marks a new independence era for Daimler Truck.

⁴ See Industry Note p. 8ff.

"Up until now, we had to travel in a convoy. In the future, we will be able to plan our own route and choose the best route for us",

said Martin Daum on July 30, 2021, immediately after the Board of Management and the Supervisory Board of Daimler gave the go-ahead for the company's realignment. In those days, Daum held the esteemed title of Chairman of the Board of Management of Daimler Truck and was soon to be appointed head of Daimler Truck. [38] The spin-off would eliminate the need to coordinate or compete with the Daimler Group on capital allocation, acquisitions, or investment budgets, thereby removing cross-divisional approval constraints. Before the spin-off, the commercial vehicles business relied heavily on internal Group funding, influenced by factors like profitability, growth, and strategic importance within the Daimler Group. The new autonomy should increase entrepreneurial agility and simplify the search for attractive investment opportunities, including partnerships and potential acquisitions. Streamlined, agile decision-making and reporting processes, free from the Daimler Group's constraints, should enable Daimler Truck to focus exclusively on its markets. [39] The choice to go public on the stock exchange went beyond financial consideration; it was about crafting an image that would capture the hearts of the market and the attention of investors. Through consistent reporting, proactive investor relations initiatives, and a transparent presentation of its market standing, Daimler Truck aimed to paint a vivid picture of its journey. In addition, the separation may give employees a direct stake in Daimler Truck's success through share-based compensation and participation programs, making their journey even more meaningful. [40]

Increase of value potential for shareholders: Analysts are concerned about a possible "conglomerate discount" resulting from the bundling of cars and trucks. If such a discount actually applied to the former Daimler Group, the spin-off could result in the creation of two separate market players, each with the potential for a higher valuation multiple. Daimler's Management Board attributes this to the market's perceived undervaluation of the commercial

vehicles business, potentially overshadowed by the dominance of the Mercedes-Benz passenger car business. [41] Consequently, the separation aims to ensure that Mercedes-Benz is valued as a pure passenger car maker and Daimler Truck as a commercial vehicle manufacturer, thus revising any undervaluation of the commercial vehicles business. This may also trigger a "re-rating" of Mercedes-Benz, unlocking added value. **Exhibits 20-21** summarize key financials of comparable companies in both industries. The separation empowers existing shareholders to autonomously choose to retain shares in both entities, enabling precise investment decisions based on risk tolerance and strategies. It also enhances the appeal of the separated commercial vehicle business to potential new investors.

However, the spin-off also had its share of conflicting views. Some experts, including Ingo Speich from Deka Investment, expressed concerns about the remaining passenger car business before the spin-off. Speich and automotive expert Willi Diez warned that the move could expose Mercedes-Benz to activist attacks or takeover attempts, emphasizing the significance of the exit of one of Germany's most successful and traditional companies. The economics professor emphasized: "*Mercedes-Benz AG is a small player in the global automotive market*", potentially making it more vulnerable to activist attacks or takeover attempts. [42] However, market analysts find it unlikely that Daimler Truck will draw the attention of competitors or activist investors. The industry is undergoing significant changes, making it a less appealing target in the unpredictable landscape. [42]

The risks

One of the criticisms is that separation reduces diversification and makes individual risk positions more prominent. Although the risk profiles of the passenger and commercial vehicle businesses differ, they are assessed independently after the spin-off. Daimler Truck's refined business model could be seen as more vulnerable to adverse market developments in the commercial vehicle sector, as the passenger car business can no longer offset it. The same

applies to Mercedes-Benz. Additionally, both Groups might encounter an increased risk of greater influence from major shareholders with conflicting strategic visions. [43]

Loss of synergies and economies of scale: Daimler's management always claimed that passenger and commercial vehicle businesses had minimal synergies and economies of scale. However, the spin-off may reinforce this issue and lead to a further reduction or complete loss of these limited synergies. Additionally, the separation entails increased internal and external expenses for at least a few years, notably in the IT domain, including infrastructure, systems, applications, support, and development functions for Daimler Truck and in areas like After Sales/Logistics. [44] A significant expense results from the need to unbundle the global financial services business and create an independent financial services unit for Daimler Truck. Before the spin-off, the financial services activities were consolidated within Daimler Mobility AG and its international subsidiaries, primarily serving the entire Daimler Group with financial and mobility services. As an integral aspect of the spin-off process, it was necessary to unbundle the central structures legally and operationally, likely resulting in dyssynergies. Moreover, the tax implications, particularly the regulatory and tax requirements, are potential risks. [45]

Lower credit rating of Daimler Truck: Another issue analysts raise is that the financial independence of the commercial vehicle business will lead to additional expenses at Daimler Truck compared with the cost structure of the former Daimler Group, especially during a transition phase. Daimler Truck must replace the financing it previously obtained from the Daimler Group and secure its refinancing arrangements. A credit rating downgrade for Daimler Truck is possible, which could result in less favorable refinancing conditions. This downgrade may drive business partners to seek bank guarantees instead of Group guarantees, with banks adopting a more cautious view and imposing higher fees. [46] However, Fitch Ratings declared in February 2021 that the separation will likely have a neutral impact on the credit rating. [47]

Costs incurred by the spin-off: A common criticism of such transactions is that they can be costly. Therefore, it should be ensured that the benefits outweigh the costs. The Daimler Group's estimates for the spin-off amount to one-time costs of approx. €700mn. The complete separation, notably concerning IT systems and applications, occurs over time and is not included in this amount. Furthermore, there will be tax burdens of around €400mn. Roughly two-thirds of these taxes will have a temporary impact and result in tax benefits in the subsequent years. The remaining portion will create a permanent tax liability. Additionally, transaction and advisory costs are expected to reach about €100mn. As a result of the operational adjustments, Daimler Truck initially anticipates incurring higher ongoing operational expenses in its industrial operations. Estimates suggest these expenses will begin at approx. €250mn p.a. and can be progressively reduced to around €150mn p.a. by 2025. [48] The estimated costs are shown in **Exhibit 22**.

The type of separation

Another question posed to Källenius, and CFO Harald Wilhelm was the type of separation of the Daimler commercial vehicles business. Different alternatives, including a partial IPO for Daimler Truck or an M&A transaction, were considered alongside the combined spin-off and hive-down. [49] Within the spin-off framework, the IPO of Daimler Truck followed a clearly defined roadmap that provided both the Mercedes-Benz and Daimler Truck with a reliable basis for strategic planning. Mercedes-Benz's shareholding in Daimler Truck was determined with certainty and precision in advance, ensuring entrepreneurial control over the commercial vehicle business. [50] The spin-off was executed by issuing 534,918,723 new no-par value registered shares of Daimler Truck Holding AG to the shareholders of Daimler AG, with an allocation ratio of 2:1. In this regard, **Exhibit 23** extracts some of the most essential details of the spin-off and hive-down agreement (*Demerger-Agreement*). The new shares of Daimler Truck were distributed directly to the shareholders, which allowed former Daimler Group

shareholders to decide separately on their investments in both companies. Daimler's management viewed this as the optimal approach to ensure transaction security and structure the future relationship between both companies.

Daimler Group embarks as Mercedes-Benz Group

On Wednesday, December 01, 2021, the combined spin-off and hive-down of Daimler Truck AG from Daimler AG was completed. Only ten days later, on December 10, 2021, the company gave its stock market debut with its first day of trading on the Frankfurt Stock Exchange. [24] This day marked the beginning of a new era for Daimler Truck and is probably one of the most critical milestones in the company's history. Martin Daum compared the preceding weeks and months with the *"tour de force"* and refers to the first trading day as the starting line:

"Making this possible organizationally was a tour de force. My thanks therefore go to our entire team for their unparalleled commitment over the past weeks and months. So in this respect, today is a finish line for us. We have worked hard to get there. However, this 10th of December 2021 is above all the exact opposite, namely a starting line." [51]

On this special day, a considerable number of existing shareholders questioned the effect of the spin-off. They received one share in Daimler Truck AG for every two shares they owned in Daimler AG, wondering whether the spin-off had created or destroyed value for them. [52] **Exhibit 24** illustrates the share price performance of Daimler AG compared to the EuroStoxx50 index until Daimler Truck's IPO. From December 01, 2021, when the spin-off was completed, until February 01, 2022, the passenger car business continued to be listed on the stock exchange as Daimler AG.

On Tuesday, February 01, 2022, Daimler AG officially transformed into Mercedes-Benz Group AG. [1] As part of the transition, the stock exchange symbol shifted from *"DAI"* to *"MBG"*, while the shares of Mercedes-Benz Group AG continue to be listed on the DAX. [53]

Exhibit 25 shows the closing prices of Daimler AG and its separated entities on key dates throughout the spin-off process. The strategic realignment garnered high media coverage, and investors expressed a strong interest in a more thorough investigation of the spin-off.

1) Daimler AG planned to divest its truck business in an environment where other OEMs had already done similar transactions. What are the fundamental reasons for separating the truck business? Did Daimler follow a market trend, or did they have company-specific reasons? What were the strategic challenges encountered by Daimler before the spin-off, and did these challenges create pressure to separate its truck business?

