

DAIMLER AG

AUTOMOTIVE MANUFACTURE

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COMPANY REPORT

31 DECEMBER 2017

24660@novasbe.pt**A business model revolution ahead***Leading the change with robust growth*

- **Disruptive trends ahead:** the automotive industry is going through a major revolution, propelled by technology innovations that have the potential to redesign the way we think about vehicles and mobility – with catalysers of change being demographics, shared mobility, connectivity, environmental policy and automation;
- **R&D costs will put pressure on margins:** as competition is becoming fiercer, OEMs will have to compete with new entrants to catch the aftersales mobility revenue if they aim to offset the effect of decreasing margins and slower sales – expenditure is expected to increase at a 5% CAGR 2017-2025;
- **Litigation risks:** “Dieselgate” scandal is looming to other German OEMs, increasing uncertainty in the sector, and Daimler is on the radar of German and European authorities; the truck cartel case is also facing new developments, with new prosecution coming from Betham Europe – the litigation management company that claims €100billion in compensation on behalf of truck buyers – Daimler can lose as much as €10billion;
- **Diversification and technology leadership:** Daimler is facing change and in 2019 will launch the first of 10 fully electric vehicles, with autonomy and price able to rival with Tesla announced model III.

Company description

Daimler AG roots go back to the invention of the first internal combustion vehicle in 1886. Since then the company has been in the forefront of automobile technology and is the manufacturer of one of the best premium vehicles brands: Mercedes-Benz. Nowadays the company is the world leading premium manufacturer and also develops trucks, commercial vehicles and buses.

Recommendation: BUY**Price Target FY18: 82,2 €****Price (as of 31-Dec-17) 70,8 €**

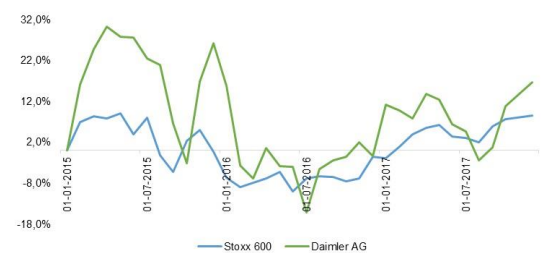
Source: Bloomberg

52-week range (€) 58-73.64

Market Cap (€m) 75.756

Outstanding Shares (m) 1070

Source: Bloomberg

Daimler cumulative monthly returns

Graph 1

Source: Bloomberg.

(Values in € millions)	2015	2016	2017E
Revenues	149.467	153.261	163.807
EBITDA	18.559	18.368	18.024
Net Profit	7.290	8.711	8.784
EPS	8,1	8,2	7,4
P/E	8,63	8,23	9,57
EV/EBITDA	4,1	3,9	4,3
ROA	4,59%	4,04%	3,04%
Industrial FCF	5.134	1.992	973
Car sales	2,00	2,2	2,22
YoY return %	19,7%	0,8%	9,5%
Dividends (€)	3,25	3,25	3,02
Price 31 Dec.	70,2	67,5	70,8

Source: Analyst Estimates and financial statements

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY JOÃO PEDRO RODRIGUES, A MASTERS IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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1. Executive summary

Historical vehicle sales by unit

Unit ('000)	H 2012	H 2013	H 2014	H 2015	H 2016	E 2017
Cars	1.452	1.566	1.723	2.001	2.198	2.228
Trucks	462	484	496	502	415	480
Vans	252	270	295	321	359	384
Buses	32	34	33	28	26	26

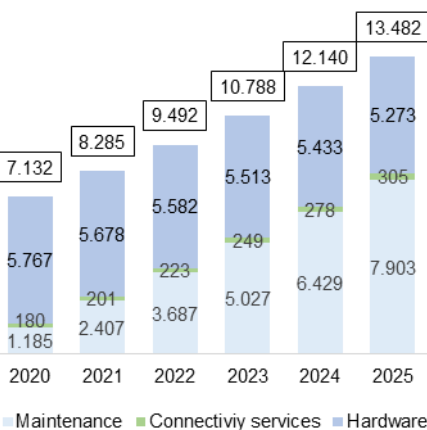
Table 1 – Historical sales

Daimler is the world leader in premium vehicles manufacture since having sold 2.197.956 million passenger cars in 2016. The company has been able to grow consistently by renovating its brand image and diversifying its model portfolio, planning to have 40 different models by 2020 ranging from electric, diesel and hybrid motors. In the near future, given the expected recover in the European market and the growth in emergent economies, vehicle revenues are expected to expand at a CAGR of 3,93% until 2025.

More demanding consumers, more market competition and increased production complexity will create a pressure on cost of sales, unlikely to be passed along to the consumer in order to keep sales expansion. The gross margin of the industrial division should decrease from 22% to 20%.

New revenue pools forecasted revenue

Units: millions of euros



Graph 2

Maintenance revenues are predicted to be generated by Daimler's authorized repair shops, from which Daimler is estimated to earn a fee from the operational profits.

In the next few years, the company will have to do very significant investments to produce electric vehicles (both fully-electric and hybrid). R&D costs will increase, as a consequence of a faster two-phase product life-cycle (shorter for software than hardware) as well as more CAPEX. The first, together with increased production cost, will pull EBIT margin of the industrial business down from 8,4% (2016) to 7,06% (2025). However, new revenue pools will have a counter-effect and increase the margin to 6,9%. They are expected to generate €7billion in revenue by 2020 and to grow at a 13,6% CAGR until 2025, creating €16,3 in value per share.

Capex in relation to revenues is forecasted to increase from 6,6% (2016) to 7,8% in 2023, before the bulk investments needed to build more electric and hybrid vehicles are completed (the budget currently stands at €10bn). After that, it's expect a CAPEX reduction to historical levels.

In the long-run, it's not expected the company to generate excess profits and consequently the return on invested capital forecasted for the industrial division is equal to the hurdle rate in perpetuity (6,53%).

Regarding the financial unit, its margins are expected to remain stable at 8% EBIT and growth tightly associated with sales growth, given that historically there is a proportional trend between the number of contracts held and vehicle sales. Nevertheless, in order to seize growth coming from emerging economies, where the middle and upper middle classes are less wealthy than in the developed world, its expected the creation of more favourable credit conditions, namely in

the form of more extended contract periods. Therefore, we expect receivables days to increase thoroughly, making the unit more cash strained.

The Dieselgate scandal continues to create uncertainty in the sector. Daimler has been on the radar of German authorities for allegedly having used defeating devices in over 1 million vehicles. Estimated losses could amount to €8 billion over the next years (considering fines, loss sales, and brand image deterioration). Furthermore, if Betham Europe succeeds in its claims, Daimler as the biggest truck manufacturer in the world could have losses of €10 billion (considering negative effects in brand image, fines and indemnifications).

The target value of the company is €82,2, with a yield of 20,8% considering the acquisition price of €70,8 as of December 31th and the forecasted dividends for 2018.

2. Company overview

Daimler AG was created in 2007 after selling the majority stake in Chrysler and is headquartered in Stuttgart, Germany. Daimler shares are quoted in the German Stock Exchange and are part of the DAX Market index.

The company is best known for producing Mercedes-Benz vehicles. With its origins tracing back to 1886, when Karl Benz created the first automobile, Daimler innovation DNA helped shaping the company into being the world leading premium car manufacturer in 2016, with 2,2 million car sales, outselling BMW for the first time since 2004. The company revenue has been registering a steady growth after the slump caused by the subprime crisis in 2008 and 2009, having grown at a CAGR of 7,78% since 2010 and at a double-digit rate since 2013. During this period Mercedes-Benz cars unit sales rose from 1,27 million to 2,2 million.

Daimler sales have been propelled mainly by fast growing emerging markets such as China, where the company sold 488 thousand cars in 2016 (+22% compared with 2015) making it the single biggest market for Daimler. By reinforcing the local dealership network, and developing local partnerships, Daimler is catching up with BMW (517 thousand units, +11,4% vs.2015) and Audi (591 thousand units, +3,6% vs.2015) in the Chinese market.

Daimler's diversification strategy has been successful in renovating Mercedes brand appeal that was largely seen as the old-fashioned "grandfather's car". By creating more aggressive lines and diversifying the product range, Mercedes was able to capture market segments that it didn't reach as effectively before, namely young adults. Having only 24 different models in 2010, the company is expected

to have 40 different models by 2020, some of them in completely new classes such as the Mercedes X-Class Pickup.

Despite a strong stock market return since 2010 (average yearly return of 16,1% CAGR), Daimler registered a -9% decline in 2016, due to political instability caused by the US elections and BREXIT that affected global stock markets. Since then the share price has been trading in the €58-€73,23 range, currently trading at +4,8% relative to the beginning of the year level. In July, the company's share price suffered a slump, decreasing -7% to €59,2, due to a report published in Süddeutsche Zeitung in July claiming that Daimler was being investigated for allegedly using defeating devices to beat emission tests in over 1 million vehicles between 2008 and 2016 - which spooked investors. Furthermore, President Trump wish to renegotiate the NAFTA agreement and impose a 35% tax on imported autos poses a significant risk on the €1bn investment that Daimler holds in a production plant facility with Nissan in Mexico and sales development in USA.

Daimler sales, relative to prior year figures, continued to grow significantly fast in the first three quarters of the year having grown +8%, outpacing its most direct competitors BMW (+5,2%), Audi (+0,5%).

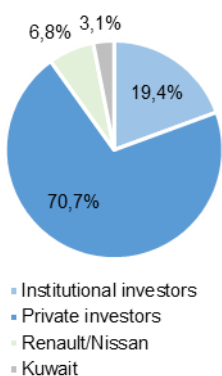
On the third quarter Daimler industrial business RoS increased from 8,4% at year-end to 9,3% while BMW achieved 8,9% and Audi 6,2%.

2.1 Management Board

Dr. Dieter Zetsche is Daimler chairman since 2006. Having been on the board since 1998, Dr. Zetsche lead the company turnaround since 2006 after completing the demerger between Daimler and Chrysler AG. Under his leadership, Daimler regained the top spot among premium vehicle manufacturers and changed Mercedes brand perception in the market completely. Dr. Zetsche is expect to continue leading the company destiny until 2019.

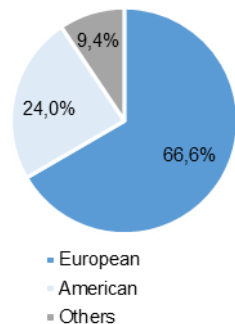
The remuneration of the board of management is divided in three main components: base salary (29%), short-medium term performance goals (29%), and long-term performance components (42%). The annual bonus is limited to 2.35 times the annual base salary for the respective year and is dependent on the various levels of achievement related with the EBIT of the year. The long-term performance oriented remuneration is achieved by a Phantom Share Plan, which obliges boards members to hold 25% of their remuneration in Daimler Shares up to the limit of 75.000 until the end of service.

Investors type



Graph 3

Investors region



Graph 4

2.2 Ownership

Daimler ownership is significantly diluted, with no shareholder holding a significant position in the company. Its biggest shareholders are: Kuwait trust fund (6,8%), BlackRock (5,18%), Renault/Nissan (3,1%) and Deutsche Bank (2,05%). Institutional investors have 71% ownership and 20% is hold by private investors. Geographically, the majority of the capital is hold by European investors (66%), while around 24% is held by American investors. Currently Daimler has 1.070 million free floating shares, each giving one voting right, and 1 million shareholders. There are no preferred stock and multiple votings rights of maximum voting rights neither.

2.3 Business model

Daimler’s “Mercedes-Benz 2020” growth strategy is based on four main pillars: strengthening the core business, grow globally, technology leadership and advancing digitalization. To strengthen the core business, Daimler intends to diversify and expand in all car segments by launching new models. In the Trucks segment Daimler’s goal is to keep being the number one producer in the world, by investing in greater efficiency and leading the segment innovation in security and automation technology. In the vans segment Daimler will continue to target new customers segments, as it did with vans Marco Polo and Vito Tourer and to further explore opportunities in Western Europe. The Bus segment will be specially focused on improving efficiency to comply with the toughest emission standards.

