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Ferrari N.V.

HOLD

€163.15

Amounts in thousand €	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Revenues	3420	3766	4121	4440	4666	5169	5412	5691	6252	6595	6957
EBIT	827.00	917.00	1047.00	1174.00	1478.00	1599.00	1622.00	1685.00	1807.00	1883.00	1995.00
Margin	24.20%	24.30%	25.40%	26.40%	31.70%	30.90%	30.00%	29.60%	28.90%	28.50%	28.70%
Net Income	787.00	699.00	744.00	835.00	1056.00	1143.00	1158.00	1203.00	1291.00	1345.00	1425.00
Margin	23.00%	18.60%	18.10%	18.80%	22.60%	22.10%	21.40%	21.10%	20.70%	20.40%	20.50%
EPS	4.15	3.68	3.97	4.45	5.62	6.08	6.16	6.40	6.86	7.15	7.57
P/E	20.9x	40.2x	40.3x	36.7x	29x	26.8x	26.5x	25.5x	23.8x	22.8x	21.5x
EV/EBIT	22.1x	32.8x	31x	27.9x	21.4x	19.0x	17.3x	15.6x	13.5x	12.1x	10.2x
Div. Yield	0.82%	0.73%	0.78%	0.88%	1.11%	1.20%	1.21%	1.26%	1.35%	1.41%	1.49%
Net Debt	2704.00	3071.00	3187.00	3138.00	2664.00	2154.00	1081.00	339.00	-408.00	-1126.00	-2133.00

Source: Company data, Logos estimate

Ferrari N.V., a Prancing Horse taking over the exchange pole position

We initiate our coverage on Ferrari N.V. with a HOLD recommendation and a year-end target price of €163.2 implying a 2.1% upside on the 16th February 2019 closing price (€159.75). Rewarded in 2020 as the most influential brand in the world for the second consecutive time according to Brand Finance, this result further confirms the role of the company as a world leading luxury brand as well as most recognizable luxury performance sport cars. Despite the share price reached its all-time high (starting from the I.P.O. in FY2015), our hold recommendation arises from the future challenges of the automotive industry.

Cars, Sponsorship and Commercial an epitome of the business..

Ferrari peculiar business strategy has allowed the Group to reach outstanding returns (19% ROCE in 2019) and margins (+54% Gross Margin in 2019) respect to its automotive competitors. In the past 6 years, after the corporate restructuring of 2015, Ferrari's growth (+6.4% revenues CAGR 2014-2019) has been driven by: (i) a controlled growth as a result of an outstanding overbook list that allowed (and will allow) the company to maintain its pricing power and exclusivity. (ii) An exceptional amount of incomes collected in F1 activity due to Sponsorship e Commercial, for which the team has been the leading player in terms of money collected with respect to others; (iii) A year-by-year planned geographical units shipment: the low volume in units shipped allowed the company to carefully select the strategic expansion in those countries.

...but the unveiled challenges of a revisited automotive industry pose questions on future growth

Cars and the new brand diversification strategy will drive future growth, reaching €3.9bn and €156m in 2022E, respectively. Nonetheless different events will attend the company in the near future:

- (i) The exceeded threshold of 10K units, that will incline the company's position and consequently deprive it from the small vehicle manufacturing status, resulting in a much stricter emissions regulation.
- (ii) The transition to hybrid technology, as emerging for the new SF90 model, versus the catching strategies already implemented by the peers (e.g. Porsche); (iii) The delayed full entrance in the luxury SUV segment as leading player, that will try to be managed via the introduction of the (likely) V6 Purosangue model in 2022E, an year in which competitors will already gained considerable market shares.

Financial Highlights

Our assessment on Ferrari business potential lead to promising growth of revenues and profitability, but that could mean-revert at normal levels in the long-term horizon. Group revenues, conducted by the Cars&S.P. and S.C.&B divisions, will grow at a +8% CAGR 2019-2028E reaching ca. €6bn in 2028E, with improvements in EBIT margin of +470bp from 2019 to 2028E, expecting to drive a considerable cash generation in the medium long-term. Moreover, we expect EPS of 4.03.

Valuation

Our year-end target price of €163.2 is the result of the DCF model considering as Terminal Value. We think this is the best estimate we can provide of the value of the company, since it takes into account: (i) A first stage, in which we further divide three different industry-based future scenarios that the company has to encounter along its way; (ii) A terminal value, calculated on the assumption that the company should be in a steady state at the end of the forecasted period. This completes our valuation to a final target price of €163.2.

Price: €159.75

Listed on: Italian Stock exchange, NYSE

Ticker:

- Bloomberg: RACE.MI
- Reuters: RACE.MI

Market Data

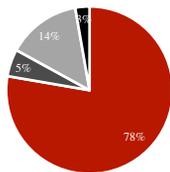
Top 5 shareholders

Exor N.V.	23.9%
Piero Ferrari	10.7%
Baillie Gifford & Co.	7.3%
T. Rowe Price Associates, Inc.	4.7%
Ferrari N.V.	4.2%
Free float	49.8%
Market Cap [€bn]	29.69
Share outstanding [m]	185.8

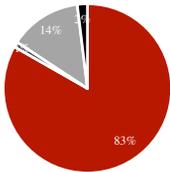
1Y Price Performance



Sales development



• % on total for Cars and spare parts
• % on total for SC&B



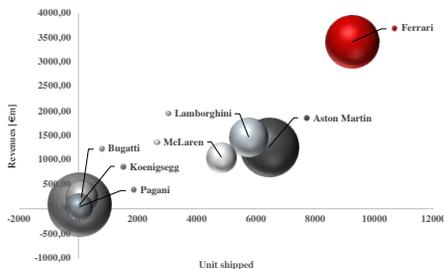
• % on total for Cars and spare parts
• % on total for SC&B