2) What are the primary concerns raised by shareholders regarding Daimler's spin-off? Does the current corporate governance structure adequately guarantee the genuine independence of Mercedes-Benz AG and Daimler Truck AG?

3) Considering the high estimated cost of executing this transaction, what is the potential for unlocking value? Within this framework, elaborate on the idea of a “conglomerate discount” and determine whether such a discount applied to Daimler AG.

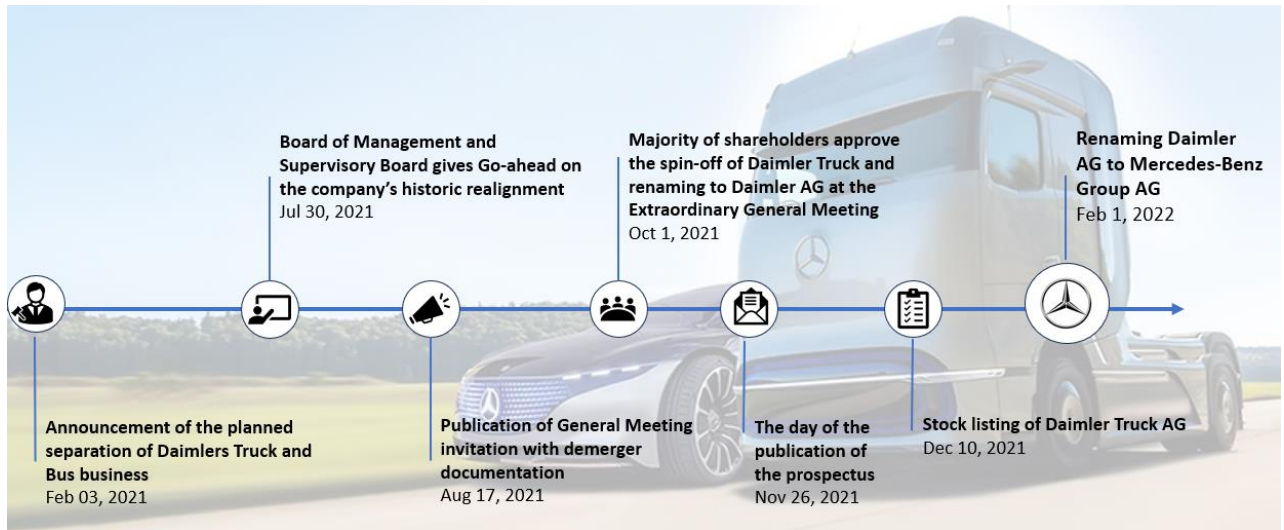
(Please note that the spin-off was announced on February 01, 2021, and the FY21 forward-looking EV/EBITDA multiples should be applied)

4) Evaluate the stock market performance of Daimler AG throughout the spin-off process compared to the EuroStoxx50 index and determine whether existing shareholders experienced value creation or destruction on the day of Daimler Truck's IPO.

5) What drawbacks and risks are associated with a combined spin-off and hive-down under the German Transformation Act? What are the alternative approaches to this form of separation, and in your opinion, did Daimler make the correct decision?

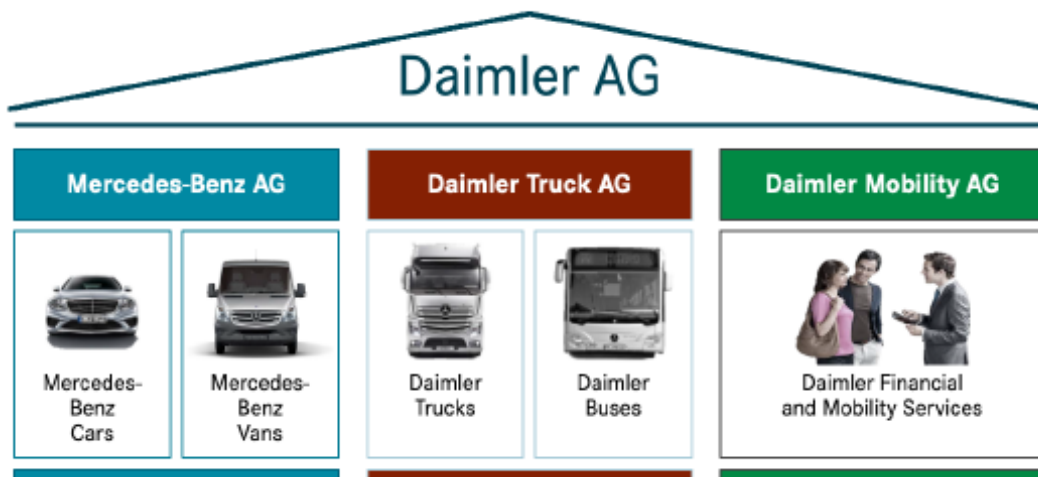
Exhibits

Exhibit 1: Key milestones in the spin-off timeline



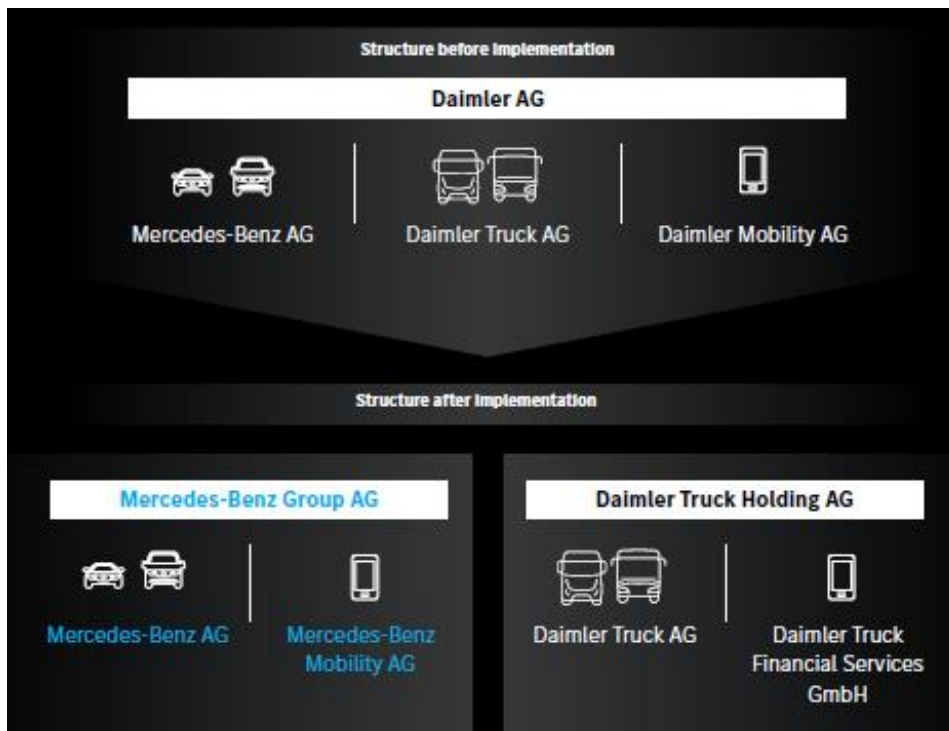
Source: Daimler public announcements

Exhibit 2: Structure of Daimler AG



Source: Spin-Off and Hive-Down Report (Demerger Report) Extraordinary General Meeting of Daimler AG on October 01, 2021, p.20.

Exhibit 3: Project Focus: The new Mercedes-Benz Group



Source: Annual Report 2021 – Mercedes-Benz Group p. 28.

Exhibit 4: Revenue of Mercedes-Benz Group AG

Revenue by segment and region			
	2021	2020	21/20
In million of euros			%-change
Revenue from continuing operations	133,893	121,778	+10
Revenue from discontinuing operations	34,078	32,531	+5
Revenue from continuing and discontinuing operations	167,971	154,309	+9
Segments			
Mercedes-Benz Cars & Vans	109,648	98,576	+11
Mercedes-Benz Mobility	27,941	27,699	+1
Reconciliation	30,382	28,034	+8
Regions			
Europe	65,924	64,226	+3
thereof Germany	24,424	25,262	-3
North America	47,561	42,937	+11
thereof United States	41,752	37,801	+10
Asia	45,439	39,944	+14
thereof China	25,437	21,343	+19
Other markets	9,047	7,202	+26

Source: Annual Report 2021 – Mercedes-Benz Group p. 61.