To increase its sales, Daimler is reinforcing its investment in China, given it is expected to be the fastest growing region in the upcoming years. Daimler has been establishing partnerships with local players to increase penetration, better meet customer needs and understanding market trends. Foton is the Chinese partner to produce and sell trucks in China under Foton brand, BYD is the partner in battery and electric vehicles manufacture (with who Daimler produced the electric vehicle Denza) and BAIC is the partner with whom Daimler holds a joint venture to produce vehicles and engines. In India Daimler operates under the name BharatBenz and FUSO, to produce and sell trucks both to the local and external market. Daimler is also pushing its internationalization strategy through R&D, increasing its investment in the R&D center in Beijing (€112million).

Digitalization is shifting OEMs business model from equipment manufacturers to integrated mobility services providers. Therefore, Daimler has been developing car sharing solutions, as Moovel and Car2go, among others. The later, with around 1 million users, is the most widely used car sharing service in the world. Daimler is also investing in car rental services such as CharterWay and getting closer to costumers through new selling platforms as Mercedes Me (digital connection with client, offering online services and gathering personalized information).

3. The Sector: market outlook

3.1 Market Outlook: disruptive trends ahead

The highly disruptive trends that have been around the corner for a couple of years now, are characterized by four important dynamics: demographics, shared mobility, connectivity, renewable energy, environmental policy and automation. Each one of these phenomena has the potential to reshape the automotive industry by itself. Acting interdependently, they are likely to create a revolution in the industry.

3.1.2 Demographics and shared mobility

According to the United Nations people will tend to live ever more in highly populated cities, with 66% of the world population expected to live in urban areas by 2050, which will progressively increase the harness of having a car. Traffic jams and lacking parking space are a driver worst nightmare and increasing public transportation efficiency is a big competitor for short hauls. Furthermore, public policies discourage car usage in major cities due to pollution concerns. Consequently, younger generations are starting to think about cars and transportation in a different way. Car sharing is a major trend and it is very likely that in the near future people will change the paradigm of having a "fit-for-all" car for a "fit-for-purpose" sharing service. Thus, big opportunities are arising in the field and pushing traditional car manufacturers from hardware providers to integrated mobility services providers, acting across the entire value chain of mobility, from production, to financing, maintenance and transportation services. The biggest car manufacturers are already investing in these solutions, which MyTaxi and Car2Go from Daimler and Reach Now from BMW are examples of.

Partially due to increase urbanization and market maturation, vehicle sales growth is expected to slow down in the upcoming years, expanding between 1,8% to 2% globally (*source: Economist Intelligence Unit*). However, new

opportunities are arising in the aftermarket that can increase revenue potential up to 30% in the transportation industry as a whole, which means about €1.37 trillion for the sector (McKinsey & StanfordUniversity, 2016). Connectivity features are becoming increasingly important in product differentiation. In 2015, in a study conducted by McKinsey, 37% of the consumers admitted they were willing to change brands to have better connectivity features (the double compared with 2014) - in China that number was 60%.

3.1.3 Connectivity

- **Automation with infotainment:** for every additional free minute that a driver has within the car, sales of entertainment (videos, music, games, social network features, internet usage) can generate €5 billion a year globally by 2030 (Bertoncello & Wee, 2015). However, it's necessary that a common consensus among automakers is created to enable the car as the next "smartphone" like platform. It is very arguable if automakers can capitalize infotainment revenues. The likely provider of the necessary software will be a tech giant, and if automakers try to restrict access to content providers, they're likely to lose market share to their competitors. Thus, they are in the same position as computer manufacturers are to Windows or smartphone makers are to Android – therefore it's not considered any potential revenues from this subsector arising to Daimler;
- **Telematics:** according to IHS Markit, telematics revenues are going to grow at 17% CAGR until 2021, as the number of connected cars increase. Automakers can use connectivity to engage with costumers for emergency services, car diagnostics and maintenance scheduling, as well as providing real time maps and navigation systems.
- **Sharing services and e-hailing:** over the last five years the number of car sharing members in North America and Germany grew more than 30%. Since 2010 Uber did one billion rides worldwide. Meanwhile, Daimler car sharing service Car2Go reached 1,2 million customers in 31 cities last year. Overall the market represented around €27 billion in 2016 and can reach €1,5 trillion in 2030 which represents a staggering 29% CAGR.

3.1.4 Renewable energy

With increasing concerns over global warming, governments are applying stricter measures to contain greenhouse gases. OEMs are going to face significant cost pressure to increase the transition pace to non-pollutant energy sources and greater efficiency – in a market where prices have been stable in real-terms in last years.

In the US, for instance, 2016 approved standards will add \$1,000 to the vehicle cost but will increase fuel economy by 20%. The longer-term 2025 standards should result in another 40% gain in fuel economy, with an additional upfront cost of \$1,500–2,000 per vehicle (source: ConsumerReports.org)

Much earlier than expected, China adopted legislation similar to Euro VI or US 2026 regarding emission standards for big cities, while legislation equivalent to Euro V remains for more rural areas. The growing concerns over pollution in the country are pushing for further stricter legislation and the Chinese government is now studying a complete ban on diesel vehicles, as UK and France already announced for 2040. Furthermore, the government is pushing to have 11% of all car sales from electric vehicles by 2020, by exempting this vehicles from acquisition and excise taxes. In 2017 alone, it is expected the duplication of the current 150 000 charging facilities across the country. China is expected to be the toughest regulatory regime in the world in the next 5 years. For now, Mercedes seems to be in good way of competing there given its range of 100% electric cars (electric smart), plug-in hybrids and more upcoming modles of fully-electric vehicles.

In Europe, Euro VI demands OEMs to have a fleet fuel consumption average of less then 4l/100km of fuel consumption and less than 92 g/km of CO₂ until 2020 in EU. The current level of Mercedes fleet is in 5l and 123g/km, which points for the need of further investment in the field.

Other developed countries are pushing the shift to green energy even further, such as Norway that established the goal to completely forbid the sale of diesel automobiles by 2025.

Many automakers are facing lawsuits due to software mechanisms that manipulated the reported emissions, which resulted in billions in fines. In Daimler, an analysis ordered by the supervisory Board showed no evidence of the existence of such devices. Nonetheless, the public notarized investigation is still going on.

3.1.5 Increasing competition: pressure on R&D expenditures

OEMs will have to compete with new competitors to catch the aftersales mobility spend if they aim to offset the effect of decreasing margins and slower sales growth. New entrants such as Uber, Cabify and Tesla are accelerating the pace of technology innovation and tech giants as Google and Apple are also potential new entrants in the market, certainly in software and maybe in hardware as well. Software competence is increasingly becoming one of the most important differentiating factors in the industry – the program code of the modern car is more complex than a plane flight control system, being composed by approximately 100 million lines of code (a Boeing 767 uses 6 million lines of code) and able to process up to 25GB per hour (Habeck et al., 2014). Software is being applied to a wide range of features: mobility services, advanced safety, location-based services, in-vehicle content, and remote analytics. In this field, tech giants have a competitive advantage over the traditional players in the industry.

Besides software, due to increasing regulation and political pressure to ban diesel vehicles, OEMs are devoting further resources to develop electric and fuel-cell vehicles (those running on hydrogen).

This competitive pressure is accelerating cars life-cycle by increasing both mechanic engineering and software innovation. Consequently, OEMs will have to reinforce their R&D expenditures and be prepared to manage a shorter life-cycle of their products (as short as a few months for software).

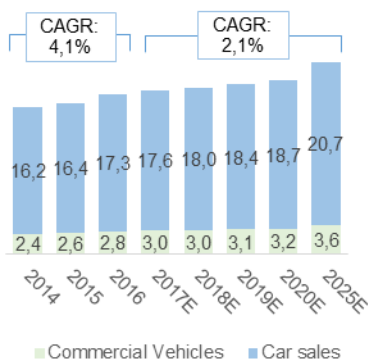
3.2. Macroeconomic outlook and sales evolution

The world GDP grew faster in 2017 than in 2016, predictably at a rate of 2,7% and should remain strong until the end of the decade, despite a slight slowdown in 2018 and 2019. Around the developed world unemployment is falling, inflation is rising and therefore we have seen three interest rate rises by the Fed in the first 7 months of the year. The ghosts of falling commodity prices, restrictive fiscal policies and deflation seem to be far away.

3.2.1 Europe

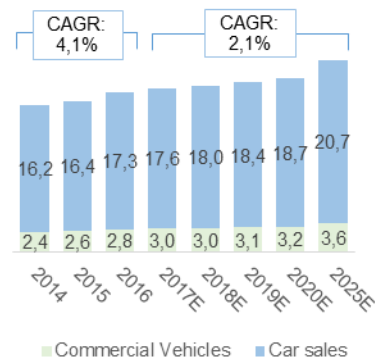
Despite last year fears of political disintegration in the EU after the shocking win of Brexit in the British referendum, Europe political cycle showed resilience to populist and isolationist movements. In France, Austria, Netherlands and UK, the

Historical and forecasted sales
Units: millions
Region: Europe



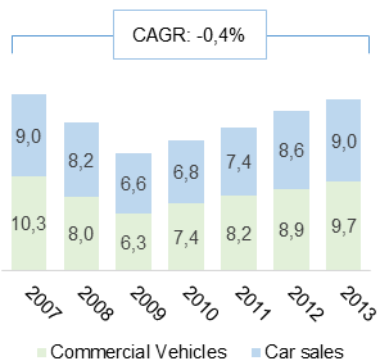
Graph 5

Historical and forecasted sales
Units: millions
Region: Europe



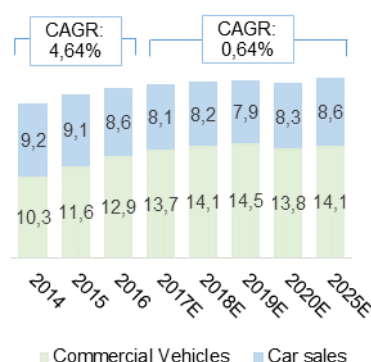
Graph 6

Historical and forecasted sales
Units: millions
Country: USA



Graph 7

Historical and forecasted sales
Units: millions
Country: USA



Graph 8

nationalist movements were defeated, bringing with it more confidence in the union stability. However, risks persist as this parties have now more parliament seats and some separatist movements such as in Cataluña have gained some ground. Greece lack of recovery still arises many doubts over the country permanence in the Eurozone. Real GDP growth in the region will predictably expand at a rate of 1,9% CAGR until 2020. After years of supportive monetary policy, deflation fears seem to be finally over with expected inflation near 1,6% this year and above 1,5% until 2020. The ECB €60bn asset purchase program is going to end this year and tapering should begin in 2018. Nevertheless, the central bank is unlikely to raise interest rates in the upcoming years.

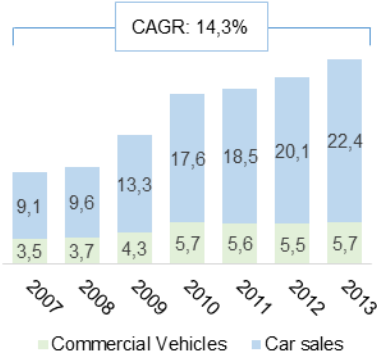
Given that the next election cycle in major European economies, such as Germany, Spain, France, Netherlands, Italy and Austria is more than three years ahead, the region will be more safeguarded to political instability. With clear signs of economic recovery and less political uncertainty, consumer confidence in the Euro area rose once more in August to 111.9 points – the highest in ten years. Nevertheless, growth in real wages is likely to remain sluggish next year, growing in average 0,6% per year until 2020. Across the euro area, the demand for consumer credit increased once more in the second quarter +11% (after a 15% rise in the first quarter).

3.2.2 USA

The American economy refrained in the first quarter of the year growing 1,4% (on an annual basis) due to a slowdown in consumer spending. However, growth expectations are still positive and a 2% GDP growth is expected in 2017. In 2018 GDP growth should be in line with 2017, while a technical recession is expected in 2019 triggered by the expected slowdown in Chinese GDP growth in 2018. That together with increased borrowing costs due to FED tightening cycle will likely have a negative impact on equity markets and should take a toll on consumption and investment. On the international level, Trump’s administration is likely to continue to pursue isolationist policies, weakening ties with China and pushing for the renegotiation of NAFTA. Meanwhile tension with North Korea continues to escalate and rising uncertainty worldwide. This political position may harm business confidence and investment.