• % on total for Engines
• % on total for Other

• % on total for Engines
• % on total for Other

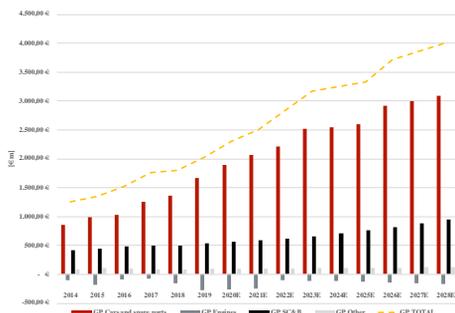
Source: Company data, Logos estimate

Competitive positioning

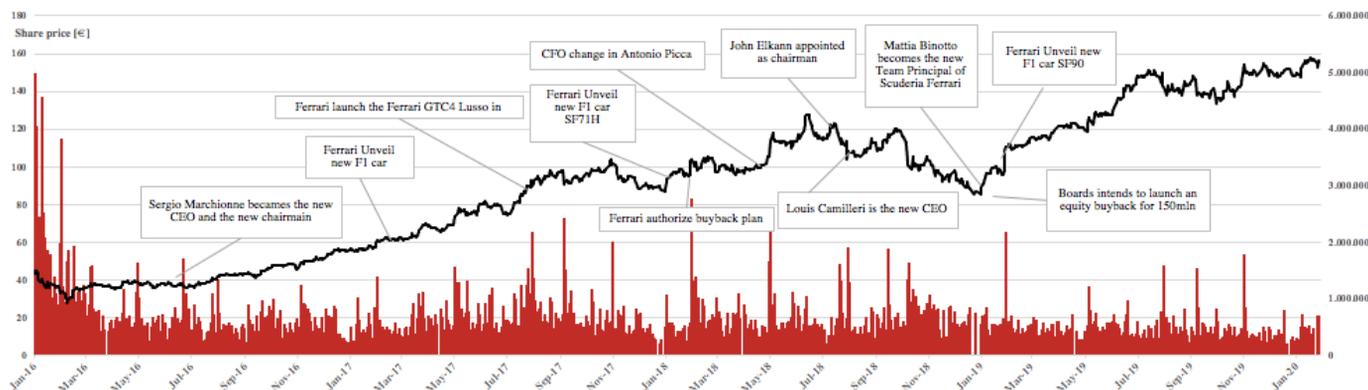


Source: Logos estimate

Gross profit 2014A – 2028E



Source: Company data, Logos estimate



Source: Facset, Company data

We initiate our coverage on Ferrari N.V. with a HOLD recommendation and a year-end target price of €163.2 implying a 2.1% Total Shareholder Return on the 16th February 2019 closing price (€159.75).

Our investment recommendation is based on: (i) strong and resilient revenues growth (+4.4% CAGR 2019-2022E) driven by the strategic Cars&S.P. business, that will allow the company to increase overall profitability at 60.7% GM in 2022E from the 54% of 2019 with the introduction of new key car models (e.g. Icona series). (ii) A changing market scenario conditioned both from new strict automotive regulatory framework as well as the new trend in SUV and EV/Hybrid car models where the company could find some issues in maintaining its historical competitive advantage with respect to its competitors: in the medium term this could affect both growth and profitability.

Ferrari

With a Market Cap. of €29.69bn and more than €3b in revenues, Ferrari is a world leading luxury brand as well as most recognizable luxury performance sport cars. Cars&S.P. (€2.9M revenues in FY 2019); engines (€198M); Sponsorship, Commercial and Brand (€538m); and Other (€104M) are the business segments comprised in the business. From the €2.8m value of 2014 to 2019, revenues grew toward €3.766m with a +6.42% CAGR, with higher contributes especially from Cars&S.P. unit, accounting on avg. for 72.8% of total incomes. At its highest historical level, EBIT margin achieved 24.3% (vs 14.1% in 2014), moving the ROIC from 12.6% to 27.7%. The company was able to improve its dividends distribution, started in 2015, increased it at 30% of net income while reducing the net industrial debt (from 797m to €337m). EBITDA increases, positive changes in the WC and tax payments benefits, boosted the company FCF from industrial activities (€675m in 2019 vs €404m in PV). Exceeding cash is used to distribute higher dividends as well as sustain company's operational activities, i.e. product range renewal, transition to hybrid technology and capitalized development costs for Cars&S.P. and F1 activities.

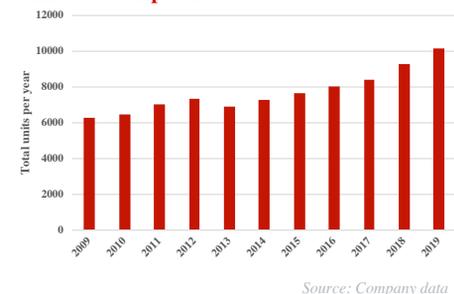
Key risks

Competition in Automobiles business: The LPCM is characterized by as little as 11 players. Most of them have higher volatility (ranging from approximately 1200 up to 5000 points) in sales compared to Ferrari (ca. 900) and its controlled growth strategy. Ferrari could boast a market share of 17%, comparable only to Bentley presence (17%) and Aston Martin (12%) which are exposed to stronger cyclicity in sales. Nonetheless, the real threats to Ferrari rock stoned position is the shift toward EVs and increased competition in the Hypercar segment.