Exhibit 5: Consolidated Statement of Income, Mercedes-Benz Group AG

In millions of euros	2021	2020
Revenue	133,893.0	121,778.0
Cost of sales	(103,218.0)	(101,592.0)
Gross profit	30,675.0	20,186.0
Selling expenses	(9,194.0)	(8,966.0)
General administrative expenses	(2,808.0)	(2,507.0)
Research and non-capitalised development costs	(5,467.0)	(4,839.0)
Other operating income	2,888.0	2,384.0
Other operating expense	(1,735.0)	(591.0)
Profit on equity-method investments, net	1,352.0	747.0
Other financial income/expense, net	317.0	(323.0)
Earnings before interest and taxes (EBIT)	16,028.0	6,091.0
Interest income	212.0	224.0
Interest expense	(429.0)	(358.0)
Profit of continuing operations, before taxes	15,811.0	5,957.0
Income taxes	(4,761.0)	(1,926.0)
Profit of continuing operations	11,050.0	4,031.0
Profit/loss of discontinued operations, after taxes	12,346.0	(22.0)
Net profit	23,396.0	4,009.0
thereof profit attributable to non-controlling interests	390.0	382.0
thereof profit attributable to shareholders Of Mercedes-Benz Group AG	23,006.0	3,627.0
thereof continuing operations	10,695.0	3,656.0
thereof discontinued operations	12,311.0	(29.0)
Earnings per share (in euros) for profit attributable to shareholders of Mercedes-Benz Group AG		
Basic	21.5	3.4
thereof continuing Operations	10.0	3.4
thereof discontinued operations	11.5	(0.0)
Diluted	21.5	3.4
thereof continuing operations	10.0	3.4
thereof discontinued Operations	11.5	(0.0)

Source: Annual Report 2021 – Mercedes-Benz Group p. 185.

Exhibit 6: Consolidated Statement of Cash Flows, Mercedes-Benz Group AG

In millions of euros	2021	2020
Profit before income taxes of continuing and discontinued operations	28,775.0	6,339.0
Depreciation and amortisation/impairments	6,980.0	8,957.0
Other non-cash expense and income	(11,503.0)	(836.0)
Gains (-)/losses (+) on disposals of assets	(695.0)	131.0
Change in operating assets and liabilities		
Inventories	(2,561.0)	2,039.0
Trade receivables	120.0	1,339.0
Trade payables	1,574.0	(299.0)
Receivables from financial services	3,879.0	2,397.0
Vehicles on Operating leases	1,428.0	1,822.0
Other operating assets and liabilities	(1,261.0)	653.0
Dividends received from equity-method investments	1,625.0	1,783.0
Income taxes paid	(3,812.0)	(1,993.0)
Cash provided by operating activities	24,549.0	22,332.0
Additions to property, plant and equipment	(4,579.0)	(5,741.0)
Additions to intangible assets	(2,741.0)	(2,819.0)
Proceeds from disposals of property, plant and equipment and intangible assets	826.0	365.0
Investments in shareholdings	(573.0)	(661.0)
Proceeds from the disposal of shares in Daimler Truck Fuel Cell GmbH & co KG	634.0	-
Proceeds from disposals Of shareholdings	159.0	259.0
Acquisition of marketable debt securities and similar investments	(5,694.0)	(3,792.0)
Proceeds from sales of marketable debt securities and similar investments	4,385.0	5,941.0
Repayment of financing of Daimler's commercial vehicles business	6,853.0	-
Cash and cash equivalents disposed of from the deconsolidation Of Daimler's commercial vehicles business	(5,489.0)	-
Other	(7.0)	27.0
Cash used for investing activities	(6,226.0)	(6,421.0)
Change in short-term financing liabilities	1,463.0	(3,263.0)
Additions to long-term financing liabilities	42,196.0	53,713.0
Repayment of long-term financing liabilities	(60,859.0)	(59,953.0)
Dividend paid to shareholders of Mercedes-Benz Group AG	(1,444.0)	(963.0)
Dividends paid to non-controlling interests	(366.0)	(282.0)
Proceeds from the issue of share capital	36.0	31.0
Acquisition of treasury shares	(48.0)	(30.0)
Acquisition of non-controlling interests in subsidiaries	(37.0)	
Cash used for financing activities	(19,059.0)	(10,747.0)
Effect Of foreign exchange rate changes on cash and cash equivalents	870.0	(999.0)
Net increase in cash and cash equivalents	134.0	4,165.0
Cash and cash equivalents at beginning of period	23,048.0	18,883.0
Cash and cash equivalents at end of period	23,182.0	23,048.0
Less cash and cash equivalents classified as assets held for sale at end Of period	62.0	-
Cash and cash equivalents at end of period (Consolidated statement of financial position)	23,120.0	23,048.0

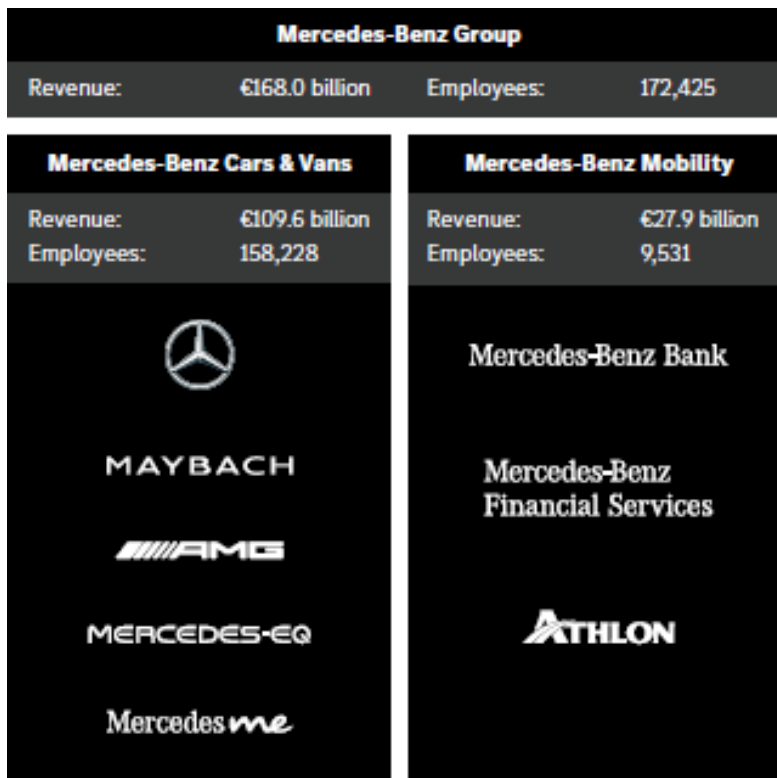
Source: Annual Report 2021 – Mercedes-Benz Group p. 189.

Exhibit 7: Consolidated Statement of Financial Position, Mercedes-Benz Group AG

In millions of euros	2021	2020
Assets		
Intangible assets	15,005.0	16,399.0
Property, plant and equipment	27,859.0	35,246.0
Equipment on Operating leases	44,471.0	47,552.0
Equity-method investments	13,588.0	5,189.0
Receivables from financial services	46,955.0	53,709.0
Marketable debt securities and similar investments	873.0	1,041.0
Other financial assets	3,181.0	4,167.0
Deferred tax assets	3,434.0	6,259.0
Other assets	1,536.0	911.0
Total non-current assets	156,902.0	170,473.0
Inventories	21,466.0	26,444.0
Trade receivables	7,673.0	10,649.0
Receivables from financial services	33,670.0	42,476.0
Cash and cash equivalents	23,120.0	23,048.0
Marketable debt securities and similar investments	6,706.0	5,356.0
Other financial assets	3,079.0	2,757.0
Other assets	4,073.0	4,534.0
Assets held for sale	3,142.0	-
Total current assets	102,929.0	115,264.0
Total assets	259,831.0	285,737.0
Equity and liabilities		
Share capital	3,070.0	3,070.0
Capital reserves	11,723.0	11,551.0
Retained earnings	56,190.0	47,111.0
Other reserves	968.0	(1,041.0)
Equity attributable to shareholders Of Mercedes-Benz Group AG	71,951.0	60,691.0
Non-controlling interests	1,216.0	1,557.0
Total equity	73,167.0	62,248.0
Provisions for pensions and similar obligations	5,359.0	12,070.0
Provisions for other risks	7,909.0	11,116.0
Financing liabilities	73,543.0	86,539.0
Other financial liabilities	1,808.0	1,971.0
Deferred tax liabilities	4,488.0	3,649.0
Deferred income	1,175.0	1,567.0
Contract and refund liabilities	3,980.0	5,787.0
Other liabilities	727.0	981.0
Total non-current liabilities	98,989.0	123,680.0
Trade payables	10,655.0	12,378.0
Provisions for other risks	8,053.0	9,334.0
Financing liabilities	52,300.0	59,303.0
Other financial liabilities	5,997.0	6,627.0
Deferred income	1,486.0	1,594.0
Contract and refund liabilities	5,929.0	7,169.0
Other liabilities	3,086.0	3,404.0
Liabilities held for sale	169.0	-
Total current liabilities	87,675.0	99,809.0
Total equity and liabilities	259,831.0	285,737.0

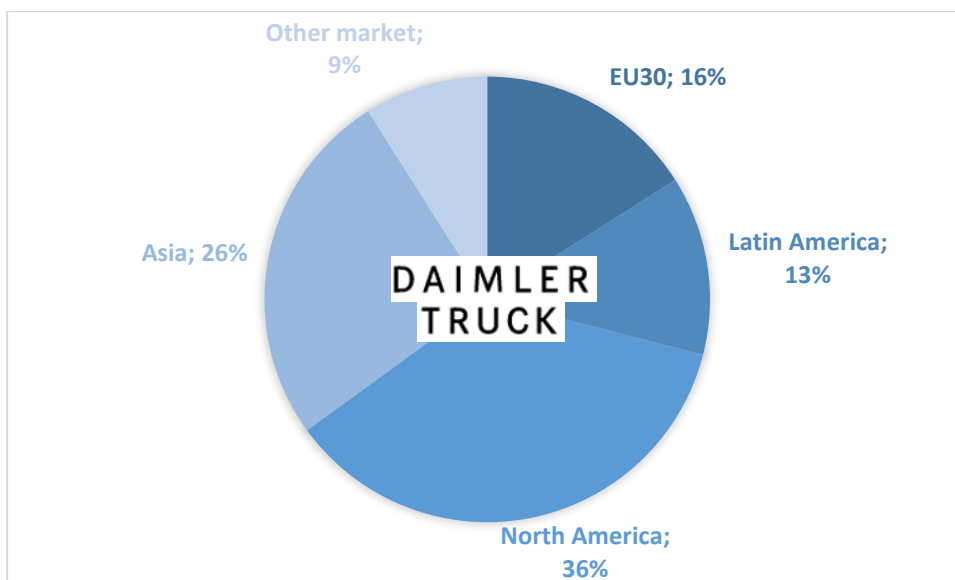
Source: Annual Report 2021 – Mercedes-Benz Group p. 187-188.