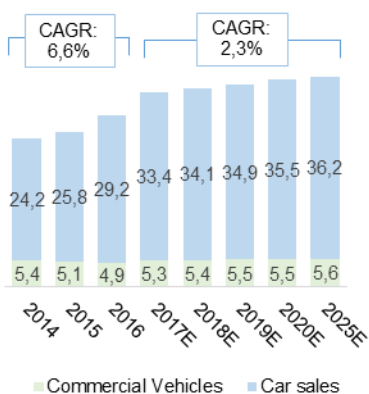
For the auto market this means that demand that spurred during six consecutive years and peaked at 17,9 million units in 2016 will refrain. In the first six months of 2017 both trucks and car sales have fallen.

Historical and forecasted sales
Units: millions
Region: Asia



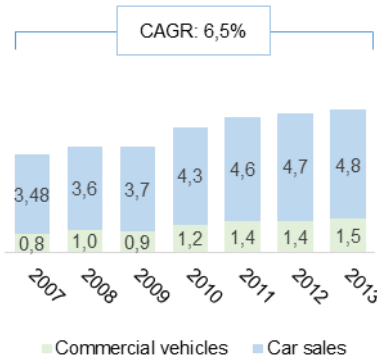
Graph 9

Historical and forecasted sales
Units: millions
Region: Asia



Graph 10

Historical and forecasted sales
Units: millions
Region: Latin America



Graph 11

3.2.3 Asia

In Asia the most buoyant market is China – the world’s largest auto market. Since the financial crisis, the country has been too reliant on credit to foster rapid growth, which triggered asset bubbles mainly in real estate and stock prices. These inefficiencies have been supported by the government state enterprises, prohibitions in share sales and over stimulus that created overcapacity. Meanwhile the country’s debt to GDP quadrupled since 2007 to an alarming 250% of GDP. Although not the biggest ratio in the world, a significant part is linked to state owned enterprises and backed by state owned banks, which poses serious systemic risks. The likely shift in policy and reform will cause a slower growth pace in the upcoming years, with 5,3% GDP growth on average until 2020. Nevertheless, the slowdown is expected to come from less investment and not from slower consumption growth. Thus, car the ownership rate will continue to increase, reaching 150 cars per 1000 people by 2020 – still significantly lower than 664 to 1000 people in Europe.

Despite government tax incentives to buy smaller, most of the growth still comes from the SUVs segment, that grew 45% in 2016 already on the back of a 52,4% increase in 2015.

Given government’s commitment to cut CO2 by 60% until 2030, electric vehicles are going to be greatly incentivized, despite announced government cuts of almost 60% in the subsidy of Rmb60.000 per each pure electric vehicle sold between 2016-2020. China is already the biggest market in the world for electric vehicles. Nevertheless, other limiting measures are on the horizon to decrease pollution, such as turning the auctioning access to plates stricter which would disincentive car purchases.

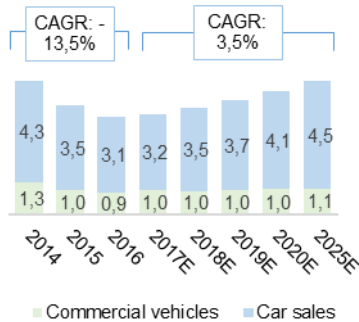
Chinese brands are progressively conquering more market share, achieving 48,2% last February. Among European premium brands, Audi remains the market leader (with 2,21% market share), with Mercedes and BMW lagging among the top 25 brands in China with 2% and 2,12% respectively. However, Daimler is catching up and grew faster in the first three quarters of the year (+29%) than BMW (+14,7%) and Audi (+3,6%).

3.2.4 Latin America

The region is on the path to stabilisation, as commodities prices started to recover and capital inflows into the region continue in a favourable trend given

Historical and forecasted sales

Units: millions
Region: Latin America



Graph 12

Year	EPS	Dividend	Payout ratio
2016	8,2	3,3	40%
2017 E	7,4	3,1	41%
2018 FY	7,4	2,6	35%
2019 FY	7,3	2,8	39%
2020 FY	8,2	2,4	29%
2021 FY	8,2	2,6	32%
2022 FY	8,5	2,5	30%
2023 FY	8,8	2,5	28%
2024 FY	9,2	4,5	49%
2025 FY	9,5	5,8	62%

Table 2

historically low yields in the developed world. Nonetheless, the region continues to be very exposed to commodities demand, which is concerning regarding China's upcoming slowdown. If central banks in developed markets continue to tighten monetary policy, then capital outflows could deteriorate financing capacity and consequently growth. GDP growth outlook will remain disappointing (according to emerging economies standards) with 1,2% GDP growth projected for 2017 with an average 2,17% CAGR expected afterwards and until 2020. The weak expectation for the next year is mainly driven by Brazil's weak outlook of 0,2% growth, caused by the corruption scandal of Lava Jato that dampens confidence, and Mexico political division with US regarding the NASA deal. The region continues to show weak productivity and commodity dependence that should not be solved in the medium term, given the region institutional deficiencies and political fragmentation. Consequently, Latin America will continue to run a budgetary deficit that will increase debt to above 60% of GDP at the end of the decade.

4. Comparative performance

4.1 Daimler Return vs the market

YoY return	2008	2009	2010	2011	2012
Daimler	-47%	73%	52%	-34%	3%
BMW	-40%	73%	92%	-6%	15%
Volkswagen	66%	-69%	71%	-5%	35%
Volvo	-54%	99%	115%	-32%	8%
Peugeot SA	-74%	78%	20%	-59%	-56%
Ford	-63%	379%	61%	-29%	5%
Toyota	-37%	17%	8%	-14%	27%
General Motors	n.a	n.a	n.a	-43%	27%
Fiat-Chrysler	n.a	n.a	n.a	n.a	n.a
Stoxx 600	-38%	33%	12%	-13%	10%
SXAP Index	-34%	31%	54%	-25%	12%

Table 3

YoY return	2013	2014	2015	2016	2017
Daimler	55%	15%	0%	15%	6%
BMW	19%	15%	-3%	20%	7%
Volkswagen	18%	2%	-26%	13%	16%
Volvo	-10%	-6%	-15%	38%	35%
Peugeot SA	64%	8%	26%	13%	1%
Ford	20%	18%	3%	8%	-6%
Toyota	29%	25%	2%	5%	2%
General Motors	30%	-7%	23%	8%	7%
Fiat-Chrysler	n.a	n.a	10%	34%	46%
Stoxx 600	14%	6%	0%	6%	11%
SXAP Index	33%	5%	-2%	15%	12%

Table 4

Since the wildly variations during the subprime and sovereign debt crisis, Daimler's stock returns have been on the path of convergence with the market. However, the company underperformed both Stoxx 600 and Stoxx 600 Automobiles and its German rivals in 2017, despite sales impetus (+8%) during the first three quarters of the year. That's a direct result of the uncertainty surrounding Daimler and the potential costs of litigation that the company may face in a near future.

Historically, Daimler has been delivering a higher dividend yield than the market and the automotive sector in general, and particularly than its most direct premium OEMs competitors. Nevertheless, dividend yield seeking investors should keep a bearish outlook on the stock yield performance, as the company should be more liquidity constrained in the near future due to the investments necessary to embrace the technological transformation that sector is going by.

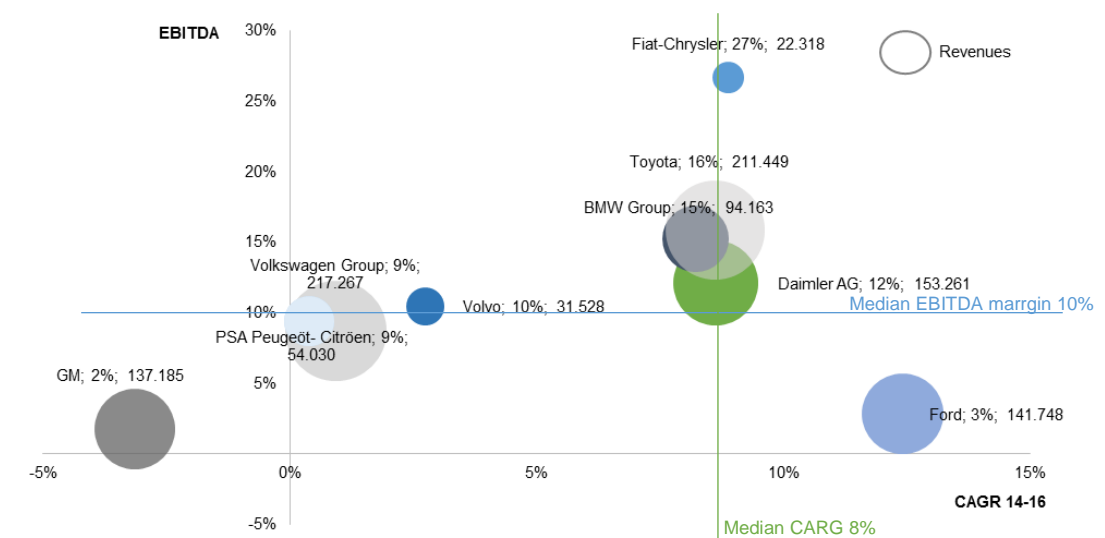
Thus, during the forecast period, because of decreasing margins, we expected earnings per share to decrease in upcoming year, despite increasing sales, and to recover in 2020 and beyond as the company capitalizes the new revenue streams. Furthermore, adding the significant increase in investment, it's expected that the pay-out ratio will decrease progressively until 2023, and then to increase up to historical levels as the company starts to phase-out the investment

cycle. As a result, it's expected that dividends per share remain under last year value until 2023, and then to increase to €5,8 by 2025.

4.2 Profitability

Over the last two years Daimler's sales have grown at a CAGR of 8,6%, which led the company into the world top spot for premium vehicles manufacturers. However, the company EBITDA margin is inferior to its direct rival BMW and Toyota and Fiat Chrysler.

Fundamental performance comparison



Graph 13

Daimler's return on equity has been historical higher than the market median, and particularly above the returns offered by its German and Swedish rivals. Regarding ROIC, the company performance has been below the median since 2012. Daimler has been creating less value on each euro than its competitors. Nevertheless, the industrial division has been consistently generating a ROIC above 8,5% (2016 8,5%; 2015 9,4%; 2014; 8,5%), giving shareholders excess returns.

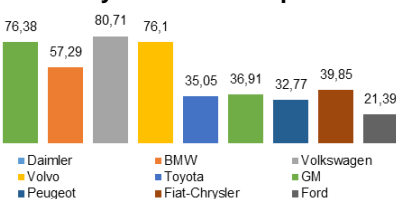
4.3 Inventory turnover

In 2016, Daimler's inventory turnover days were among the highest in the industry. The premium automakers tend to have a slower inventory turnover, but its significantly higher than its main rival BMW. This means that Daimler inventory management is less efficient, negatively affecting operating margins and increasing working capital needs.