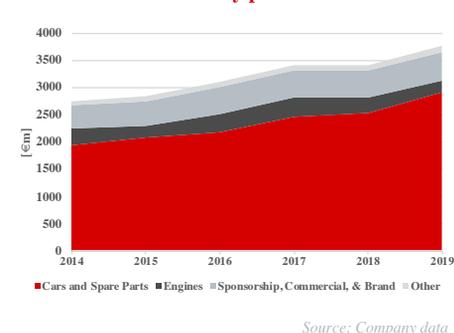
Growth strategy: The group has proven a winning solution to control growth in a steady and sustainable fashion, allowing to build their current position as results of the waiting lists. This strategy however could limit their potential profits as well as not meet new generation's needs (since the average age of Ferrari customer is between 35 - 50 and a request for instantaneous satisfaction characterize potential new public). Changes related to the shipment schedule have already been planned, but an eventual request for speed up in the process will disrupt much of company identity.

General reputational risk: Ferrari main asset is its Brand image, credibility and/or integrity, which allow them to achieve premium prices. Nevertheless, there are several aspect that could be impacted by a decline in the value of the brand: Cars & Spare Parts sales, brand related activities and attraction of new sponsor for F1 not providing coverage for the huge costs incurred in R&D activities (20% of EBIT margin in 2019) and F1 operations.

Historical shipments – Exhibit 1



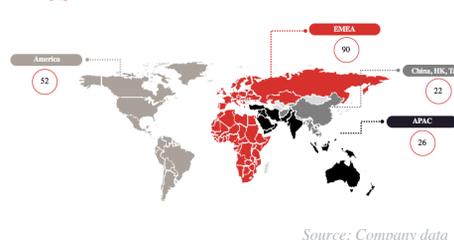
Revenue breakdown by pillar – Exhibit 2



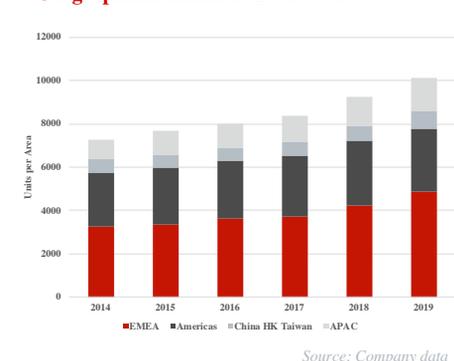
Cars strategic pillars breakdown – Exhibit 3



POS distribution – Exhibit 4



Geographical breakdown – Exhibit 5



Embodying Italian excellence Ferrari N.V. (RACE:MI) makes the world dream since 1947. With a €29.69bn Market Cap and more than €3.7bn revenues in 2019, Ferrari has established itself as a leading player in the Luxury Performance Car Market with a rallying growth of +6% CAGR (2014 - 2019) in revenues. The admission to listing and trading on the MTA managed by Borsa Italiana in January 2016 followed the separation of Ferrari and its subsidiaries from FCA Group. This separation occurred through a series of transactions including a restructuring (with Ferrari N.V. as the new holding company for the Ferrari business), the IPO of ca. 10% of the common shares (with listing and start of trading on the NYSE in October 2015), and the distribution to FCA's holders of shares and certain mandatory convertible securities of the remaining ownership interest in Ferrari.

Ferrari at a glance

Ferrari DNA has been forged for racing: Enzo Ferrari set up Scuderia Ferrari in Modena back in 1929. From 1950, the inaugural year of Formula 1, through the present, it has won respectively 238 Grand Prix races, 16 Constructor World titles and 15 Drivers' World titles, thus conquering among other players, the title (and bonus) of longest running Formula 1 Team. But success on the world's tracks and roads extends far beyond Formula 1, including victories in some of the most important GT car races as the 24 Hours of Le Mans. In 1947 the first racing car was produced, the 125 S with the powerful and well-known 12-cylinder engine. Fiat Group walked in during 1969, acquiring a 50% stake that was later increased to 90% after the departure of the founder Enzo Ferrari (the remaining 10% is currently held by his son, Piero Ferrari). Thanks to the vision of Sergio Marchionne (Chairman and CEO of the company), the 2016 Ferrari spin-off from FCA Group marked an historical moment for the company. Nowadays Ferrari N.V., incorporated under the Dutch law, is the holding company of the Ferrari Group (see Appendix 1 for the structure chart of the Group), counting ca. 4,000 employees and having one of the world's strongest brand.

Strategic Pillars

The four pillars of Ferrari to build continuous momentum (see Exhibit 2)

(i) **Cars & Spare Parts (+77% of 2019 revenues +9% CAGR in 2014-2019)** represent the beating heart of the Prancing Horse company, with a revenue CAGR of +3% in 2014 - 2019 and a market share of 17%. Car models (see Appendix 1) are divided (see Exhibits 3) between Sport, Special Series (the two range models represents 64% of sales in 2019), GT (36%) and Icona (<1%, just introduced in 2018). The Ferrari product range is completed by the Limited Edition Hypercars, or so called "Fuori Serie" - very limited editions created in connection with special events - and the One-Offs representing the highest level of personalization, but only available to the most loyal customers.

(ii) **Engine (+5% of 2019 revenues -9% CAGR in 2014-2019).** Production of V8 and V12 is made in agreement with Maserati (FCA Group) therefore Ferrari revenue do not respond directly to market logics, but sales of Maserati cars do. For the latter, those have been turmoiled years with lower-than-expected performances which drove down also Ferrari revenue from this pillar (-30.3%YoY Dec 2019) offsetting also revenue benefits from F1 licensing to Haas and Alfa Romeo in the 2019 Championship (ca. €71m revenue 2019E). Thus, starting from 2021 only licenses will be left, progressively dismissing supplying to Maserati.