Exhibit 8: The brand world of the Mercedes-Benz Group as of December 2021



Source: Annual Report 2021 – Mercedes-Benz Group, p. 44.

Exhibit 9: Unit sales structure of Daimler Trucks 2021



Source: Annual Report 2021 Daimler Truck, p.47.

Exhibit 10: Consolidated Statement of Income/Loss, Daimler Truck AG

In millions of euros	2021	2020
Revenue	39,764.0	36,013.0
Cost of sales	(32,519.0)	(30,531.0)
Gross profit	7,245.0	5,482.0
Selling expenses	(2,722.0)	(2,625.0)
General administrative expenses	(1,635.0)	(1,472.0)
Research and non-capitalized development costs	(1,398.0)	(1,423.0)
Other operating income	2,029.0	726.0
Other operating expense	(348.0)	(200.0)
Profit/loss on equity-method investments, net	106.0	47.0
Other financial income/expense, net	80.0	(44.0)
Earnings before interest and taxes (EBIT)	3,357.0	491.0
Interest income	73.0	62.0
Interest expense	(156.0)	(219.0)
Profit before income taxes	3,274.0	334.0
Income taxes	(891.0)	(465.0)
Net profit/loss	2,383.0	(131.0)
thereof profit attributable to non-controlling interests	36.0	12.0
thereof profit/loss attributable to shareholders	2,347.0	(143.0)
Earnings per share (in euros) for profit attributable to shareholders'		
Basic and diluted	2.9	(0.2)

Source: Annual Report 2021 Daimler Truck, p.138.

Exhibit 11: Consolidated Statement of Cash Flows, Daimler Truck AG

In millions of euros	2021	2020
Profit before income taxes	3,274.0	334.0
Depreciation and amortization/impairments	1,160.0	1,335.0
Other non-cash expense and income	(737.0)	(61.0)
Gains (-)/losses (+) on disposals of assets	(624.0)	(17.0)
Change in operating assets and liabilities		
Inventories	(1,307.0)	870.0
Trade receivables	(348.0)	350.0
Trade payables	1,171.0	(138.0)
Receivables from financial services	66.0	1,438.0
Vehicles on operating leases	186.0	339.0
Other operating assets and liabilities	(118.0)	318.0
Dividends received from equity-method investments	12.0	9.0
Income taxes paid	(635.0)	(607.0)
Cash flows from operating activities	2,100.0	4,170.0
Additions to property, plant and equipment	(762.0)	(796.0)
Additions to intangible assets	(318.0)	(139.0)
Proceeds from disposals of property, plant and equipment and intangible assets	114.0	108.0
Acquisition of businesses	-	(64.0)
Proceeds from the disposal of shares in Daimler Truck Fuel Cell GmbH & Co. KG	634.0	
Proceeds from disposals of shareholdings	136.0	8.0
Investments in shareholdings	(302.0)	(31.0)
Acquisition of marketable debt securities and similar investments	(1,634.0)	(2,593.0)
Proceeds from sales of marketable debt securities and similar investments	6,296.0	1,152.0
Other	96.0	3.0
Cash flows from investing activities	4,260.0	(2,352.0)
Change in short-term financing liabilities	529.0	921.0
Additions to long-term financing liabilities	13,304.0	6,986.0
Repayment of long-term financing liabilities	(7,418.0)	(8,424.0)
Dividends paid to non-controlling interests	(26.0)	-
Transactions with the Mercedes-Benz Group until the spin-off	(7,258.0)	(604.0)
Dividends paid to the Mercedes-Benz Group until the spin-off	(6.0)	(14.0)
Cash flows from financing activities	(875.0)	(1,135.0)
Effect of foreign exchange rate changes on cash and cash equivalents	96.0	(114.0)
Net increase in cash and cash equivalents	5,581.0	569.0
Cash and cash equivalents at beginning of period	1,663.0	1,094.0
Cash and cash equivalents at end of period	7,244.0	1,663.0

Source: Annual Report 2021 Daimler Truck, p.141.

Exhibit 12: Consolidated Statement of Financial Position, Daimler Truck AG

In millions of euros	2021	2020
Assets		
Intangible assets	2,700.0	1,682.0
Property, plant and equipment	7,860.0	7,879.0
Equipment on operating leases	3,542.0	3,746.0
Equity-method investments	1,369.0	534.0
Receivables from financial services	8,943.0	8,318.0
Marketable debt securities and similar investments	34.0	27.0
Other financial assets	706.0	804.0
Deferred tax assets	1,388.0	1,258.0
Other assets	309.0	328.0
Total non-current assets	26,851.0	24,576.0
Inventories	7,793.0	6,278.0
Trade receivables	3,962.0	3,487.0
Receivables from financial services	7,155.0	6,951.0
Cash and cash equivalents	7,244.0	1,663.0
Marketable debt securities and similar investments	105.0	5,814.0
Other financial assets	654.0	448.0
Other assets	1,036.0	772.0
Total current assets	27,949.0	25,413.0
Total assets	54,800.0	49,989.0
Equity and liabilities		
Share capital	823.0	
Capital reserves	14,277.0	
Retained earnings / Invested equity attributable to the Mercedes-Benz Group	1,886.0	9,703.0
Other reserves	(1,066.0)	(1,478.0)
Equity attributable to shareholders	15,920.0	8,225.0
Non-controlling interests	503.0	483.0
Total equity	16,423.0	8,708.0
Provisions for pensions and similar obligations	2,471.0	3,530.0
Provisions for other risks	2,645.0	2,568.0
Financing liabilities	11,120.0	8,744.0
Other financial liabilities	1,802.0	2,030.0
Deferred tax liabilities	68.0	99.0
Deferred income	1,111.0	1,283.0
Contract and refund liabilities	1,785.0	1,639.0
Other liabilities	31.0	31.0
Total non-current liabilities	21,033.0	19,924.0
Trade payables	4,359.0	3,043.0
Provisions for other risks	2,045.0	1,719.0
Financing liabilities	5,479.0	11,805.0
Other financial liabilities	2,498.0	2,274.0
Deferred income	664.0	665.0
Contract and refund liabilities	1,634.0	1,295.0
Other liabilities	665.0	556.0
Total current liabilities	17,344.0	21,357.0
Total equity and liabilities	54,800.0	49,989.0

Source: Annual Report 2021 Daimler Truck, p.140.

Exhibit 13: Overview of all brands included in Daimler Truck as of December 2021



Source: <https://www.daimlertruck.com/en/company/history>

Exhibit 14 Daimler Truck’s new strategy after the spin-off



Source: Governance Presentation EGM 2021, Daimler AG (2021); p.23-24.

Exhibit 15: Borad of management of Daimler AG as of December 31, 2021

Name	Position	Appointed until
Ola Källenius	Chairman of the Board of Management of Daimler AG/ Mercedes-Benz Cars & Vans	May 2024
Martin Daum	Daimler Truck and Buses	Feb 2022
Renata Jungo Brüngger	Integrity and Legal Affairs	Dec 2023
Wilfried Proth	Human Resources and Director of Labor Relations	Apr 2022
Markus Schäfer	Group research and Mercedes-Benz Cars Chief operating Officer (COO)	May 2024
Britta Seeger	Mercedes-Benz Cars Marketing & Sales	Dec 2024
Hubertus Troska	Greater China	Dec 2025
Harald Wilhem	Finance & Controlling / Daimler Mobility	Mar 2022

Source: Daimler AG - Annual Report 2020, p. 13.

Exhibit 16: Board of Management and Supervisory Board of Mercedes-Benz AG as of December 31, 2021

Name	Position	Appointed until
Ola Källenius	Chairman of the Board of Management	May 2024
Dr Jörg Burzer	Production & Supply Chain Management	Nov 2023
Renata Jungo Brüngger	Integrity & Legal Affairs	Dec 2023
Sabine Kohleisen	Human Resources and Director of Labor Relations	Nov 2023
Markus Schäfer	Chief Technology Officer, Development & Procurement	May 2024
Britta Seeger	Marketing & Sales	Dec 2024
Hubertus Troska	Greater China	Dec 2025
Harald Wilhelm	Finance & Controlling / Mercedes-Benz Mobility	Mar 2027

Source: Annual Report 2021 Mercedes-Benz Group, p. 10.