Consolidated profitability					
	2012	2013	2014	2015	2016
Daimler					
ROA	4,6%	5,61%	2,21%	6,78%	2,30%
ROE	16,5%	22,2%	16,8%	19,5%	16,1%
ROIC	8,8%	4,71%	4,14%	4,48%	3,97%
BMW					
ROA	4,0%	3,9%	4,0%	3,9%	3,8%
ROE	17,7%	16,1%	16,0%	16,0%	15,3%
ROIC	8,5%	7,8%	8,3%	7,8%	6,9%
Volkswagen					
ROA	7,7%	2,9%	3,3%	-0,4%	1,4%
ROE	32,1%	11,1%	12,7%	-1,9%	6,2%
ROIC	6,5%	5,6%	5,8%	-1,8%	3,0%
Volvo					
ROA	3,2%	1,0%	0,6%	4,0%	3,4%
ROE	13,9%	3,6%	2,8%	18,6%	14,6%
ROIC	9,1%	4,7%	2,7%	11,1%	9,4%
Toyota					
ROA	2,5%	5,1%	4,6%	4,9%	3,8%
ROE	7,2%	14,4%	13,3%	13,9%	10,7%
ROIC	4,3%	7,9%	7,1%	7,4%	5,2%
General Motors					
ROA	1,7%	3,0%	6,8%	5,2%	4,5%
ROE	7,6%	12,1%	34,9%	25,7%	22,5%
ROIC	0,5%	4,9%	9,2%	8,4%	11,9%
Peugeot SA					
ROA	-7,5%	-3,7%	-1,2%	1,6%	3,7%
ROE	-43,0%	-28,6%	-8,8%	9,1%	14,9%
ROIC	-20,6%	-7,5%	0,6%	9,8%	12,6%
Fiat-Chrysler					
ROA	-	-	-	0,3%	1,7%
ROE	-	-	-	2,2%	10,0%
ROIC	-	-	-	6,1%	12,6%
Ford					
ROA	3,1%	3,6%	1,5%	3,4%	2,0%
ROE	36,6%	34,2%	12,5%	27,6%	15,9%
ROIC	6,0%	4,6%	2,6%	5,4%	2,4%
Median					
ROA	3,1%	3,3%	2,7%	3,9%	3,4%
ROE	15,2%	13,3%	13,0%	16,0%	14,9%
ROIC	6,2%	4,8%	5,0%	7,4%	6,9%

Table 5

Inventory Turnover comparison



Graph 14

5. Valuation

5.1 Historical market valuation

Considering the P/E multiple in the last three years Daimler has been undervalued in relation to the Automakers and Replacement Parts Industry, represented in the graph 14 by the SXAP index. However, most of the selected peers are undervalued in relation to the automotive index, indicating that investors are not confident in traditional automotive producers. Furthermore, investors seem to be divesting in the industry, as the P/E average multiple in the STOXX 600 stood at 17,3x in 2017, while the SXAP index stood at 9,6x. Reasons may vary, such as high uncertainty regarding the future of tradition OEMs given the entrance of market disruptors (such as Tesla, Uber or even Google), bearish view on the future consumption of durable goods in developed economies (given stagnant wages) or the legal scandals that have been affecting the industry worldwide. The Price-to-book multiple reinforces this perspective, as the median of the selected peers in 2017 stood at 1,3, while the STOXX auto index stood at 1,4 and the STOXX 600 at 1,8x.

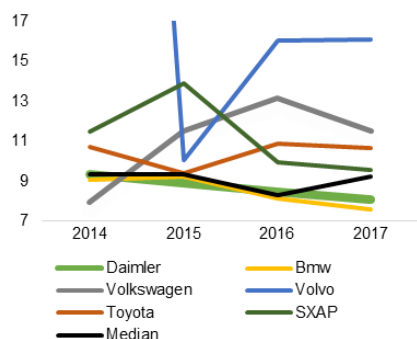
5.2 Business main drivers

5.2.1 Sales

It is forecasted a strong sales momentum in upcoming years as Mercedes further diversifies its portfolio with completely new models and plans to have electric versions of all its vehicles in the future (see tables 6 and 7).

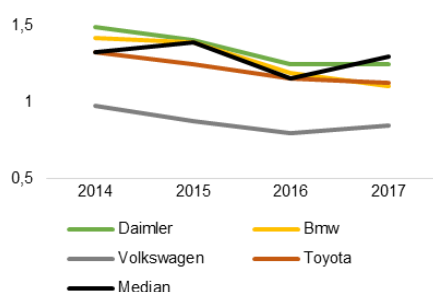
China is the biggest individual market for Mercedes, and it will be the main driver of sales growth in upcoming years. Daimler is reinforcing its localization strategy in China, planning to invest €609 million in an electric car battery factory together with BYD. Localizing production has been a key factor on Audi early lead on the market. By reinforcing localization Daimler will be more price competitive and more able to avoid import taxes that can be as high as 25%. Nowadays, Daimler produces 70% of the vehicles it sells in the country. This year the company

P/E Multiple



Graph 15

Price-to-book Multiple



Graph 16

Sales (millions €)	2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Cars	89.284	95.211	97.801	99.957	103.686	107.742
Units ('000)	2.198	2.228	2.292	2.341	2.420	2.505
Trucks	33.187	37.179	39.638	41.141	44.106	46.015
Units ('000)	415	480	508	527	560	581
Vans	12.835	13.384	13.954	14.463	15.220	15.875
Units ('000)	359	384	401	415	437	455
Buses	4.176	4.373	4.541	4.749	4.955	5.293
Units ('000)	26	26	26	27	28	30
Financial unit	20.660	4.298	4.463	4.667	4.870	5.202
Nº contracts ('000)	4.318	4.282	4.415	4.518	4.685	4.843

Table 6

Sales (millions €)	FY 2022	FY 2023	FY 2024	FY 2025	CAGR 17-25
Cars	111.973	116.708	121.495	123.801	3,34%
Units ('000)	2.586	2.672	2.764	2.817	2,97%
Trucks	48.442	51.975	55.068	56.574	5,39%
Units ('000)	606	641	671	690	4,64%
Vans	16.350	16.797	17.252	17.611	3,49%
Units ('000)	469	482	495	505	3,48%
Buses	5.615	5.946	6.296	6.443	4,96%
Units ('000)	31	32	33	34	3,18%
Financial unit	5.519	5.844	6.188	6.332	4,96%
Nº contracts (thousands)	4.995	5.161	5.331	5.433	3,02%

Table 6

Industrial unit		E	FY	FY	FY	FY
Op. Profitability	2016	2017	2018	2019	2020	2021
Cars						
Gross Margin %	22,6%	21,2%	20,9%	20,7%	20,4%	20,2%
EBIT %	8,5%	6,9%	6,9%	6,4%	6,3%	6,1%
Trucks						
Gross Margin %	22,5%	22,5%	22,3%	22,0%	21,8%	21,5%
EBIT %	7,7%	6,0%	5,5%	5,4%	5,1%	5,0%
Vans						
Gross Margin %	20,9%	20,3%	20,2%	20,0%	19,9%	19,7%
EBIT %	9,2%	8,1%	7,6%	7,5%	7,0%	6,5%
Buses						
Gross Margin %	20,8%	20,7%	20,5%	20,3%	20,2%	20,0%
EBIT %	8,5%	6,9%	6,9%	6,4%	6,3%	6,1%

Table 8

Industrial unit		FY	FY	FY	FY
Op. Profitability		2022	2023	2024	2025
Cars					
Gross Margin %		20,2%	20,2%	20,2%	20,2%
EBIT %		6,1%	6,2%	6,2%	6,3%
Trucks					
Gross Margin %		21,5%	21,5%	21,5%	21,5%
EBIT %		5,0%	5,1%	5,2%	5,3%
Vans					
Gross Margin %		19,7%	19,7%	19,7%	19,7%
EBIT %		6,2%	5,9%	5,9%	5,9%
Buses					
Gross Margin %		20,0%	20,0%	20,0%	20,0%
EBIT %		6,1%	6,2%	6,2%	6,3%

Table 9

R&D (as % of sales)	FY	FY	FY	FY	FY
	2022	2022	2023	2024	2025
Cars	7,1%	7,1%	7,1%	7,1%	7,1%
Trucks	5,3%	5,3%	5,3%	5,3%	5,3%
Vans	5,4%	5,4%	6,0%	6,0%	6,0%
Buses	6,0%	6,0%	6,0%	6,0%	6,0%

Table 10 – R&D forecast

R&D (as % of sales)	E	FY	FY	FY	FY
	2016	2017	2018	2019	2020
Cars	6,4%	6,7%	7,0%	7,3%	7,1%
Trucks	3,8%	5,3%	5,3%	5,3%	5,3%
Vans	3,4%	3,5%	3,5%	3,5%	4,1%
Buses	4,8%	5,0%	5,1%	5,3%	6,0%

Table 11 - R&D forecast

opened more 20 outlets in China, increasing the total number to 549. Daimler Market share is expected to increase to 2,4% by 2025.

5.2.2 Gross Margin

Automakers in general, and especially premium automakers, are going to see their gross margins decrease substantially due to increase competition and environmental regulation. Daimler’s industrial business gross margin stood at 22% in 2016 and is expected to decrease to 20 until 2025.

Today’s budget vehicle brings more equipment at the standard package than a premium vehicle brought ten years ago (Bluetooth, navigation systems, sensors, advance assistance features, etc.). Thus, consumers expect increasingly more features in premium brands’ standard packages, without having to pay extra for it. As a result, premium automakers are going to feel increasing difficulties in differentiating themselves, having the risk of losing significant market share if the price to the final consumer increases significantly. Therefore, they are more likely to avoid passing these higher costs to the end of the value chain. Furthermore, by further diversifying their product portfolio, Daimler will have increasing complexity in their production scheme, that likely increases production costs despite digitization measures being made under the Vortex Plan to turn factories more efficient.

5.2.3 R&D

Because of the trends mentioned above, R&D expenses are going to increase substantially during the forecasted period, increasing from 4% to 5% relative to sales at the industrial unit. Details of the forecast can be seen in Table 10 and 11.

5.2.4 New revenue streams

Although there is some uncertainty regarding to which degree OEMs can seize upcoming opportunities regarding connectivity and automation, it is undeniable that their operating model is shifting from being hardware providers to being mobility services providers. Consequently, new revenue streams regarding maintenance, connectivity (shared mobility services

and telematics) and hardware revenues for premium connectivity equipment should begin to materialize by 2020. If properly explored, these opportunities can partially offset the decreasing pressure in profitability caused by higher R&D and production costs.

Maintenance

The average vehicle age in Europe is 10,7 years, while in US is 11,6 years and in China is around 5 years. Considering an approximate useful life of 10 years, it is estimated that a vehicle maintenance cost after the initial two years of warranty amounts to 0,86% of its purchasing price. In the near future, increased complexity in vehicle electronics and automation systems will require specialized skills to repair them. Therefore, it will be more likely that consumers will opt for specialized mechanic workshops instead of the traditional generalist mechanics. Although some uncertainty remains regarding the business model that OEMs will adopt, it is probable that they will look to capitalize and expand their existent network of authorized workshops. OEMs will try to capture consumers' loyalty in the aftermarket by engaging more with them, providing a range of services across all the mobility experience. Connectivity plays a key role, being expected that in-built systems will soon have the capacity to run diagnostics to the vehicle, alerting the driver for possible problems and suggesting the visit to an authorized workshop.

Connectivity

The connected car opens a very valuable stream of value that not only automakers but also software and telecommunications companies are trying to seize. Whoever controls the access to the dashboard, controls the revenues that it can create. Initially each OEM tried to develop its own system, but the Open Automotive Alliance has been successful in pushing adoption rates to open software such as Android developed by Google - last year, Mercedes adopted it . In the shorter term the main revenue streams will likely come from application sales, mobility services and paid advertising (for instance a restaurant owner could pay for having its restaurant suggested by whoever passes by looking for one). In the study "Connected car, Automotive Value Chain unbound", McKinsey estimated that by 2020 OEMs will be able to capture €500 in connectivity revenues over the car life-cycle (Habeck et al., 2014). However, given the mentioned doubts surrounding OEMs ability to seize opportunities from this revenue pool, the amount considered in the present valuation was half of that amount, reflecting the expectation of a smaller market share. According to the

Industrial Capex (as % of sales)	2016	E 2017	FY 2018	FY 2019	FY 2020	FY 2021
Tangible assets						
Expansion capex	1,5%	1,5%	1,6%	1,6%	1,7%	1,7%
Reposition capex	4,5%	4,4%	4,6%	4,9%	5,1%	5,2%
Intangible assets						
Expansion capex	1,0%	0,8%	0,8%	0,8%	0,8%	0,8%
Reposition capex	2,2%	2,2%	2,4%	2,4%	2,5%	2,5%

Table 12

Industrial Capex (as % of sales)		FY 2022	FY 2023	FY 2024	FY 2025
Tangible assets					
Expansion capex		1,7%	1,7%	1,7%	0,8%
Reposition capex		5,3%	5,3%	5,4%	4,4%
Intangible assets					
Expansion capex		0,8%	0,8%	0,8%	0,8%
Reposition capex		2,5%	2,5%	2,4%	1,8%

Table 13

same study, revenues expected to grow at a 7,5% CAGR until 2025. Considering the projected sales, this could amount to €305M by 2025.