(iii) **Sponsorship, Commercial & Brand (+4% of 2019 revenues +5% CAGR in 2014-2019).** Comprise the promotional and commercial activities of Scuderia Ferrari, the most relevant promotional effort for Ferrari providing a return mostly in term of visibility (see Appendix 4) and brand image. The real advantage here comes from sharing R&D costs between F1 and Cars development. Brand activities are experiencing a wind of change (see below Corporate strategy) and expected to account for 10% of EBIT in 7-10 years (current contribution is ca. 2% of total revenues).

(iv) **Others (+3% of 2019 revenues +3% CAGR in 2014-2019).** Residual pillar mainly related to the management of Mugello racetrack and financial services offered to retail client for the purchase of cars. The Group operates through a fully owned subsidiary in the US, through associates in EMEA and several partnerships in other markets.

Geographic pillars

Ferrari can count on the widest dealer network in the market, with 190 POS (avg. 142) distributed worldwide (see Exhibit 4) according to specific metrics including both historical data and projections about future growth. We distinguish the following regions:

(i) **EMEA (48% of 2019 shipments, 90 POS)** is the region where Ferrari is headquartered (Maranello, Italy) and has been historically the largest market, nearly counting for half of total sales. Key countries include UK, Germany, Italy, France, Switzerland and Middle East.

(ii) **Americas (29% of 2019 shipments, 52 POS)** has always been the second largest market for Ferrari counting for an avg. 33% of sales, saw a decrease of -3%YoY during last year. Eventually, this flection was charged to waiting lists and delivering policies.

(iii) **China, HK and Taiwan (8% of 2019 shipments, 22 POS)** are regions where Ferrari enjoys a market leadership position (27% market share) and along with the next pillar, will be key in Ferrari future being preferred to Americas in deliveries schedule. Flattish trend despite tensions was still a good performance for a tormented year in those regions.

(iv) **APAC (14% of 2019 shipments, 26 POS)**, mainly including Japan, Australia, Singapore, Indonesia and South Korea, increased by +1%YoY and fundamental for future consolidation.

Corporate strategy

Ferrari focuses on maintaining a leading position in the Luxury Performance Car Market, enhancing and protecting the value and exclusivity of its brand. In order to achieve profitable growth the following strategies are pursued:

Controlled growth: low volume production strategy and a full control of demand to maintain exclusivity. In order to respond to growing demand, both in emerging markets and as a response to demographic changes and growing spending capacity of target clients, Ferrari will expand the lines of product while maintaining singular line limitations in production. In term of geography, capitalization on wealth creation in emerging markets and maintenance of historical control over other regions, are the two perspective to be considered.

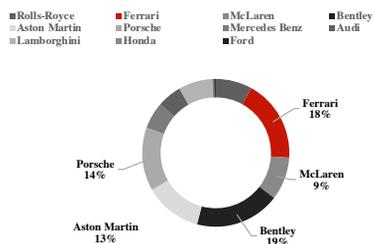
Regular new model introductions and enhancements: regular launching to capitalize on design, engineering and production processes, doing it alternatively between distinct product segments to preserve exclusivity and enduring value of each new car. 5 model have been launched in the previous year, 2 are in pipeline for 2020 and many more in next years up to a total of 15 in 2022. Periodical launches of Limited-Edition supercars, very Limited Series and One-off cars will satisfy demand of special customer while attracting customer from Sport and GT pillars.

Pursue excellence in racing: competitive success in Formula 1 racing promotes brand and technology to a global audience while the know-how developed is transferred mainly to Sports and GT automobiles.

Controlled growth in adjacent luxury and lifestyle categories: to maintain and enhance the Ferrari brand's reputation, related initiatives are selected compatibly with brand image and the loyal following of clients and Ferrari enthusiasts. Coherently with this statement, Ferrari is expanding into a range of other luxury goods and in adjacent lifestyle categories through third party licensing and partnerships (e.g. the partnership with Bottura and Armani). To further enhance its focus, Ferrari had planned to review all the collateral product lines (reduction of about 30% planned), decreasing the number of existing shops and licenses (of about 50%).

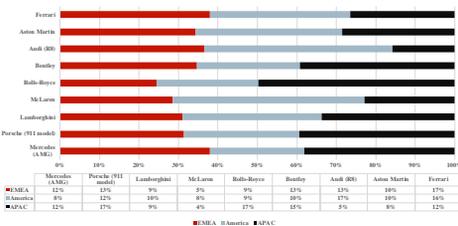
Industry overview and competitive positioning

Market structure – Exhibit 6



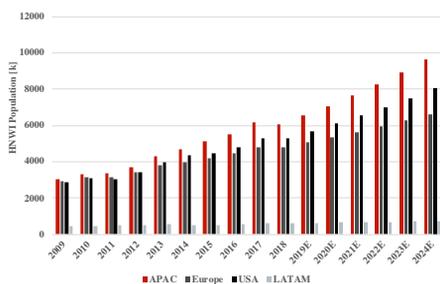
Source: Company data, Logos estimate

Market breakdown by geography – Exhibit 7



Source: Company data, Logos estimate

HNWI population development – Exhibit 8



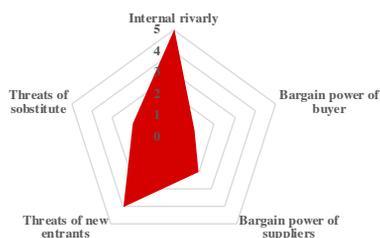
Source: Capgemini, Logos estimate

EVs scenarios analysis (2032E) – Exhibit 9

	2018 Global automotive industry (top 20 OEMs)	Scenario 1: Delayed investment	Scenario 2: Delayed investment	Scenario 3: High investment with reduced gross margin
Revenue	US\$2,200bn		US\$2,600bn	
EBIT (% of revenue)	6.3%	4.0% - 4.4%	5.1% - 5.5%	3.0% - 3.4%
ROC (%)	3.9%	2.3% - 2.7%	3.0% - 3.4%	1.7% - 2.1%
Change in ROC form 2018	n.a.	(1.2%) - (1.6%)	(0.5%) - (0.9%)	(1.8%) - (2.2%)
BEV / PHEV (% of model launches)	12%	33%	16%	33%