Supervisory Board of Mercedes-Benz Group AG as of December 31, 2021

Name	Background	Age
Dr Bernd Pischetsrieder	He worked at BMW from 1993 to 1999 and as CEO at Volkswagen AG in Wolfsburg from 2002 to 2006.	74
Joe Kaeser	On April 12, 2006, Bischoff was elected as a member of the supervisory board of Daimler AG and as its Chairman with effect from April 5, 2007.	80
Bader M. Al Saad	Mr. Al Saad was the CEO of one of the leading investment companies in Kuwait, the Kuwait Financial Center (“Markaz”). He also has extensive experience in various positions at the Bank of Kuwait and the Middle East.	65
Sari Baldauf	a Finnish manager and the former Chairwoman of Nokia Corporation.	67
Michael Bettag	He has been Chairman of the branch commission of Mercedes-Benz (former Daimler AG) since 2015.	61
Ben van Beurden	Van Beurden succeeded Peter Voser as CEO of Shell plc from January 2014 to December 2022.	64
Nadine Boguslawski	As an employee representative, she served on various supervisory boards, including ElringKlinger AG and Robert Bosch Automotive Steering GmbH.	45
Dr Clemens Börsig	In 1999, he moved to Deutsche Bank AG, becoming CFO in 2001. From 2002 to 2006, he was also responsible for the bank's risk management as Chief Risk Officer.	74
Michael Brecht	Since 1990, he has been active as a member of the Works Council Committee in Gaggenau and became its Chairman in 1998.	55
Dr Martin Brudermüller	Since 2011, he has been Deputy Chairman of the Board of Management of BASF SE and was responsible for Petrochemicals, Monomers, Intermediates, Process Research, Chemical Engineering, Corporate Technology and Operational Excellence, and BASF New Business.	61
Liz Centoni	As Executive Vice President, Chief Strategy Officer and GM of Applications at Cisco, she is responsible for Strategy, Emerging Technologies & Incubation and the Application Solutions portfolio.	58
Raymond Curry	In June 2014, he was elected Regional Director and a member of the United Auto Workers International Executive Board. His area of responsibility includes UAW region 8, which consists of 12 U.S. states in the Mid-Atlantic and Southeast. In June 2018, he was elected Secretary-Treasurer.	57

Michael Häberle	Since January 2019, he has been active as chairman of the Works Council of the Mercedes-Benz Untertürkheim Plant, Research & Development Cars. In addition, he is a member of the European Works Council, the World Employee Committee (WEC), the Group Works Council of Daimler AG, the Collective Bargaining Commission, and other bodies of IG Metall.	53
Dr Jürgen Hambrecht	He was a member of the ethics commission for a secure energy supply for the nuclear phase-out.	76
Petraea Heynike	She was Executive Vice President and member of the Executive Board of Nestlé S.A until April 2011.	75
Timotheus Höttges	Chairman of the Board of Deutsche Telekom AG since 2014.	60
Joe Kaeser	Between 2006 and 2013, he was the CFO of Siemens and then the Group's CEO from 2013 to 2021.	65
Olaf Koch	He is the founder of the venture capital company Zintinus. From 2012 to 2020, he was also CEO of Metro AG.	52
Ergun Lümali	In March 2014, he was elected Chairman of the works council at the Sindelfingen site, and in April 2014, he was elected deputy Chairman of the General Works Council of Daimler AG.	60
Roman Romanowski	Roman Romanowski works as an honorary judge at the Federal Labor Court in Erfurt and is a member of numerous advisory boards for magazines and institutes.	48
Prof Dr Helene Svahn (since 1 Oct 2021)	Prof. Dr. Helene Svahn was appointed Senior Vice President of Research & Innovation at Permobil AB in 2015. From 2019 to 2021, she was President and Chief Executive Officer of Haldex AB.	48
Monika Tielsch	Monika Tielsch was elected to the works council of Daimler for the first time in 1998. Since then, as a works councilor in Sindelfingen, she has looked after employees in R&D, product strategy, and parts of MB.OS. Since 2012, she has also served as chairwoman of the Research & Development Coordination Committee.	55
Elke Tönjes-Werner	Since 1997, she has been a member of various negotiation groups in the General Works Council. From 2003 to 2005, she completed a training program as a process manager and obtained the European Business Competence license level A.	59
Sibylle Wankel	Since 1997, she has worked for IG Metall as an attorney and was responsible for tariff negotiations in Bavaria before she became General Counsel of the IG Metall Board of Management in May 2016.	58
Dr Frank Weber	From 2003 to 2019, he was responsible for the Mercedes-Benz Cars press shop Group. Since 2020, he has headed the BodyTEC Center, which combines the two previous Press Shop Network and Equipment Centers.	61

Marie Wieck	Since 2010, Marie Wieck has been General Manager in various IBM business areas, such as WebSphere, MobileFirst, Middleware, Hybrid Cloud and Blockchain.	62
Dr Sabine Zimmer	Since 2015, she has been the Manager of Daimler's Vocational Training Policies Germany. Dr. Sabine Zimmer is actively involved in the IG Metall as a shop steward and also serves as an honorary judge at the regional labor court in Stuttgart.	41
Roman Zitzelsberger	Roman Zitzelsberger has been the district manager of IG Metall Baden-Württemberg since December 2013. In the 2015, 2018 and 2022 collective bargaining rounds, he negotiated the pilot agreements for the metal and electrical industries nationwide.	56

Source: Annual Report 2021 Mercedes-Benz Group, p. 21.

Exhibit 17: Board of Management and Supervisory Board of Daimler Truck AG as of December 31, 2021

Name	Poistion	Appointed until
Martin Daum	Chairman of the Board of Management of Daimler Truck Holding AG	2025
Jochen Goetz	Member of the Board of Management, Finance and Controlling	2026
Jürgen Hartwig	Member of the Board of Management, Human Resources	2026
Andreas Gorbach	Management, Truck Technology	2024
Karin Rådström	Member of the Board of Management, Europe and Latin America region and the Mercedes-Benz truck brand	2024
John O'Leary	Member of the Board of Management, North America region and the Freightliner, Western Star and Thomas Built Buses brands	2024
Stephan Unger	Member of the Board of Management, Financial Services	2024
Karl Deppen	Member of the Board of Management, Asia Region and the FUSO and BharatBenz brands	2024

Source: Annual Report 2021, Daimler Truck AG, p.16.

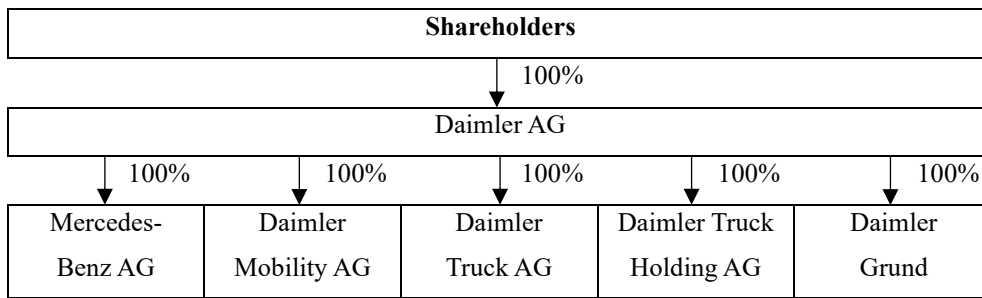
Supervisory Board of Daimler Truck Holding AG as of December 31, 2021

Name	Background/ Position	Age
Joe Kaeser	Chairman of the Supervisory Board of Daimler Truck Holding AG –shareholder representative. Chairman of the Supervisory Board, Chairman of the Presidential Committee and the Nomination Committee. Chairman of the Supervisory Board of Siemens Energy AG.	64
Michael Brecht	Member of the Supervisory Board of Daimler Truck Holding AG –employee representative. Deputy Chairman of the Supervisory Board, of the Presidential Committee and the Audit Committee. Chairman of the General Works Council of Daimler Truck AG. Chairman of the Works Council of the Mercedes-Benz plant in Gaggenau.	54
Michael Brosnan	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Chairman of the Audit Committee. Former Chief Financial Officer of Fresenius Medical Care AG & Co. KGaA.	66
Bruno Buschbacher	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the General Works Council of Daimler Truck AG. Chairman of the Works Council of the Mercedes-Benz plant in Mannheim.	no data
Harald Dorn	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Chairman of the General Spokespersons’ Committee of the executive employees of Daimler Truck AG.	no data
Jacques Esculier	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Former Chairman of the Board of Management and CEO of WABCO Holdings Inc.	62
Akihiro Eto	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Member of the Audit Committee. Former Member of the Board of Management, President and Global Chief Operating Officer of Bridgestone Corporation.	61
Laura Ipsen	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. President and Chairwoman of the Board of Management of Ellucian Company L.P.	54
Renata Jungo Brünnger	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Member of the Nomination Committee. Member of the Board of Management of Mercedes-Benz Group AG and Member of the Board of Management of Mercedes-Benz AG.	60
Carmen Klitzsch-Müller	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the General Works Council of Daimler Truck AG.	51
Jörg Köhlinger	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the Audit Committee. Central District Manager of IG Metall (Metalworkers’ Union).	58
John Krafcik	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Former CEO, now advisor, Waymo LLC.	60