5.2.5 EBIT margin

Despite the counter effect of the new revenue streams, Daimler industrial business operational margins should suffer downward pressure, decreasing from the actual 8,4% to 6,9% in 2025. If the company is unable to capture de aftermarket potential, profitability could be 0,8 p.p. lower (6,1%) during the same period.

5.2.6 CAPEX

The transition to alternative energy sources, investment in connectivity and in autonomous driving will push the company capital requirements very significantly. For instance, only in battery production Daimler already invested €1 billion, having inaugurated the second fabric of lithium-ion batteries in May which represents a €500 million investment, and plans to invest another €609 million in China. The effort will likely strain the company cash flow for the next few years, until the new production scheme settles and the investment gradually returns to historical levels. The returns on these new investments should also be lower, given that the company is on an early stage of the learning curve regarding electric mobility.

5.3 Financial services

The financial services division at Daimler serves the purpose of supporting vehicle sales, therefore its revenues are tightly linked to unit sales. During the forecasting period it's not foreseeable any major change in the division profitability that should continue to show an EBIT margin around 8% and the contract number growth is forecasted at 3% CAGR until 2025. Revenues are directly linked to the number of sold vehicles, as historically there is a stable number of average contracts per units sold. However, as the most significant market growth is happening in non-developed countries, where disposable household income is obviously lower, we forecasted an increase in receivables from 774 to 828 days of sales, given

that in order to expand in these markets, Mercedes needs to offer better credit conditions to stimulate demand.

5.4 Reconciliation

Reconciliation comprises all eliminations related with intersegment sales and the cost of the central structure of Daimler, with items that can't be allocated to any segment. Not only is the related revenue eliminated, but also the cost of sales and the proportional of every other operational revenue (R&D, selling expenses, administrative expenses and other costs).

5.5 Debt Overview

Daimler's debt is mainly comprised by the issuance of bonds, having approximately € 77,5 billion bonds outstanding from ABS transactions. For these bonds Daimler pays an average interest rate of 1,64%. The second main source of financing is bank credit, which amounts to €29 billion with an average interest rate of 2,96%. The company estimated net financial debt for 2018 is € 131,1 billion, being that other € 130,2 billion in net financial debt is allocated to the financial services division and therefore discounted in the flow-to-equity valuation of the division. The net financial debt of the industrial unit estimated for 2018 are €902 million. Marketable debt securities of around € 1 billion are not considered to the calculation of net financial debt because they are not considered to be as liquid as cash. These instruments are used as part of liquidity management, traded in active markets and are rated with grade A.

	Current ratio	Debt/Assets
Daimler	1,21	52%
BMW	0,98	50%
Volkswagen	0,88	38%
Volvo	1,08	35%
Fiat Chrysler	0,80	23%
Ford US	1,20	60%
GM	0,89	38%
Peugeot SA	1,04	14%
Toyota	1,01	40%

Table 14

Although the company is the second most indebted among the selected peers in book value terms, in market values the debt-to-enterprise value is below the median of the selected peers. Regarding the overall weigh of financial expenses on profitability, Daimler has the second highest interest coverage at 40,8 – a very significant safety net for debtholders. Despite the significant investment requirements that are being forecasted, Daimler Debt-to-Assets should remain stable around current levels, which is accordant with the objective of keeping the credit rating at grade A, that improved in 2016 from the previous level of A-.

	Interest coverage	Debt/EV
Daimler	40,79	61%
BMW	34,17	62%
Volkswagen	2,14	70%
Volvo	14,81	36%
Fiat Chrysler	3,00	40%
Ford US	-6,53	72%
GM	10,13	68%
Peugeot SA	6,33	146%
Toyota	51,75	72%

Table 15

5.6 Contingent liabilities

Besides debt recorded in financial statements, Daimler discloses in the management report contingent liabilities that are off the books. Amounting to approximately € 2 billion, these contingent liabilities are related to guarantees conceded under buyback commitments in the value of € 1,7 billion and another € 298 million related to undisclosed liabilities. Discounting this value from the equity value, the price per share is reduced in -€1,01.

	Debt/EBITDA
Daimler	6,8x
BMW	6,6x
Volkswagen	4,5x
Volvo	7,5x
Fiat Chrysler	1,4x
Ford US	7,5x
GM	9,1x
Peugeot SA	-1,0x
Median	6,7x

Table 16

5.6 Equity investments

Daimler Equity Method Investments comprise strategic investments in companies such as Beijing Benz Automotive Co., BAIC Motor, Kamaz (the Russian truck maker) THBV (the high detail map maker bought from Nokia), BharatBenz and other joint ventures through which Daimler develops key technologies and penetrates new markets. These investments were valued using the multiples valuation for disclosed investments and for the others was considered the carrying amount value. The estimated value of the investments was €6.047 million or €5,7 per share.

5.8 WACC

Implicit in Daimler’s goal to keep a credit rating of A is the maintenance of the actual leverage ratios. For that reason, it was used a single WACC discount rate for every year explicitly forecasted cash flows. Table 19 exhibits the used inputs. Given that Daimler 66% of Daimler’s investors are European, the risk-free rate utilized was the euro area monthly yield curve, and the benchmark index was STOXX 600 index, that tracks the performance of the biggest 600 European companies. Daimler’s shares returns have a higher correlation with STOXX 600 (0,75) than with any other widely used market index. The index returns were averaged since January 2006, excepting 2007, 2008 and 2009 – the Subprime crisis years - resulting in 7,25% average market return. The same discount rate was used for each one of Daimler’s industrial business units, given that there isn’t sufficient information about the company’s operation in each geography. To determine the company cost of debt, it was considered the yield to maturity of an outstanding bond that has a maturity similar to the last forecasted year, having therefore chosen one that matures in 2026. The current yield to maturity is 1,26%. To compute the unlevered beta, it was calculated the average of the unlevered beta of the selected peers, that totalled 0,89. The cost of equity for the industrial unit was computed using the Capital Asset Pricing Model, by leveraging the industry unlevered beta and computing the market excess return using the 0,5% risk free rate and 7,25% as the market expected return. Daimler’s beta levered is 0,88 and consequently the expected return on equity was 6,46%. Given that Daimler’s industrial unit registered excess cash in 2016 (the year used as benchmark for the debt-to-equity ratio), the WACC is 6,5%.

BBAC peers	P/B
Beiqi Foton	1,11
SAIC Motor	1,28
Great Wall Motor	1,74
Faw Car	2,75
BYD	4,62
Dongfeng	0,77
Average	2,04

BAIC peers	
Geely Automobile	3,98
Brilliance Automotive	1,88
Great Wall Motor	1,74
Guangzhou Automobile	1,43
Dongfeng	0,77
SAIC	1,28
BYD	4,62
Zhengzhou Bus	5,12
Changan Automobile	2,25
Zhongsheng Group	2,94
Average	2,60

Table 17

Hurdle rate	Industrial	F.services
Risk-free	0,50%	0,50%
E[r]	7,25%	7,25%
Bu	89,0%	n.a.
BI	0,88	1,71
D/EV	-0,7%	n.a.
Rd	1,2%	n.a.
Re	6,46%	12,05%
WACC	6,50%	n.a.

Table 18 – Hurdle rate inputs

Company	Unlevered betas
Daimler AG	0,58
BMW Group	0,54
Volvo	0,74
Fiat-Chrysler	1,04
GM	0,35
Toyota	0,61
Peugeot	2,34
Average	0,89

Table 19

Industrial Performance	2016	E 2017	FY 2018	FY 2019	FY 2020
Industrial unit					
ROA	8,7%	7,3%	7,0%	6,5%	7,1%
ROE	15,6%	13,3%	12,3%	11,0%	11,7%
Operating ROIC	9,1%	7,8%	7,4%	6,8%	7,4%
Cars growth rate					
ROA	5,2%	6,8%	6,8%	6,1%	6,7%
ROE	15,5%	18,5%	18,7%	16,2%	17,4%
Operating ROIC	10,2%	8,0%	7,7%	7,0%	7,7%
Reinvestment rate	85,4%	46,6%	60,3%	63,6%	67,0%
Trucks growth rate					
ROA	8,5%	7,1%	6,5%	6,3%	6,6%
ROE	18,0%	13,2%	11,7%	11,0%	11,4%
Operating ROIC	9,7%	7,8%	7,2%	6,8%	7,4%
Reinvestment rate	133,9%	101,8%	62,6%	55,8%	72,3%
Vans growth rate					
ROA	11,4%	9,4%	8,7%	8,2%	8,4%
ROE	12,2%	12,2%	12,2%	12,2%	12,2%
Operating ROIC	14,3%	11,3%	9,9%	9,2%	9,5%
Reinvestment rate	97,1%	71,1%	73,3%	78,0%	79,0%
Buses growth rate					
ROA	4,9%	4,9%	4,9%	4,7%	4,3%
ROE	18,6%	29,9%	24,7%	23,0%	20,2%
Operating ROIC	4,9%	4,9%	4,7%	4,5%	4,1%
Reinvestment rate	158,2%	52,5%	23,4%	27,7%	26,2%

Table 20

Industrial Performance	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Industrial unit					
ROA	6,7%	6,5%	6,5%	6,4%	6,4%
ROE	10,7%	10,3%	10,0%	10,0%	9,9%
Operating ROIC	6,9%	6,7%	6,6%	6,6%	6,5%
Cars growth rate					1,98%
ROA	6,2%	6,1%	5,9%	5,8%	5,7%
ROE	15,8%	15,0%	14,4%	13,9%	13,5%
Operating ROIC	7,2%	7,1%	6,9%	6,8%	6,8%
Reinvestment rate	66,0%	67,9%	69,0%	33,3%	29,3%
Trucks growth rate					2,4%
ROA	6,3%	6,3%	6,4%	6,5%	6,6%
ROE	10,7%	10,5%	10,6%	10,8%	10,8%
Operating ROIC	6,9%	6,9%	7,1%	7,1%	7,1%
Reinvestment rate	58,9%	64,6%	73,0%	48,8%	34,1%
Vans growth rate					2,3%
ROA	7,6%	6,9%	6,5%	6,4%	6,4%
ROE	12,2%	12,2%	12,2%	12,2%	12,2%
Operating ROIC	8,5%	7,6%	6,9%	6,7%	6,6%
Reinvestment rate	81,5%	86,6%	67,6%	34,9%	34,3%
Buses growth rate					0,9%
ROA	4,2%	4,3%	4,3%	4,4%	4,4%
ROE	20,0%	20,2%	20,4%	21,0%	20,6%
Operating ROIC	4,0%	4,1%	4,1%	4,2%	4,2%
Reinvestment rate	43,3%	43,3%	42,7%	34,8%	22,1%

Table 21

5.9 Forecasted performance and growth rate

In the long-term is expected that Daimler doesn't generate excess returns for investors. Given the CAPEX increase in upcoming years and decreased operational profitability, we expect the return on invested capital of the industrial division to converge to the hurdle rate. After 2021 capex requirements should decrease progressively to historical levels and increase the company unlevered operating free cash flow to normalized level until 2025, from where future growth is computed using the reinvestment rate and ROIC of that period.

5.10 Litigation risks: Daimler blurred future due to Dieselgate and the truck cartel

Daimler was among the four companies sentenced in 19th July 2016 with a record fine of €2,93billion for violating EU antitrust rules, after Man being whistle-blower of the cartel that lasted over 14 years. The companies were found guilty of coordinating prices, timing the introduction of emission technologies and passing on to customers the costs of those. However, the case wasn't completely settled with the European Commission decision as the litigation management company Bentham Europe plans to fund a potential €100 billion damage claim on behalf of businesses from all over Europe that bought trucks during the cartel period. The claims are made on the allegation that 10 million trucks were sold in the EU during the cartel period and that each one of them was overpriced by about €10 500. Given that the cartel existence is already proved, it was attributed a significant probability that an additional high settlement cost can happen until 2020. Assuming that the prosecution has a 70% probability chance of success, and that Bentham could get a settlement for around half the initial claim, then it is considered a possible loss of €10 billion, including fines, legal costs and market share loss due to affected brand

image. Despite nothing having been found so far, Daimler involvement in Dieseldgate is not completely inconsiderable. In May, German prosecutors searched Daimler's offices as part of an investigation that seems to be getting deeper. On the other side of the Atlantic, American authorities have also requested the company to conduct an internal inquiry. There is now the suspicion that Germany's biggest automakers could have been colluded for 20 years not only to cheat emission tests standards, but also to decide which technology they would offer to their customers. The suspicion emerged by chance when investigators found documents showing the collusion during a raid on Volkswagen's offices to investigate suspicions of a steel cartel. Although denying any involvement, Daimler recalled 3 million Mercedes-Benz to lower their emissions, which clearly doesn't send a good sign for the market. For instance, Union Investment, which is Germany third-largest fund manager with around €300bn in assets, banned investments in Daimler in August over increased litigation risk. Given that Volkswagen already spent €23,7 billion directly for compensation and vehicle buybacks, of which €3,65billion were in fines due to the emission scandal in the US only, it was considered that on both side of the Atlantic altogether, Daimler faces the risk of losing at least €8billion, considering litigation costs, compensation and harm to brand image with a 60% chance until 2020.