Source: PwC

LPCM Porter's 5 Forces – Exhibit 10



Source: Logos estimate

The Luxury Performance Car Market (LPCM), Engines and Sponsorship, Commercial & Brand (S.C.&B.), are the business units that represent declination of the Ferrari activity. While the first two enter the Automobiles & Parts (ICB) definitions and experience peculiar dynamics connected to their segment, they share all a **common driver: the strength of the Prancing Horses' brand.**

The Luxury Performance Car Market (LPCM) (WW €61.7bn , CAGR of +6.19% 2019-2022E)

The LPCM is part of the Automobiles Industry (\$2,200bn in 2018, top 20 global OEMs, 2,56% of global GDP, source: PwC) and S-segment, characterized by high level performance cars, luxury details and usually two-seaters design. As a premium and luxury segment (€61.7bn in 2018, 0,03% GDP, source: Statista) that sell to wealthier customer and counts 11 players (see Exhibits 6), manufacturers have more pricing power and sales show less cyclicality. EMEA still holds the biggest share of this market, followed by America close chased by a raising APAC where the bulk of growth is happening, mainly driven by wealth creation in emerging economies and upper classes of HNWI and UHNWI in Asia.

Macro driver for demand

(i) **HNWI and UHNWI percentage and composition.** The numbers had been increasing steadily worldwide (see Exhibits 8) with a slight set back in the last period (-0.3% in 2017-2018, source: Capgemini Wealth Report 2019) due to two main factors: a struggling global economy and international trade conflicts. **The composition of HNWI and UHNWI is also changing, with an increasing number of young people and women represented.**

(ii) **EVs and environmental concerns.** CASE mobility is shaping a market that had find itself in a mature phase and is now heading into a restructuring era. **Global sales of BEVs and HEVs increased by +68% in 2017-2018 and preference are shifting towards alternative powertrains** (+6% preference for alternative powertrains in car buying decisions, source: Deloitte Global Automotive Consumer Study). Regulation is also shaping a future projected into EVs with tighter CO2 requirements and announced plans to progressively ban conventional gas and diesel fueled vehicles, thus structurally shaping the demand.

Macro driver for supply

(i) **R&D expenditure.** In 2018 Ferrari had the highest R&D intensity (19% against 9% avg.). We need to consider though that its costs computation include also F1 activities unlike its competitors that separates - legally and physically - F1 related enterprises from road cars development and production. **LPCM had experienced a surge in R&D expenses between 2012-2018, driven by competing pressure and an ongoing shift toward CASE mobility.** Increasing internal competition and a restructuring phase approaching have required premium players to expand and diversify their product portfolios (see Appendix), providing enhanced customer experiences.

(ii) **Emerging markets importance. Winning Asia and BRICs presence will be key to establish future success leveraging on heritage and specialization.** Expansion and an orientation of those markets toward CASE mobility along with the need to effectively reply to a different type of demand, requires significant expenditures and impose exposure to different political, regulatory, tax and economic conditions in these jurisdictions.

(iii) **Regulatory restrictions on CO2 emissions.** EU reduced CO2 emission to 95g/km from 2020/2021 and another cut of 15% from 2025 on. The other side of the Ocean instead, is not imposing stringent requirements with a recent Trump departure from Paris Agreements on Climate Change. Asia has taken actions toward CO2 reductions and ratified the Agreement also if its rules are still less stringent than EU. Restrictions will lead Global EV sales to reach 12 million in 2025E and nearly 23 million in 2030E, increasing on average by 21% per year (Source: IEA Global EV Outlook 2019).

Other relevant winner-takes-it-all trend

SUVs and Hypercars. The Premium SUVs market (+5% sales by 2030, source: IHS Markit Global Automotive outlook 2018) and High Luxury SUVs market (+30% sales by 2030, source: IHS Markit Global Automotive outlook 2018) is a fast-paced segment in which Ferrari is lagging back while 5 out of 10 competitors already launched at least one model. Many Hyper-cars are on the line due to the projected increase in HNWI and tempting high margins, the market lies in the hands of 3 main players (Pagani, Bugatti and Koenigsegg) long way followed by Aston Martin, Mercedes and McLaren.

Competitive Analysis: a dog market striving for changes.

Internal rivalry in LPCM (see Appendix 2 and Exhibits 10) puts high pressure on companies since they are fighting to win a small potential customer base. All the competitors are part of larger groups, meaning they could benefit from differentiation and larger financial resources. Demanding customers in search for permanent value from their purchases and a shift to alternative fueling boost the relevance of **the threats of new entrants:** if able to capture new trends and markets while cutting the bottom line, helped by regulatory tightening, they will give hard times to already established companies. **The threats of substitutes** remain moderate, although there are several evolving trends in place, the typical customer personas stay loyal to a LPCM company and Ferrari customers are likely to own more than one car also thanks to company's policies. The true threats will come with future generations (Millennials and Generation Z). **Supplier's power** is linked to their high specialization and consequent dependence of the Automotive Industry on a small pool of players, which in turn are able to differentiate among other Industries (namely: defense, aerospace and general industrial applications). **Buyers power** is low as dealers are chosen by companies and act as franchisee, not imposing significant investments.