Jörg Lorz	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the General Works Council of Daimler Truck AG. Chairman of the Works Council of the Mercedes-Benz plant in Kassel.	49
Claudia Peter	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. First authorized representative of IG Metall Gaggenau.	no data
Andrea Reith	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the Works Council of the EvoBus plant in Neu-Ulm.	37
Martin H. Richenhagen	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Former President and Chairman of the Board of Management of AGCO Corporation.	69
Marie Wieck	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Member of the Presidential Committee and of the Nomination Committee. Executive Partner at Ethos Capital.	61
Harald Wilhelm	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Member of the Audit Committee. Member of the Board of Management of Mercedes-Benz Group AG and of Mercedes-Benz AG. Chairman of the Supervisory Board of Mercedes-Benz Mobility AG.	55
Roman Zitzelsberger	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the Presidential Committee. District Manager of IG Metall in Baden-Württemberg.	55
Thomas Zwick	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the Audit Committee. Deputy Chairman of the General Works Council of Daimler Truck AG. Chairman of the Works Council of the plant in Wörth.	55
Tim Zech	Chairman of the Supervisory Board. Head of Tax at Mercedes-Benz Group AG (formerly Daimler AG). Stepped down on December 09, 2021.	49
Robert Köthner	Chief Accounting Officer of the Mercedes-Benz Group AG (formerly Daimler AG). Stepped down on December 09, 2021.	no data
Dr. Annette Matzat	Head of Labor and Human Resources Policy at Mercedes-Benz Group AG (formerly: Daimler AG). Stepped down on December 09, 2021.	no data

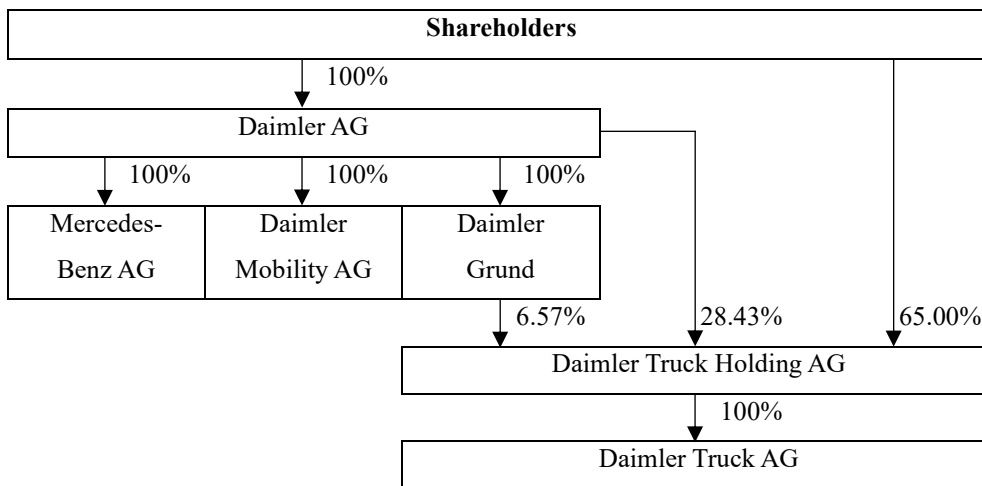
Source: Annual Report 2021, Daimler Truck AG, p.25-26.

Exhibit 18: Daimler AG structure before the spin-off



Source: Daimler Demerger Report p. 3.

Exhibit 19: Daimler AG structure after the spin-off*



**as of December 01, 2021. On February 01, 2022, Daimler AG was renamed to Mercedes-Benz Group AG and Daimler Mobility AG to Mercedes-Benz Mobility AG*

Source: Daimler Demerger Report p. 5.

Exhibit 20: Passenger car industry: Comparable companies

	BMW	Ferrari	Ford	GM	Renault	Stellantis	Tesla	Toyota	Volkswagen
FY 2021	31-Dec	31-Dec	31-Dec	31-Dec	31-Dec	31-Dec	31-Dec	31-Mrz	31-Dec
Currency	EUR	EUR	USD	USD	EUR	EUR	EUR	JPY	EUR
EX-Rate at FY-end (EUR/X)	1.00	1.00	1.14	1.14	1.00	1.00	1.00	129.90	1.00
In million (except JPY in bn and %)									
Market Capitalization	58,527.0	41,824.3	85,593.2	87,945.0	8,833.0	51,892.0	363,885.0	28,114.0	88,971.0
Enterprise Value	145,981.0	43,110.3	152,105.2	168,648.0	48,865.0	63,912.0	355,051.0	36,460.7	236,918.0
Revenue	111,239.0	4,271.0	136,341.0	127,004.0	46,213.0	149,419.0	53,823.0	27,214.5	250,199.0
CAGR (FY16-21)	+3.4%	+6.6%	-2.1%	-3.2%	-2.0%	-	+50.4%	-0.9%	+2.9%
EBITDA	22,791.0	1,536.6	30,795.0	25,717.0	5,998.0	20,747.0	9,625.0	4,624.2	49,433.0
EBIT	16,296.0	1,080.6	24,835.0	13,666.0	1,955.0	14,876.0	6,714.0	2,979.9	22,097.0
Net Income	12,382.0	830.8	17,937.0	10,019.0	888.0	14,200.0	5,519.0	2,245.2	15,382.0

BMW manufactures automobiles and motorcycles for the premium and luxury segments globally. With BMW, MINI, and Rolls-Royce, the German company owns three well-known brands in the automotive industry.

Ferrari is a well-known luxury sports car brand that sold only 11,115 cars in 2021. However, Ferrari car prices start at around €200,000 without optional extras, which made the company very profitable with a net margin of about 20% in 2021.

Ford Motor Company is a multinational automobile manufacturer founded by the famous Henry Ford. The U.S. company sells automobiles and commercial vehicles under the Ford brand and luxury cars under its Lincoln brand.

General Motors sells trucks, crossovers, cars, and automobile parts and provides software-enabled services and subscriptions worldwide. The U.S. company dominates its home market, generating about 80% of its sales in 2021. The company sells its passenger cars under the brands Buick, Chevrolet, Cadillac, and GMC.

Renault is a French automotive company that sells passenger cars, light commercial vehicles, and associated components under the Renault brand (global), the Dacia brand (Europe and North Africa), and the Renault Samsung Motors brand (South Korea). The company is the country's largest manufacturer and exporter of motor vehicles and is controlled by the French government.

Stellantis is a multinational automotive manufacturing corporation that was formed from the merger of the Italian-American conglomerate Fiat Chrysler and the French PSA Group in 2021. The company sells its vehicles under the Abarth, Alfa Romeo, Chrysler, Citroën, Dodge, DS, Fiat, Fiat Professional, Jeep, Lancia, Opel, Peugeot, Ram and Vauxhall brands.

Tesla is an electric automobile and clean energy company led by its famous co-founder Elon Musk. The U.S. company disrupted the passenger car industry by producing electric sports cars with unique digital and autonomous driving features.

Toyota is the second largest car manufacturer in the world after Volkswagen (in terms of revenue in 2021). The Japanese company sells passenger vehicles, minivans, and commercial vehicles such as trucks and related parts and accessories.

Volkswagen is a German multinational automobile manufacturer and the largest in the world (in terms of revenue in 2021). The Group sells passenger cars under the Audi, Bentley, Cupra, Jetta, Lamborghini, Porsche, SEAT, Škoda and Volkswagen brands, motorcycles under the Ducati name, light commercial vehicles under the Volkswagen Commercial Vehicles brand, and heavy commercial vehicles via the brands of the listed subsidiary Traton.

Source: Annual Reports 2021 of the respective companies.

Exhibit 21: Truck industry: Comparable companies

	AB Volvo	CNH	General	Hino	Paccar	Traton
		Industrials	Dynamics	Motors		
FY 2021	31-Dec	31-Dec	31-Dec	31-Mrz	31-Dec	31-Dec
Currency	SEK	USD	USD	JPY	USD	EUR
EX-Rate at FY-end (EUR/X)	10.30	1.14	1.14	129.90	1.14	1.00
In million (except JPY in bn and %)						
Market Capitalization	426,313.2	33,561.3	58,460.6	546.5	30,652.7	11,070.0
Enterprise Value	517,477.2	49,405.3	68,352.6	561.1	36,096.8	27,027.0
Revenue	372,216.0	33,428.0	38,469.0	1,498.4	23,522.3	30,620.0
CAGR (FY16-21)	+15.6%	+6.1%	+4.2%	-3.0%	+6.7%	-
EBITDA	63,077.0	2,576.0	5,053.0	57.0	3,193.8	3,725.0
EBIT	44,357.0	2,037.0	4,163.0	2.2	2,290.5	996.0
Net Income	32,787.0	1,723.0	3,257.0	(7.5)	1,852.1	457.0

AB Volvo is one of the world's leading manufacturers of trucks, buses, construction equipment, and marine and industrial engines headquartered in Sweden. The Group's brand portfolio includes Volvo, Volvo Penta, Rokbak, Renault Trucks, Prevost, Nova Bus, Mack, and Arqus.