5.11 Scenario analysis

With its business model going through major transformation, Daimler's valuation has imbedded a specific uncertainty regarding how the company will be able to seize upcoming opportunities. Therefore, it is of the maximum pertinence to consider several outcomes. Three scenarios were considered: a base case, with a 70% probability, a best-case scenario with 10% probability and a worst-case scenario with a 20% probability of occurrence. In each of the scenarios is considered the same level of annual sales, investment, operating and financing costs, being the difference between the assumptions regarding new revenue streams and the probability of losses related with litigation risks.

5.11.1 Base-case scenario:

Maintenance: it is estimated that Daimler's authorized repair shops can achieve a market share of 70%, with Daimler earning a fee of 5% over the 10% EBIT margin (15% for the truck segment) generated by annual revenue of maintenance 0,86% over the purchase price;

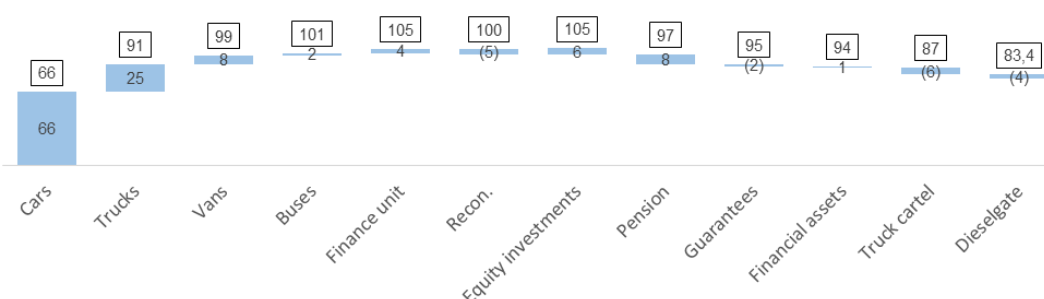
Connectivity: it was considered that by 2020, Daimler can reach by vehicle 53,06 € in revenue (location-based services mostly) and experience a 7,5% CAGR for these services until 2025 reaching 152,35 € in yearly revenue by

vehicle - the bus division was not considered (values based on “Connected Car, Automotive Value Chain unbound, Mckinsey” considering a smaller market share);

Hardware: extra equipment related with connectivity can generate more €1700 in upfront revenue by 2020, but this value should decrease at a -5% CAGR until 2025, diminishing to €1315 as competition will drive ever more equipment into standard packages – the gross margin on these is estimated to be the same as the margin of vehicle sales.

Litigation risks: it was considered the probability of additional truck cartel related losses to be 70% and losses from Dieselpgate to be 65%.

Price per share decomposition



Graph 17

5.11.2 Best-case scenario:

Maintenance: the main difference in relation to the base-case scenario is that it’s considered that OEMs can achieve a higher degree of control namely by implementing an effective strategy to achieve higher dominance over their cars operating systems therefore being able to provide a more differentiated service and capturing a 90% market share;

Connectivity: it was considered that the market penetration rate for these services would grow more quickly and consequently a 12% CAGR was considered;

Hardware: it wasn’t estimated a decreased of revenues due to higher competition;

Litigation risks: it was considered the probability of additional truck cartel related losses to be 65% and losses from Dieselpgate to be 60%.

5.11.3 Worst-case scenario:

Maintenance: in the worst-case scenario, the Open Automotive Alliance is successful in guaranteeing that every repair shop has access to detailed information on how to repair connected and automated cars, making it difficult for

officially authorized repair shops to differentiate themselves – in this case not reaching more than 40% market share;

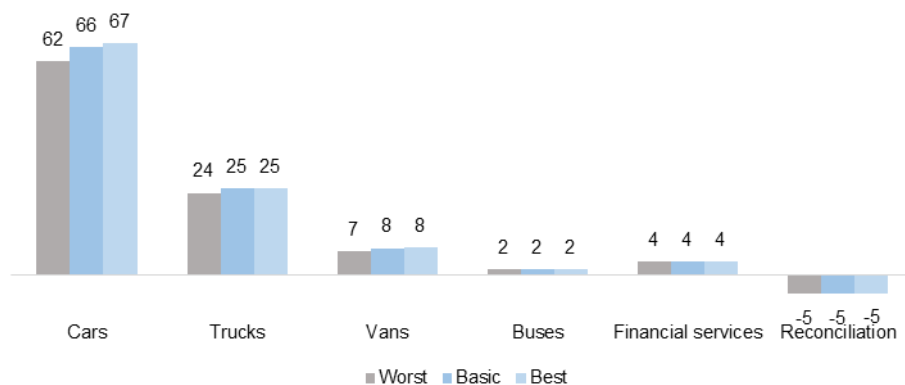
Connectivity: it was considered the same revenue and growth rate as in the base case scenario;

Hardware: it was considered the same rate of decreasing revenues as in the base case (-5% CAGR) but the upfront revenue in 2020 is considered to be 900€ instead of 1700€;

Litigation risks: it was considered the probability of additional truck cartel related losses to be 75% and losses from Dieselgate to be 70%.

In the base scenario Daimler share price stands at 83,4€, while in the best-case scenario and worst-case scenario the value sums up to 85,6€ and 76,3€, respectively. Considering the probabilities of each scenario, the target share price is 82,2€.

Price of each unit for different scenarios



Graph 18

6. Multiples Valuation

For multiples valuation the comparable companies chosen were BMW, Volvo, Ford, Toyota, Fiat-Chrysler, Peugeot and GM. Volkswagen, although used to establish Daimler’s competitive position in the industry, was excluded for valuation purposes because its valuation is affected by the one-off scandal of Dieselgate. Using the median of price-to-sales multiple and applying it to the €169.870 consolidated forecasted revenues for 2018, Daimler valuation share price valuation stands €84,6. If instead we use Price-to-book and applying it to the forecasted net assets for 2018, we get a valuation of €86,06 per share. Given the market value of 70,8 € in December 31st, using price-to-sales multiple, shares are being under-priced in about -16%.

	P/S	P/B
Daimler	0,5	1,2
BMW	0,6	1,1
Volvo	1,0	3,3
Ford	0,3	1,5
Toyota	0,7	1,1
GM	0,4	1,4
Median	0,5	1,3

Table 8 - Valuation multiples

7. Sensitivity analysis

Changing consumer habits and demographics may threaten business long-term growth. Given the demographic trends already mentioned, it is foreseen that the number of megacities should increase significantly, up to a point where 1 billion people will live in cities over 5 million inhabitants. Proportionally direct to the urbanization rate and city size is the harness of having a car and pollution. Together with government regulation to discourage car usage and ban internal combustion engines a decline in car ownership is likely, especially in developed markets where Daimler's sales depend from, such as Europe and the US, and in economically vibrant cities in emerging economies such as Beijing and Delhi. Acting with a opposite effect, population growth diminishes the impact in growth potential of declining ownership rates, with the world population expected to increase at a CAGR of 0,7% to 9,77 billion people in 2050. Nonetheless, to derive a rational regarding Daimler future long-term growth, regional differences must be considered. To derive a sensitivity analysis to the growth rate, three different scenarios were assumed with the following assumptions:

Europe

In Europe population is not only getting old, as it is decreasing significantly with population expected to be 715,2 million in 2050, below the 742 million expected value for 2025, a -0,14% CAGR. Considering that the GDP long-term growth rate stands at 1,5%, then that means that GDP per capita will continue to increase in the region, increasing population wealth. In that sense, given that the premium brands market share stands at 10,34%, it is forecasted that market share could increase to 15%. Considering that the average household has 2,3 people, applying the forecasted 80% ownership rate to the 66% urban population and 90% ownership to the remain 34% that live in rural areas, then it is estimated that the total car park could decrease -0,2% a year to 232,67 million vehicles in 2050. Given the mentioned increase in market share, premium OEMs could expect 0,85% growth for their unit sales.

United States of America

In USA cities are usually more reliant in automobile transportation than the European counterparts, nevertheless the same trends apply to the region. Adults between 21 and 34 buy just 27% of all the new vehicles sold in the region, a decrease from 1985 peak at 38%. In younger adults and teenagers the trend is even more significant, with less than half of potential drivers holding a driving license, down from almost two-thirds in 1998, which denotes the lack of interest

in driving. In general, traditional adulthood marks such as getting married or buying and house are becoming increasingly delayed among millennials, in part because of unemployment and underemployment. As a result of increasing instability and uncertainty, younger generations prefer more flexible solutions, and regarding mobility that means being more likely to choose car sharing solutions, buying monthly transportations passes or using applications like Uber. The last American Census Bureau revealed that in 22 states across the US car ownership declined slightly (between 0,1% and 1%) between 2010 and 2015, which is mostly relevant because it ended decades of straightforward increase.

Differing from Europe, the American population is expected to increase at a 0,5% CAGR between 2025 and 2050, reaching 434,65 million people by 2050.

Applying the same rational as for Europe, but considering that 20% of the 66% urban population will live in large cities (over 5 million habitants) where ownership rates are estimated to be 40%, it's estimated a car park of 134,97 million vehicles in 2050, up from 133 million in 2015. As the GDP growth rate at 1,79% outpaces population growth, *ceteris paribus*, the general population is likely to get richer and so the market share for premium vehicles is likely to increase. Considering that it could achieve the same rate as in Europe, then premium OEMs could see a 1,11% long-term growth potential in the American passenger vehicle market.

China

The awakening of the sleeping giant has brought a tremendous wealth growth to the Chinese population and along with it a great increase in car ownership in urbanized areas. Nevertheless, the yearly income of the average Chinese household is far less than the European and American counterparts, reaching only 5.845,96€. As population is concerned, China presents the same pattern as Europe, with population expected to decrease at a CAGR of -0,23% from 2025 to 2050, diminishing from 1,44 billion to 1,36 billion in 2050.

Despite the majority of the population being poorer than in developed countries, China middle class has been soaring with economic growth. While in 2000 only 4% of the urban population was considered to be middle class, in 2022 that percentage is expected to reach 76% which will represent 550 million in 2022. That alone would be enough to make China middle class the world third-most populous country in the world. The Chinese middle class is defined by households earning between €7.639,63 and €28.860,84 a year (Barton, Chen, & Jin, 2013).

For the purpose of estimating the potential market for premium vehicles, more than considering population and GDP growth, it's of special relevance to estimate the growth of the Chinese middle class. Given that the purpose is to estimate the

potential market for premium OEMs, only the Chinese upper middle class, those earning between €11.882,92 and €28.860,84 a year, is considered as relevant market. Nowadays, the upper middle class represents 54% of the urban households and it's foreseen that this value could rise up to 70% by 2050.

The urbanization rate is forecasted to be 57% in 2025 and only 54% of those are expected to have enough money to buy a premium car. Considering that the ownership rate will still be inferior to USA and Europe at 60% and that the average urban household has 2,3 people, then the forecasted car park is 115 million vehicles by 2025. Given the fact that the European premium brands hold together about 6% market share, then the forecasted number of European premium vehicles circulating in China will be around 5,78 million by 2025. Despite the fact that the Chinese population is expected to decrease, the urbanization rate is expected to increase to 66% and the upper middle class should represent 70% of the urban population by 2050. Thus, considering that in large cities the ownership rate will be around 60% and that in megacities cities will be around 40%, the total number of passenger vehicles in circulation should rise to 152,12 million. As a result of more wealth, it's foreseen a more robust market position that could top at a 7% market share – as wealthy Chinese people use western products as a symbol of social status. Therefore, European premium OEMs could expect to grow at a 2,49% CAGR in the country.