Competitive advantages

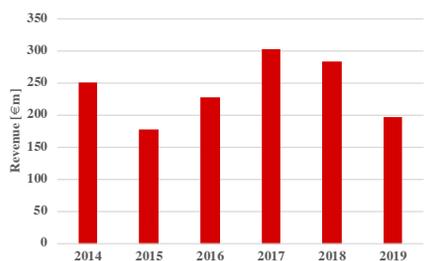
(i) **Loyal customer base** built with specific **customer policies** (see Appendix) as waiting lists (only company along with Hermès to adopt a waiting strategy) that reward fidelity to the brand. Ferrari also benefits from its strong racing heritage that has built a strong sentiment towards the brand with "Ferraristi" clubs spread all over the World.

(ii) **Leading edge engineering** capabilities and high R&D investment in F1 from which **Ferrari transfer innovation and know-how, creating synergies between F1 segment and automobiles development.** LPCM actors present also in the F1 Championship headquartered their racing activities in United Kingdom (all team except from Sauber, Toro Rosso and Ferrari) with separate entities, thus transfer of knowledge is less direct and with Brexit on the run other limitations (or at least costs) will arise.

(iii) **Sound and resilient financial performances** with consistent liquidity at their disposal. Comparable competitors show an Industrial FCF of €128m avg. versus a €675m of Ferrari, remotely followed by Lamborghini (€407m). This advantage is partially mitigated by their stand-alone status compared to competitors included in larger automotive groups. This comprehension allow great flexibility and diversification but could also result in a certain dilution of the brand which results in lower pricing power.

(iv) **Continuous renewal of product offering** (15 models to be launched between 2019 and 2022) that stimulate customer demand and **highly customizable models** with a wide range of interior and exterior options, escalating from personalization program, special equipment, Tailor-Made to One-off which are designed entirely by the customer in collaboration with Ferrari's design team.

Engine revenues - Exhibit 11



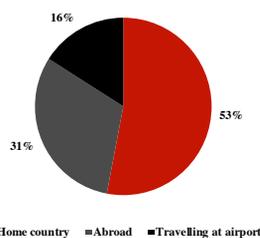
Source: Company data

F1 Premiums breakdown - Exhibit 12

	Column 1	Column 2	F1	Other	Total (€m)
Ferrari	35.50	56.70	73.00	41.00	206.20
Mercedes	35.50	65.50	41.00	35.00	177.00
Red Bull	35.50	46.10	36.00	35.00	152.60
McLaren	35.50	64.00	36.00		135.50
Williams	35.50	50.00		10.00	95.50
Racing point	35.50	59.00			94.50
Toro Rosso	35.50	52.00			87.50
Renault	35.50	73.00			108.50
Sauber	35.50	56.00			91.50
Haas	35.50	70.00			105.50

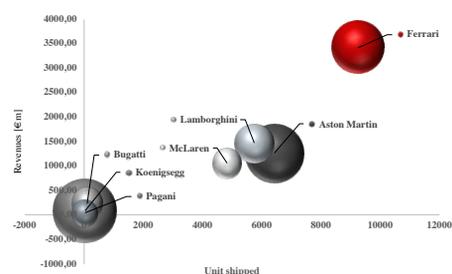
Source: autosport.com

Luxury product purchase - Exhibit 13



Source: Statista

Competitive positioning - Exhibit 14



Source: Logos estimate

Competitive Financial Analysis (FY 2018) - Exhibit 15

Key Financial Figures	SPORT						GT			Hypercar			
	Ferrari	Aston Martin	Lamborghini	McLaren	Porsche	Average sport	Bentley	Rolls Royce	Average GT	Pagani	Bugatti	Koenigsegg	Average Hypercar
Revenues [€m]	3420.32	1259.26	1460.81	1049.18	25784.00	6594.71	1407.26	580.87	994.07	89.03	239.03	36.52	121.53
Revenue CAGR	7.93%	14.86%	22.89%	25.56%	12.47%	21.10%	(3.51%)	5.53%	1.01%	25.61%	19.60%	28.08%	24.43%
Gross Margin %	52.55%	39.14%	20.63%	19.71%	25.26%	26.49%	17.03%	25.05%	21.04%	47.46%	64.47%	54.32%	55.42%
R&D%	18.80%	1.03%	3.66%	0.11%	8.53%	1.60%	32.37%	4.01%	18.19%	1.76%	1.95%	1.77%	1.82%
EBIT margin	24.16%	29.63%	12.52%	7.23%	16.63%	16.46%	(32.78%)	12.10%	(32.78%)	34.48%	8.42%	5.63%	16.17%
ROE	58.10%	(14.17%)	4.37%	27.78%	18.89%	5.99%	n.a.	36.28%	36.28%	38.35%	12.12%	13.83%	21.44%
Debt / Equity	1.16	3.59	0.25	2.19	1.30	2.01	(2.15)	0.96	(0.59)	1.97	8.09	0.24	3.43
Interest Coverage Ratio	32.16	27.00	n.a.	6.08	46.42	27.97	23.77	39.22	31.5	73.97	12.79	6.98	31.24
Net Trade Cycle	(36.02)	76.87	73.19	84.26	24.70	78.11	n.a.	205.64	205.64	513.51	7.90	n.s.	260.71
Quick Ratio	1.83	0.47	1.65	0.33	0.60	0.82	0.25	0.05	0.15	0.01	0.53	0.36	0.30
Cash Flow Margin Ratio	27.13%	19.98%	27.91%	21.07%	21.07%	22.99%	(17.17)	0.69%	(8.24%)	20.19%	0.86%	7.35%	9.47%