CNH Industrials is well known in Europe for its truck and bus brand Iveco, but it is also one of the world's largest manufacturers of agricultural vehicles. As mentioned in the industry note, the planned spin-off in 2022 will create two strong and separately listed companies: CNH Industrial, focusing on agriculture and construction, and the Iveco Group, focusing on commercial and mass transportation, powertrain technologies, and specialty vehicles.

General Dynamics is a global aerospace and defense company. As one of the largest defense companies in the world, the U.S. company has four operating segments: Aerospace, Marine Systems, Combat Systems, and Technologies.

Hino Motors, Japan's most established truck manufacturer, specializes in producing trucks, buses, and engines. As a subsidiary of the Toyota Group, the company operates mainly in the Asian markets but also manufactures and sells trucks around the globe.

Paccar is a global technology company that designs and manufactures light-, medium- and heavy-duty commercial vehicles sold worldwide under the Kenworth, Peterbilt, and DAF brand names. The U.S. company focuses primarily on its home market, generating about half its sales.

Traton is one of the world's leading commercial vehicle manufacturers. The German company is majority-owned by Volkswagen and was called Volkswagen Truck & Bus before the spin-off in 2019. The Group's brand portfolio includes Scania, MAN, Volkswagen Caminhões e Ônibus, Navistar, and RIO.

Source: Annual Reports 2021 of the respective companies

Exhibit 22: Spin-off cost overview

Item	Estimated costs
Separation and establishment of the financial services business	€233.3mn
Establishment and expansion of central functions (incl. separation of IT systems and applications)	€233.3mn
Separation of mandated functions (incl. required division of sales & after-sales)	€233.3mn
Tax burdens	€400.0mn
Transaction and advisory costs (incl. accounting, legal and M&A, audit, notarization, general meetings, commercial register applications, stock exchange listing and corresponding prospectus liability insurance)	€100.0mn
Higher ongoing operational expenses for Daimler Truck (annually)	€250.0mn (first year)
Total amount	€1,450.0mn

Source: Daimler Demerger Report p. 50-51.

Exhibit 23: Extraction of the most essential details of the spin-off and hive down agreement
1. Spin-off of a Majority Interest in Daimler Truck AG

On 6 August 2021, Daimler AG as the transferring legal entity and Daimler Truck Holding AG as the acquiring legal entity entered into a spin-off and hive-down agreement (Abspaltungs- und Ausgliederungsvertrag, hereinafter: the “**Demerger Agreement**”) in notarized form. Under the Demerger Agreement, amongst other things, the following steps were agreed:

- Transfer of a majority interest of 65.00% in the (increased) share capital of Daimler Truck AG (i.e., 574,954,240 shares in the registered share capital of Daimler Truck AG) and of the control and profit and loss transfer agreement existing between Daimler AG and Daimler Truck AG to Daimler Truck Holding AG by way of a spin-off by means of acquisition pursuant to § 123 para. 2 no. 1 of the German Transformation Act (Umwandlungsgesetz, UmwG, hereinafter: the “**Spin-off**”). As consideration for this transfer, the shareholders of Daimler AG were to receive one newly issued share of Daimler Truck Holding AG for each two shares in Daimler AG, i.e., a total of 534,918,723 new no-par value registered shares from a corresponding increase of the registered share capital of Daimler Truck Holding AG (hereinafter: the “**Capital Increase Against Contributions in Kind I**”).
- Transfer of additional 251,498,474 shares in the registered share capital of Daimler Truck AG to Daimler Truck Holding AG by way of a hive-down by means of absorption pursuant to § 123 para. 3 no. 1 UmwG (hereinafter: the “**Hive-down**”). As consideration for this transfer, Daimler AG was to receive 233,936,002 new no-par value registered shares from a corresponding increase of the registered share capital of Daimler Truck Holding AG (“**Capital Increase Against Contributions in Kind II**”).

- Transfer of additional 58,092,270 shares in the registered share capital of Daimler Truck AG to Daimler Truck Holding AG by Daimler Vermögensverwaltungsgesellschaft für Grundbesitz mbH (“**Daimler Grund**”). As consideration for this transfer, Daimler Grund was to receive 54,047,157 new no-par value registered shares from a corresponding increase of the registered share capital of Daimler Truck Holding AG (hereinafter: the “**Capital Increase Against Contributions in Kind III**”).

The general meetings of Daimler AG and Daimler Truck Holding AG approved the Demerger Agreement on 1 October 2021 and on 5 November 2021, respectively. On 9 December 2021, the above-described measures (i.e., the Spin-off and the related Capital Increase Against Contributions in Kind I, the Hive-down and the related Capital Increase Against Contributions in Kind II, as well as the Capital Increase Against Contributions in Kind III) were registered with the commercial registers of Daimler Truck Holding AG and Daimler AG, respectively, and thereby became legally effective. As a result, a total of 65% of the shares in Daimler Truck Holding AG is now held by the shareholders of Daimler AG, while Daimler AG (directly and indirectly) holds a total 35% of the shares in Daimler Truck Holding AG.

2. Allocation Ratio for the Spin-off

The Spin-off is effected against the granting of 534,918,723 new no-par value registered shares of Daimler Truck Holding AG from the Capital Increase Against Contributions in Kind I to the shareholders of Daimler AG. § 4.1 of the Demerger Agreement provides for an allocation ratio of 2:1. This means that each shareholder of Daimler AG receives:

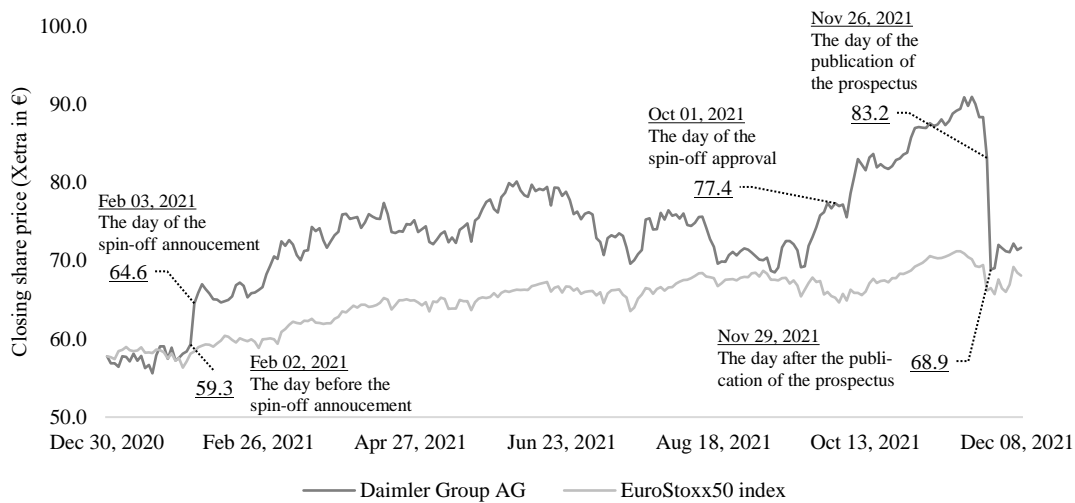
- for every two (2) ordinary registered shares with no-par value of Daimler AG (ISIN DE0007100000; German Securities Identification Number (WKN) 710000)
- one (1) ordinary registered share with no-par value of Daimler Truck Holding AG (ISIN DE000DTR0CK8; WKN DTR0CK), representing a notional amount of the share capital of EUR 1.00.

7. Stock Exchange Admission and Stock Market Trading

The English language listing prospectus of Daimler Truck Holding AG for the admission to stock exchange trading was approved by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) on 26 November 2021. The prospectus relating to the total of 822,951,882 ordinary registered shares with no-par value of Daimler Truck Holding AG is available online at www.daimlertruck.com under the section www.daimlertruck.com/investors.

On 9 December 2021, all shares of Daimler Truck Holding AG were admitted to the Regulated Market of the Frankfurt Stock Exchange and, additionally, to the sub-segment of the Regulated Market of the Frankfurt Stock Exchange with additional post-admission obligations (Prime Standard). However, on this day trading in shares of Daimler Truck Holding AG is not yet possible and the Daimler shares are still traded “cum Daimler Truck”. The first trading in the shares of Daimler Truck Holding AG is expected to occur on 10 December 2021. On the same day, the shares of Daimler AG will be traded "ex spin-off".