Weighing the growth in each region by its relative weight in total sales, the forecasted long-term growth for premium vehicles worldwide stock is 0,95% (using EU, USA and China as proxies for world growth). If Daimler's passenger car division would grow at the same rate in long-term then, applying the same scenario analysis mentioned above, Daimler's share price would be €76,5 per share.

If this trend of decreasing ownership turns out to be even stronger, for instance with ownership in large cities decreasing to 30%, 50% in urban areas and 70% in non-urban areas, premium vehicles long-term growth would be just 0,42% and consequently Daimler share price, *ceteris paribus*, would be even lower at €68,7 per share. On the other hand, if the ownership remains exactly the same as it is today, then premium vehicles long-term growth would be 1,98% and Daimler's share price would be €84,3.

Sensitivity analysis to the discount rate

Since 2015, the FED as already increased four times the target Fed funds rate, and it intends to continue doing so, as the American economy continues to show evidence of consistent growth (+3,2% in the third quarter of 2017), the unemployment rate reached the record low of 17 years and the inflation rate

RE	WACC					
	5,3%	5,7%	6,1%	6,5%	6,7%	6,9%
10,9%	124,6	108,0	94,7	83,9	79,2	74,9
11,3%	124,4	107,8	94,5	83,7	79,0	74,7
11,7%	124,3	107,6	94,4	83,5	78,8	74,5
12,1%	124,1	107,5	94,2	83,4	78,7	74,3
12,5%	123,9	107,3	94,0	83,2	78,5	74,2
12,9%	123,8	107,2	93,9	83,1	78,4	74,1
13,3%	123,7	107,0	93,8	82,9	78,2	73,9

Table 23 – Sensitivity analysis

stood at 2,2% in November. In Europe, the ECB will start tapering its stimulus at the end of this year. Consequently, it is likely that interest rates increase, in which case, *ceteris paribus*, for the same level of risk, investors will demand more return. Even if that's the case, Daimler continues to show a significant upside potential, although inferior. Changes in the discount rate of the financial division, *ceteris paribus*, don't have a very significant impact on the company valuation, given the relative weight of the division for the market capitalization.

8. Conclusions

Daimler undervaluation on the market may be related with uncertainty regarding the capacity OEM's will have to capture value coming from new revenue streams. In the view presented in this report, €16,4 of share value is coming from those revenue streams, about which there isn't any public information provided by OEMs. Thus, investors may be reluctant to capitalize the upside potential until there is more visibility about how successful the business model transformation will be.

This uncertainty, together with the predictable end of the internal combustion engine, has withdrawn investors from the automotive sector, apart from Tesla whose market capitalization recently surpassed BMW's despite not generating any profit and not having a comparable level of sales. The market seems to be underestimating the power of installed OEMs to face transformations brought by industry disruptors like Tesla and Uber. However, the first possess much vaster human resources, production capacity and market knowledge than the latter. Furthermore, Daimler is heavily investing in electrifying its portfolio, on AI investigation to push autonomous driving and on bringing the connected experience to the consumer. Thus, the company is very well positioned to tackle all the challenges arising from technology disruption.

Even considering a scenario where the long-term growth perspectives are not as positive as the one being incorporated in the valuation, Daimler would still show upside potential of +8%. Thus, in this perspective, Daimler is a solid value stock with a buy recommendation.

9. References

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Appendix

Financial Statements

Industrial unit P&L (in millions of euros)	2016	E 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenue	132.601	142.649	148.056	152.254	159.496	166.129	173.212	181.808	190.061	194.161
Unit Sales	2.998.386	3.118.564	3.226.712	3.310.336	3.445.390	3.570.533	3.691.647	3.826.650	3.963.170	4.045.055
Cost of sales	(103.600)	(112.457)	(117.079)	(120.773)	(126.908)	(132.594)	(138.247)	(145.104)	(151.689)	(154.961)
Gross Profit	29.001	30.192	30.977	31.481	32.588	33.534	34.966	36.704	38.372	39.200
Gross margin %	23%	21%	21%	21%	20%	20%	20%	20%	20%	20%
New revenue pools										
Maintenance					1.185	2.407	3.687	5.027	6.429	7.903
Gross Margin %					13%	13%	13%	13%	13%	13%
Daimler fee					5%	5%	5%	5%	5%	5%
Connectivity services					180	201	223	249	278	305
Gross Margin %					100%	100%	100%	100%	100%	100%
Hardware revenues - equipment					5.767	5.678	5.582	5.513	5.433	5.273
Gross margin %					21%	20%	20%	20%	20%	20%
Profit from new revenue pools	-	-	-	-	1.374	1.371	1.382	1.402	1.424	1.428
R&D	(5.257)	(6.530)	(6.959)	(7.354)	(7.690)	(8.066)	(8.482)	(8.973)	(9.389)	(9.594)
Selling expenses	(11.577)	(12.390)	(12.586)	(12.930)	(13.547)	(14.047)	(14.586)	(15.212)	(15.751)	(15.972)
General administrative expenses	(2.702)	(3.123)	(3.242)	(3.334)	(3.493)	(3.639)	(3.793)	(3.981)	(4.160)	(4.250)
Other operating income (net)	933	1.841	1.918	1.970	2.066	2.150	2.241	2.352	2.459	2.512
Operating EBIT	10.398	9.990	10.109	9.832	11.298	11.303	11.727	12.293	12.954	13.324
Equity investments	627	-	-	-	-	-	-	-	-	-
Other financial income/expense, net	(82)	-	-	-	-	-	-	-	-	-
EBIT	11.151	11.151	11.151	11.151	11.151	11.151	11.151	11.151	11.151	11.151
Interest Income	229	213	192	213	217	224	236	245	257	270
Interest expense	(540)	(664)	(771)	(855)	(938)	(1.039)	(1.131)	(1.231)	(1.339)	(1.389)
EBT	10.840	9.539	9.530	9.190	10.577	10.489	10.831	11.307	11.873	12.205
Income taxes	(3.235)	(2.845)	(2.842)	(2.741)	(3.155)	(3.128)	(3.230)	(3.372)	(3.541)	(3.640)
Net income	7.605	6.694	6.688	6.449	7.422	7.360	7.601	7.935	8.332	8.565
EBIT margin	7,8%	7,0%	6,8%	6,5%	7,1%	6,8%	6,8%	6,8%	6,8%	6,9%
EBIT margin without new revenue pools	7,8%	7,0%	6,8%	6,5%	6,2%	6,0%	6,0%	6,0%	6,1%	6,1%
EBT margin	8,2%	6,7%	6,4%	6,0%	6,6%	6,3%	6,3%	6,2%	6,2%	6,3%

Table 24

Financial services P&L (in millions of euros)	2016	E 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Revenue	20.660	21.157	21.813	22.326	23.150	23.931	24.680	25.502	26.343	26.847
thereof intersegment revenue	(1.302)	(1.358)	(1.400)	(1.433)	(1.486)	(1.536)	(1.584)	(1.637)	(1.691)	(1.723)
Net revenue	19.358	19.800	20.413	20.893	21.664	22.395	23.096	23.865	24.652	25.124
Cost of sales	(17.698)	(18.071)	(18.631)	(19.069)	(19.773)	(20.440)	(21.079)	(21.782)	(22.500)	(22.930)
Gross Margin	2.962	3.087	3.182	3.257	3.377	3.491	3.600	3.720	3.843	3.917
Gross Margin in %	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
New revenue pools	0	0	0	0	0	0	0	0	0	0
Profit from new revenue pools	0	0	0	0	0	0	0	0	0	0
Selling expenses	(649)	(650)	(670)	(686)	(712)	(736)	(759)	(784)	(810)	(825)
General administrative expenses	(717)	-767	-791	-810	-839	-868	-895	-925	-955	-973
R&D	0	0	0	0	0	0	0	0	0	0
Other operating income (net)	119	108	111	114	118	122	126	130	134	137
Operating EBIT	1.715	1.777	1.832	1.875	1.944	2.010	2.073	2.142	2.212	2.255
Share of profit/loss from investments a	(1)	-	-	-	-	-	-	-	-	-
Other financial income/expense, net	25	-	-	-	-	-	-	-	-	-
EBIT	1.739	1.777	1.832	1.875	1.944	2.010	2.073	2.142	2.212	2.255
Interest income	1	1	1	1	1	1	1	1	1	2
Interest expense	(6)	(7)	(8)	(8)	(8)	(8)	(9)	(9)	(9)	(9)
EBT	1.734	1.771	1.826	1.869	1.937	2.003	2.065	2.134	2.205	2.247
Income taxes	(555)	(528)	(544)	(557)	(578)	(597)	(616)	(637)	(658)	(670)
Net income	1.179	1.243	1.281	1.311	1.360	1.405	1.449	1.498	1.547	1.577
Ebit margin	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%

Table 25

Industrial unit balance sheet (in millions of euros)	2016	E 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Intangible assets	11.199	12.736	14.373	16.101	17.957	19.943	22.066	24.137	25.152	26.208
Property, plant and equipment	26.314	28.436	30.745	33.234	35.966	38.809	41.770	44.871	46.336	47.833
Equipment on operating leases	17.433	17.967	18.666	19.189	20.108	20.948	21.854	22.960	24.020	24.530
Equity-method investments	4.043	1.481	1.531	1.539	1.595	1.632	1.677	1.737	1.792	1.802
Receivables from financial services	(76)	(72)	(75)	(77)	(81)	(84)	(88)	(92)	(96)	(98)
Marketable debt securities	1	5	3	3	4	4	4	4	4	5
Other financial assets	(3.043)	(1.948)	(2.023)	(2.079)	(2.181)	(2.271)	(2.369)	(2.491)	(2.606)	(2.661)
Deferred tax assets	3.128	2.600	2.625	2.560	2.911	2.920	3.038	3.195	3.373	3.471
Other assets	(2.642)	(2.632)	(2.828)	(3.024)	(3.271)	(3.510)	(3.768)	(4.040)	(4.197)	(4.330)
Total Non-current assets	56.357	58.574	63.018	67.445	73.008	78.391	84.185	90.281	93.778	96.758
Inventories	24.426	25.687	26.629	27.345	28.586	29.742	30.977	32.463	33.899	34.607
Trade receivables	8.977	9.341	9.703	9.963	10.414	10.835	11.284	11.824	12.346	12.603
Receivables from financial services	(11)	(19)	(20)	(21)	(21)	(22)	(23)	(24)	(25)	(26)
Cash and cash equivalents	8.751	10.292	10.190	10.540	11.107	11.468	11.973	12.544	13.085	13.361
Marketable debt securities	9.497	8.594	9.382	9.554	9.893	10.379	10.779	11.295	11.804	12.047
Other financial assets	(8.002)	(8.386)	(8.717)	(8.951)	(9.356)	(9.733)	(10.137)	(10.622)	(11.091)	(11.322)
Other assets	1.151	2.147	2.239	2.311	2.437	2.541	2.654	2.798	2.933	3.001
Total current assets	44.789	47.657	49.405	50.740	53.060	55.208	57.507	60.278	62.951	64.271
Total assets	101.146	106.231	112.423	118.186	126.068	133.599	141.692	150.560	156.729	161.029
Total equity	48.685	50.292	54.579	58.511	63.687	68.581	73.869	79.494	83.354	86.300
Provisions for pensions and similar obligations	8.875	8.460	7.261	6.739	6.175	5.657	5.149	4.639	4.153	3.745
Provisions for income taxes	964	1.090	1.122	1.159	1.206	1.258	1.313	1.375	1.437	1.467
Provisions for other risks	6.461	7.140	7.285	7.493	7.834	8.165	8.512	8.924	9.325	9.523
Financing liabilities	19.029	20.798	22.734	24.277	26.232	28.106	30.091	32.270	33.537	34.539
Other financing liabilities	2.721	2.853	3.007	3.093	3.234	3.370	3.513	3.684	3.849	3.931
Deferred tax liabilities	(941)	(1.432)	(1.349)	(1.388)	(1.452)	(1.514)	(1.579)	(1.657)	(1.733)	(1.770)
Deferred income	4.605	3.499	3.729	3.820	3.951	4.115	4.270	4.430	4.598	4.682
Other liabilities	15	25	25	25	27	28	29	30	31	32
Total non-current liabilities	41.729	42.433	43.814	45.217	47.205	49.186	51.298	53.695	55.198	56.149
Trade Payables	10.853	11.817	12.475	12.831	13.415	13.982	14.575	15.282	15.968	16.307
Provisions for income taxes	604	715	736	752	791	823	858	901	941	961
Provisions for other risks	8.864	10.225	10.845	11.153	11.662	12.153	12.668	13.282	13.877	14.171
Financing Liabilities	(20.480)	(21.481)	(23.051)	(23.677)	(24.715)	(25.740)	(26.813)	(28.079)	(29.315)	(29.923)
Other financial liabilities	6.924	7.955	8.400	8.639	9.033	9.413	9.813	10.288	10.749	10.977
Deferred income	2.283	2.291	2.498	2.569	2.686	2.799	2.917	3.059	3.196	3.263
Other liabilities	1.684	1.983	2.125	2.191	2.303	2.402	2.508	2.638	2.761	2.823
Total current liabilities	10.732	13.506	14.030	14.458	15.176	15.833	16.525	17.371	18.178	18.580
Total liabilities	52.461	55.939	57.844	59.675	62.381	65.019	67.823	71.065	73.375	74.729
Total equity and liabilities	101.146	106.231	112.423	118.186	126.068	133.599	141.692	150.560	156.729	161.029