Source: Logos estimate

The Engine Unit (CAGR -9.00% 2014 - 2019)

The components market (see Appendix 1) for Ferrari involves both selling engines to Maserati (contract expiring in 2021, not renovated) and to other F1 teams, specifically Haas and Alfa Romeo (for which there is the possibility to start producing in-house after 2020). Haas is expected to continue acquiring Engine from Ferrari since they only have two main suppliers for its cars' constituent, of which one is Ferrari itself. **Essentially, demand for components is determined by Maserati production and sales.** Ferrari production schedule is tight to Maserati demand, therefore growth or contraction in the volume of car manufacturing is reflected in component manufacturing. In 2020 Maserati is expected to launch an all-new sport car and the restyling of Levante, Ghibli and Quattroporte. Although it has lost 32% in 2018, and its volumes are still shrinking in 2019 (-29%YoY sales in Q3), Maserati is expected to experience a transition phase with a new industrial plan and, according to historical data, an increase in shipments will likely occur in 2020 thanks to the programmed launches (in 2013 Quattroporte and Ghibli increased by 137% the shipments, while the Maserati SUV Levante hadn't the impact expected with just a 22% expansion).

Competitive Analysis: best-in-class performance.

It is important to notice that Ferrari do not compete in a "Market" for what concern Maserati. Nevertheless, over the years, **Ferrari engines have always stood out for their power in performance and reliability**, a factor often very much under observation with regard to these types of engines that deliver exceptional performance. The "Engine of the year" Award, evaluate engines according to technical characteristics regarding fuel economy, noise, smoothness, performance and drivability. **From 2011 an undoubted winner has emerged: Ferrari.** Awarded several times as "Best performance engine" and lastly "Engine of the year" in 2019.

Sponsorship, Commercial & Brands (S.C.&B.)

Sponsorship and Commercial

In the last 20 years Ferrari ended up first 8 times (Column 2 = 19% of floating revenues), 6 times second (16%), 5 third (13%) and 1 fourth (11%). In the foreseeable future it likely will continue to earn the Constructor Championship Bonus (\$35.3m average value) if it will continue to apply with the new Concorde Agreement (2021). **Ferrari will retain its veto right that allow a substantial influence over FIA decisions.** Liberty Media, is struggling to fix some structural problems with F1, introducing a budget cap (starting 2021) and a flatter payment system. **Ferrari and Mercedes will loose the most, followed by Red Bull with a substantial reduction in budget partially balanced by increasing for its related team Toro Rosso.** Ferrari represent an exception from other Teams that separate Automotive from F1 activity with most related companies based in UK. In 2019 F1 premiums have reached ca.\$206.2m (see Exhibits 12, source: autosport.com) to which the revenues from sponsors need to be added. Ferrari differentiated itself from competitors for its tight connection to F1 since its brand image and marketing activity relies on it, while its longest-standing-team-status ensure significant advantages.

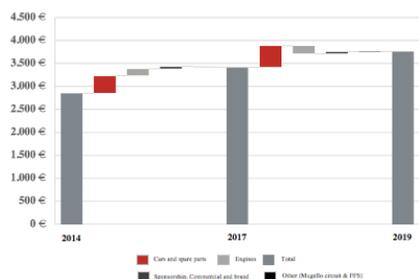
Brand

The Luxury Goods market account between €271-276bn in 2019E and is expected to grow with a CAGR of 3.5% (2019-2025E) (source: Bain & Company). The Industry has entered a new normal phase with Chinese consumers driving growth. By 2025 Chinese customers are expected to account for 45% of the global market, with half of their luxury purchases happening in Mainland China. Key trend that have been identified are the inclusion of the Gen Y and Z segment, second-hand market connected to an increase awareness in term of sustainability and social responsibility, enhancement of the omnichannel side of the customer journey and mass customization. **The drivers for growth are increasing in the number of HNWI individuals and tourism/travelling flows.** American and European mature market has seen a subtle growth (in 2018, 2-4% and 1-3% respectively) while Middle East, Dubai along with Qatar and Saudi showed weak tourism luxury spending. **The Luxury Goods Market has moderate concentration (HHI = 1359 and C4 = 65).** Considering exclusively Ferrari's competitors that have also a Lifestyle division there are essentially 4 actors to be included: Porsche (with Porsche Design), Lamborghini, Bentley and Aston Martin (introduced in 2018).

Competitive Financial Analysis

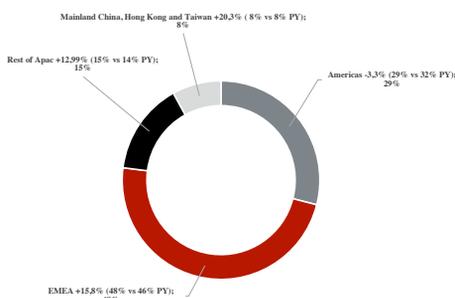
We conclude the *Industry overview and competitive positioning* assessment by further analysing the main financial figures of Ferrari and its LPCM competitors (see Exhibit 15) of which geographical exposition (see Exhibits 7) and market presence (see Exhibits 6) have been previously presented (for further details about specific product characteristics juxtaposition, refer to Appendix 1). In order to provide a clearer comparison we performed a subdivision based on companies' lines that represent the most relevant sources of competition for Ferrari. **The Prancing Horse present the highest level of revenues** (excluding Porsche that present product line targeting a wider audience), witnessing an exceptional pricing power and ability to attract customers with its activities. The related CAGR is lower than its peers following the steady pattern dictated by Ferrari controlled growth strategy. Two data are eye-catching: ROE and Cash Flow Margin Ratio. The former is significantly higher than the overall LPCM showing Ferrari financial superiority, while the latter is just 0.6% lower than Lamborghinis' (main threat to Ferrari position) position that is experiencing booming performance mainly thanks to its Urus SUV.