Source: Mercedes-Benz Group: Annual Meeting 2021

Exhibit 24: Share price performance of the Daimler Group AG compared to the EuroStoxx50 index until Daimler Truck's IPO


Source: yahoo.finance

Exhibit 25: Closing share prices on key dates throughout the spin-off process (Xetra in €)

Date	Daimler Group AG	Mercedes-Benz AG	Daimler Truck AG	EuroStoxx50	BMW
Dec 30, 2020	57.79	-	-	3,571.59	72.23
Feb 02, 2021	59.28	-	-	3,590.46	71.41
Feb 03, 2021	64.56	-	-	3,609.75	71.73
Nov 26, 2021	83.16	-	-	4,089.58	85.51
Nov 29, 2021	68.87	-	-	4,109.51	85.78
Dec 09, 2021	71.68	-	-	4,208.30	90.22
Dec 10, 2021	-	74.25	32.00	4,199.16	89.66
Dec 30, 2021	-	67.59	32.29	4,306.07	88.49
Jan 31, 2022	-	69.93	31.38	4,174.60	92.95
Feb 01, 2022	-	70.16	32.29	4,224.45	94.29

Source: yahoo.finance

Exhibits

Exhibit 1: The main key factor for the spin-off was the creation of value

Customers
We want to increase our competitiveness through an even sharper focus. Our customers will gain solutions tailored to their specific needs.

Partners
We want to set the pace in both industries - with strong technological partnerships to jointly accelerate technological progress.

People
We want to take advantage of growth opportunities - with our people, and for our people. Our goal: safe, attractive jobs in the long term.

Shareholders
We want to establish two undisputed innovation leaders. Our shareholders will profit from the value crystallization.

Society
Economic success is the prerequisite to achieve our societal responsibility and our environmental commitment.

Source: Governance Presentation EGM 2021, Daimler AG (2021); p.10. <https://group.mercedes-benz.com/dokumente/investoren/hauptversammlung/daimler-ir-ahv-2021-governanceroadshowpresentation.pdf>

Exhibit 2: Project Focus: Two companies with two different focuses

Passenger cars "First move the world"	Commercial vehicles „For all who keep the world moving“
Product: Luxury experience	Product: Investment good
Customers: Mainly private (B2C)	Customers: Mainly business (B2B)
Target: Turn modern luxury into profitable growth	Target: Turn global scale into profit
Transformation: Focus on battery electric vehicles & car software	Transformation: Battery, fuel cell, software customer solutions

Source: Governance Presentation EGM 2021, Daimler AG (2021); p.6. <https://group.mercedes-benz.com/dokumente/investoren/hauptversammlung/daimler-ir-ahv-2021-governanceroadshowpresentation.pdf>

Exhibit 3: Project Focus: Transformation of the Mobility Department



Source: Governance Presentation EGM 2021, Daimler AG (2021); p.5. <https://group.mercedes-benz.com/dokumente/investoren/hauptversammlung/daimler-ir-ahv-2021-governanceroadshowpresentation.pdf>

Exhibit 4: Members of the Supervisory Board of Daimler Truck AG who have connections to Mercedes-Benz AG

Michael Brecht	Member of the Supervisory Board of Daimler Truck Holding AG –employee representative. Deputy Chairman of the Supervisory Board, of the Presidential Committee and of the Audit Committee. Chairman of the General Works Council of Daimler Truck AG. Chairman of the Works Council of the Mercedes-Benz plant in Gaggenau.	54
Bruno Buschbacher	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the General Works Council of Daimler Truck AG. Chairman of the Works Council of the Mercedes-Benz plant in Mannheim.	no data
Renata Jungo Brünger	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Member of the Nomination Committee. Member of the Board of Management of Mercedes-Benz Group AG and Member of the Board of Management of Mercedes-Benz AG.	60
Jörg Lorz	Member of the Supervisory Board of Daimler Truck Holding AG – employee representative. Member of the General Works Council of Daimler Truck AG. Chairman of the Works Council of the Mercedes-Benz plant in Kassel.	49
Harald Wilhelm	Member of the Supervisory Board of Daimler Truck Holding AG – shareholder representative. Member of the Audit Committee. Member of the Board of Management of Mercedes-Benz Group AG and of Mercedes-Benz AG. Chairman of the Supervisory Board of Mercedes-Benz Mobility AG.	55
Tim Zech	Chairman of the Supervisory Board. Head of Tax at Mercedes-Benz Group AG (formerly Daimler AG). Stepped down on December 09, 2021.	49
Robert Köthner	Chief Accounting Officer of the Mercedes-Benz Group AG (formerly Daimler AG). Stepped down on December 09, 2021.	no data
Dr. Annette Matzat	Head of Labor and Human Resources Policy at Mercedes-Benz Group AG (formerly: Daimler AG). Stepped down on December 09, 2021.	no data

Exhibit 5: Forward-looking multiples for the passenger car industry as of Dec 31, 2021

Comparable company	EV/EBITDA multiple
BMW	6.41x
Ferrari	28.06x
Ford	4.94x
General Motors	6.56x
Renault	8.15x
Stellantis	3.08x
Tesla	36.89x
Toyota	7.88x
Volkswagen	4.79x
Median	6.56x

Exhibit 6: Forward-looking multiples for the truck industry as of Dec 31, 2021

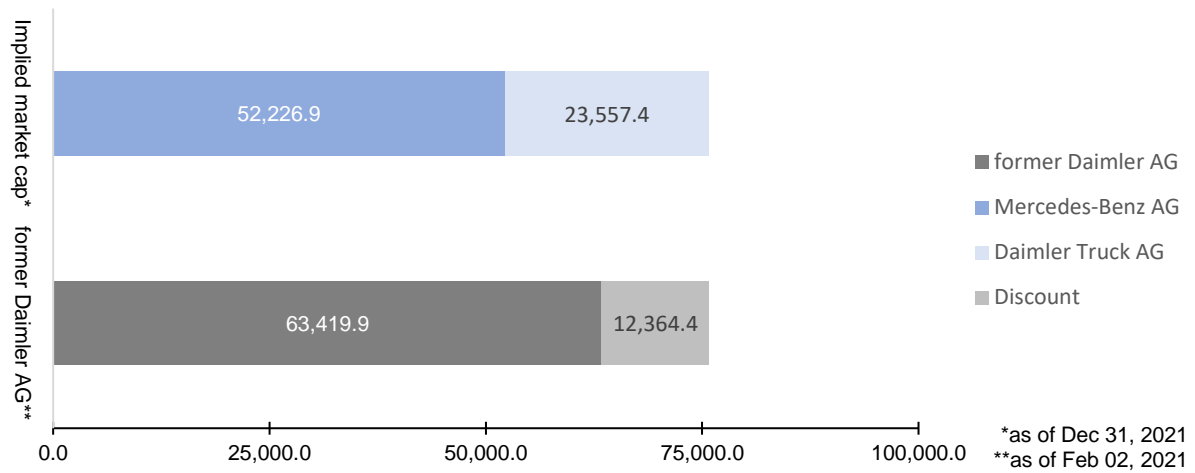
Comparable company	EV/EBITDA multiple
AB Volvo	8.20x
CNH Industrial	19.18x
General Dynamics	13.53x
Hino Motors	9.85x
Paccar	11.30x
Traton	7.26x
Median	10.58x

**Exhibit 7: EV-Equity bridge of Mercedes-Benz AG and Daimler Truck AG as of Dec 31, 2021
(in €mn)**

	Mercedes-Benz AG	Daimler Truck AG	Sum-of-the-Parts
EBITDA	23,008.0	4,517.0	27,525.0
Peer group multiple*	6.41x	7.26x	6.55x
Implied EV	147,370.9	32,797.7	180,168.6
Net Debt	(95,144.0)	(9,216.0)	(104,360.0)
(-) Financing liabilities (nominal)	(125,843.0)	(16,599.0)	(142,442.0)
(+) Cash and cash equivalents	23,120.0	7,244.0	30,364.0
(+) Marketable securities and term deposits	7,579.0	139.0	7,718.0
Implied value of common equity	52,226.9	23,581.7	75,808.6

*based on the EV/EBITDA multiple of BMW for Mercedes-Benz and Traton for Daimler Truck

Exhibit 8: Comparison of Mercedes-Benz AG's and Daimler Truck AG's implied market cap with its market cap before the spin-off announcement (in €mn)



The implied market caps for Mercedes-Benz AG and Daimler Truck AG are derived from the EV/EBITDA multiples of BMW AG and Traton SE, respectively.

Bibliography

- [1] E. Bulle and M. (. Giagheddu, "Non-Rating Action Commentary Daimler's Truck Business Planned Separation Likely to be Credit-Neutral," Fitch Ratings, [Online]. Available: <https://www.fitchratings.com/research/corporate-finance/daimler-truck-business-planned-separation-likely-to-be-credit-neutral-04-02-2021>; 15.11.23.
- [2] M. (. Ebeling, "Daimler-AG-Konzernaufspaltung: Was wird aus dem Stern-Logo und dem Daimler-Namen?," Mercedes-Fans, [Online]. Available: <https://www.mercedes-fans.de/magazin/news/daimler-ag-konzernaufspaltung-was-wird-aus-dem-stern-logo-und-dem-daimler-namen.17901>; 15.11.23.
- [3] S. Heppelmann and M. (. Hoffleith, "Holding structure – from Conglomerate Discount to Management Value Added," Stern Stewart & Co., https://www.sternstewart.com/media/studie_36_holding_structure_en_1.pdf; p.3.
- [4] J. Koenig, T. Koller and A. (. Lulu, "McKinsey Quarterly When bigger isn't always better," [Online]. Available: <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/when-bigger-isnt-always-better>; 15.11.23.