Table 26

Industrial unit Cash Flow (in millions of euros)	2016	E 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
EBIT	10.648	9.990	10.109	9.832	11.298	11.303	11.727	12.293	12.954	13.324
Notional Taxes on EBIT	(3.176)	(2.979)	(3.015)	(2.932)	(3.370)	(3.371)	(3.498)	(3.666)	(3.864)	(3.974)
Tax adjustments	(2)	-	-	-	-	-	-	-	-	-
Noplat	7.470	7.010	7.094	6.900	7.929	7.932	8.229	8.626	9.090	9.350
Depreciation and amortization	5.398	5.848	6.469	6.920	7.415	7.932	8.473	9.026	9.313	9.592
Gross Free Cash Flow	12.868	12.858	13.563	13.820	15.343	15.864	16.702	17.653	18.404	18.942
Net Capex	(5.924)	(6.317)	(6.853)	(7.410)	(8.066)	(8.607)	(9.172)	(9.780)	(8.364)	(8.620)
Change in Net working capital	(894)	(2.153)	(424)	(626)	(1.149)	(996)	(1.099)	(1.362)	(1.295)	(639)
Δ Net intangible assets	(2.878)	(3.190)	(3.561)	(3.727)	(3.937)	(4.155)	(4.385)	(4.418)	(3.429)	(3.524)
Other investments/divestures	(1.180)	1.079	426	265	(161)	235	115	55	(64)	26
Unlevered operating cash flow	1.992	2.277	3.151	2.322	2.030	2.340	2.162	2.148	5.251	6.185
Unrealized gains and losses	(2.537)	-	-	-	-	-	-	-	-	-
Δ Marketable debt securities (current)	(2.499)	903	(788)	(172)	(339)	(486)	(400)	(516)	(509)	(242)
Δ Marketable debt securities (non-current)	-	(4)	2	0	(1)	0	(0)	(0)	(0)	(0)
Δ Other financial assets (current)	567	384	331	234	405	377	403	485	469	231
Δ Other financial assets (non-current)	2.507	(1.095)	75	56	102	90	98	121	115	55
Unlevered free cash flow	31	2.465	2.771	2.440	2.197	2.322	2.263	2.238	5.326	6.229
EBIT on Equity Method investments	503	-	-	-	-	-	-	-	-	-
Notional Taxes on EBIT	(150)	-	-	-	-	-	-	-	-	-
NOPLAT	353	-	-	-	-	-	-	-	-	-
Δ Equity-method investments (net)	(445)	2.562	(50)	(8)	(56)	(37)	(45)	(60)	(55)	(10)
Free cash flow	(92)	2.488	(54)	(9)	10	33	27	16	(18)	31
Δ Pension plans	329	(415)	(1.199)	(522)	(564)	(517)	(509)	(510)	(486)	(408)
Unrealized gains and losses	(1.234)	-	-	-	-	-	-	-	-	-
Free cash flow	(905)	(415)	(1.199)	(522)	(564)	(517)	(509)	(510)	(486)	(408)
Financial expense	(311)	(451)	(579)	(642)	(721)	(815)	(896)	(985)	(1.081)	(1.120)
Tax shields	93	134	173	192	215	243	267	294	322	334
Δ Net Financial Debt	1.074	792	1.285	1.057	1.175	1.270	1.232	1.332	446	593
Cash flow from debt financing	856	475	879	607	669	699	604	641	(312)	(193)
Δ Equity	110	(5.087)	(2.400)	(2.517)	(2.247)	(2.467)	(2.313)	(2.309)	(4.472)	(5.618)
Total Financing Cash flows	966	(4.612)	(1.522)	(1.910)	(1.577)	(1.768)	(1.709)	(1.668)	(4.785)	(5.811)

Table 27

Financial services Balance sheet (in millions of euros)	2016	E 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Intangible assets	899	918	938	959	980	1.002	1.025	1.048	1.073	1.099
Property, plant and equipment	67	85	103	121	140	160	181	202	224	243
Equipment on operating leases	29.509	27.985	28.852	29.531	30.620	31.654	32.643	33.731	34.844	35.510
Equity-method investments	55	56	57	58	60	61	62	63	64	66
Receivables from financial services	42.957	44.874	46.997	48.183	51.068	53.107	55.127	57.591	60.006	60.875
Marketable debt securities	1.099	1.342	1.384	1.416	1.468	1.518	1.565	1.618	1.671	1.703
Other financial assets	5.942	5.940	6.124	6.269	6.500	6.719	6.929	7.160	7.396	7.538
Deferred tax assets	742	676	697	714	740	765	789	815	842	858
Other assets	3.309	3.463	3.602	3.691	3.874	4.018	4.159	4.324	4.489	4.564
Total Non-current assets	84.579	85.340	88.755	90.942	95.450	99.004	102.481	106.553	110.609	112.455
Inventories	958	992	1.022	1.046	1.085	1.122	1.157	1.195	1.235	1.258
Trade receivables	1.637	1.306	1.347	1.378	1.429	1.478	1.524	1.575	1.626	1.658
Receivables from financial services	37.637	41.826	43.414	44.113	46.337	47.757	49.131	50.870	52.530	52.815
Cash and cash equivalents	2.230	2.005	2.067	2.115	2.193	2.267	2.338	2.416	2.496	2.544
Marketable debt securities	151	160	165	168	175	181	186	192	199	203
Other financial assets	10.839	11.118	11.463	11.733	12.165	12.576	12.969	13.401	13.843	14.108
Other assets	3.811	4.007	4.152	4.227	4.424	4.564	4.698	4.862	5.021	5.067
Total current assets	57.263	61.413	63.629	64.780	67.809	69.943	72.003	74.511	76.950	77.652
Total assets	141.842	146.753	152.384	155.722	163.259	168.947	174.484	181.064	187.559	190.107
Total equity	10.448	13.491	14.374	15.185	16.251	17.306	18.372	19.541	20.756	21.693
Provisions for pensions and similar obligations	159	143	129	116	104	94	84	76	68	62
Provisions for income taxes	2	1	2	2	2	2	2	2	2	2
Provisions for other risks	171	158	163	167	173	179	184	190	197	200
Financing liabilities	51.369	51.814	53.684	54.655	57.210	59.011	60.749	62.865	64.923	65.515
Other financing liabilities	606	631	651	666	691	714	736	761	786	801
Deferred tax liabilities	4.408	883	910	932	966	999	1.030	1.064	1.099	1.120
Deferred income	954	883	910	932	966	999	1.030	1.064	1.099	1.120
Other liabilities	-	-	-	-	-	-	-	-	-	-
Total non-current liabilities	57.669	54.514	56.448	57.469	60.112	61.997	63.816	66.022	68.174	68.820
Trade Payables	714	570	587	601	623	644	665	687	709	723
Provisions for income taxes	147	115	118	121	126	130	134	138	143	146
Provisions for other risks	563	571	588	602	624	645	666	688	710	724
Financing Liabilities	67.768	73.446	76.096	77.472	81.094	83.647	86.111	89.110	92.026	92.866
Other financial liabilities	2.618	2.652	2.734	2.799	2.902	3.000	3.094	3.197	3.302	3.365
Deferred income	1.161	1.153	1.189	1.217	1.262	1.305	1.346	1.390	1.436	1.464
Other liabilities	754	242	249	255	265	274	282	292	301	307
Total current liabilities	73.725	78.748	81.563	83.068	86.896	89.645	92.296	95.501	98.628	99.594
Total liabilities	131.394	133.262	138.011	140.537	147.008	151.642	156.111	161.523	166.802	168.414
Total equity and liabilities	141.842	146.753	152.384	155.722	163.259	168.947	174.484	181.064	187.559	190.107

Table 28

Financial services cash flow (in millions of euros)	2016	E 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
EBIT	1.715	1.777	1.832	1.875	1.944	2.010	2.073	2.142	2.212	2.255
Notional Taxes on EBIT	(511)	(530)	(546)	(559)	(580)	(599)	(618)	(639)	(660)	(672)
Tax adjustments	(38)	-	-	-	-	-	-	-	-	-
Noplat	1.166	1.247	1.286	1.316	1.364	1.410	1.454	1.503	1.553	1.582
Depreciation and amortization	80	86	89	93	97	100	104	108	112	116
Gross Free Cash Flow	1.246	1.333	1.375	1.409	1.461	1.511	1.559	1.611	1.665	1.698
Net Capex	(25)	(26)	(29)	(33)	(37)	(41)	(46)	(50)	(55)	(56)
Change in Net working capital	(2.630)	(4.134)	(1.605)	(711)	(2.245)	(1.440)	(1.394)	(1.759)	(1.682)	(298)
Δ Net intangible assets	(739)	(98)	(98)	(99)	(100)	(101)	(102)	(103)	(103)	(106)
Other investments/divestures	(11.026)	(4.753)	(3.234)	(1.997)	(4.305)	(3.308)	(3.240)	(3.831)	(3.800)	(1.625)
Δ Marketable debt securities (current)	(24)	(9)	(5)	(4)	(6)	(6)	(6)	(6)	(6)	(4)
Δ Marketable debt securities (non-current)	48	(243)	(42)	(33)	(52)	(50)	(47)	(52)	(53)	(32)
Δ Other financial assets (current)	(858)	(279)	(345)	(270)	(433)	(411)	(393)	(432)	(442)	(265)
Δ Other financial assets (non-current)	(498)	2	(184)	(144)	(231)	(219)	(210)	(231)	(236)	(141)
Δ Net Financial Debt	15.086	6.427	4.585	2.400	6.259	4.432	4.277	5.197	5.059	1.482
Financial income net	1	(6)	(6)	(7)	(7)	(7)	(7)	(8)	(8)	(8)
Financial Expense	19	-	-	-	-	-	-	-	-	-
Tax shields	(6)	2	2	2	2	2	2	2	2	2
Unrealized gains and losses	-	-	-	-	-	-	-	-	-	-
Δ Pension plans	42	(16)	(14)	(13)	(12)	(10)	(9)	(8)	(8)	(7)
Unrealized gains and losses	-	-	-	-	-	-	-	-	-	-
EBIT on Equity Method investments	(1)	-	-	-	-	-	-	-	-	-
Notional Taxes on EBIT	0	-	-	-	-	-	-	-	-	-
NOPLAT	(1)	-	-	-	-	-	-	-	-	-
Δ Equity-method investments (net)	(32)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Free Cash flow to Equity	603	(1.801)	399	500	293	351	383	329	332	640
Δ Equity (in cash)	(603)	1.801	(399)	(500)	(293)	(351)	(383)	(329)	(332)	(640)

Table 29

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Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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