Revenues bridge – Exhibit 16



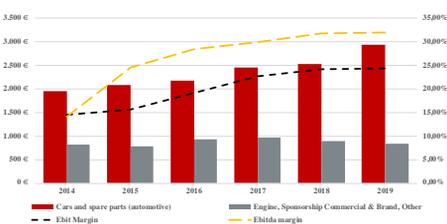
Source: Company data, Logos estimate

Shipment breakdown 2019 – Exhibit 17



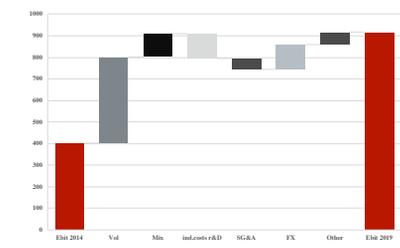
Source: Company data

Revenues vs. EBITDA – Exhibit 18



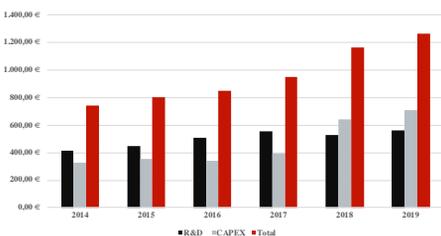
Source: Company data, Logos estimate

EBIT bridge – Exhibit 19



Source: Company data, Logos estimate

CAPEX – Exhibit 20



Source: Company data, Logos estimate

Ferrari Heritage

Revenues

Cars & Spare Parts, drivers through growth. From the €2.762m value of 2014 - when the 10.000 cars delivered in a year. In terms of geography, Mainland China, Hong Kong and Taiwan was up 20.3%; EMEA grew 15. first rumors of Ferrari spin-off came out - to 2019, revenues grew toward €3.766m with a +6.42% CAGR. The increase was mainly generated by the Cars and Spare Parts unit, accounting on avg. for 72.8% of revenues in the considered timeframe and generating €2.926m in 2019 (+8.5%YoY). This increase mainly derived from Sport and GT series, a greater contribution from personalization programs (representing 20% of this revenue line) and a pricing mix increases. In particular, deliveries of Ferrari Portofino, the 488 Pista, the 812 Superfast and the ramp up of the 488 Pista spider increased by 212 cars compared to PV (i.e. + 9.4%). 488 GTB and 488 Spider partially offset these figures, as well as deliveries of Ferrari J50 and LaFerrari Aperta in 2018.

Excess of 10K threshold shipments and waiting list management. Unit controlled shipments have been growing at a rate of 5% until 2017, reaching a +10.16% raise in 2018, and +9.5% in 2019, exceeding for the first time the threshold of 8%; rest of APAC increased 12.9%; while Americas was down 3.3%, as results of the decision to privilege deliveries to China and Hong Kong in the first half of the year.

Engines, gradual sunset of the Ferrari's powering to Maserati. Composed by sales to Maserati and rental to some F1 racing teams, incomes generated from engines decreased from €311m in 2014 to €198m in 2019 (-8.6% CAGR). Engines revenue reduction reflected lower shipments to Maserati. The agreement with the "Tridente" will end in 2021, ceasing the production of aspirated V6 and V8 engines, which equip the current Ghibli, Quattroporte, Granturismo, GranCabrio and Levante lineup.

S.C.&B., winning through changes. The increase from €417m in 2014 to €538m in 2019 (+ 5.2% CAGR) is the result of higher incomes from sponsorship, brand related activities, and participation in the Formula 1 World Championship, in particular as a result of the improved ranking in the World Constructor's Championship.

Other. Being primarily related to financial services activities and management of the Mugello racetrack, other revenues grew from €90m in 2014 to €104m in 2019 (+2.7% CAGR) through supporting activities, including the deconsolidation of the financial services business in Europe, followed by the sale of FFS GmbH's majority stake to FCA Bank in 2016.

Margin and costs

Gross margin. Reaching 52.54% in 2019 (vs 44.5% in 2014), its growth is mainly attributable to raises in revenues of C.&S.P., S.C.&B. and other. In 2019 higher COGS (+6.9% compared to 2018) were partially offset by the decrease in costs related to lower engines volumes. By estimating GP per business line, we drew a bittersweet corporate picture, with positive GP for C.&S.P., S.C.&B. and other (respectively, 44.3%, 14.2% and 2.6% in FY 2019) but negative ones for the engines line (-7.2%). (See Appendix 6 & 7 for further details)

EBITDA margin. Over the last 6 years the Group registered a growing margin (from 25.5% in 2014 to 33.7% in 2019) reaching €1,269m in 2019, up 110bp vs the prior year. SG&A costs have been fairly stable (10.29% on avg.), with a slight increment in 2019 (i.e. 10.9%), as a result of the activities related to the new product launches and the company's organizational development. R&D, as operational expenses, remained consistent over time (from 19.5% in 2014 to 18.5% in 2019), increasing especially in the period from 2014 to 2017. The 2018's decrease (-2.1%) was attributable to lower research activities for F1, GT and sports cars. In 2019, as the production lines for the models started being operated, R&D grew by +8.7%.

EBIT margin. EBIT reached the highest level in history in 2019 (€917m) at 24.3% margin (vs 14.1% in 2014), after a 6-years steady growth. On the one hand, EBIT's increase was mainly driven by i) positive volume impact of €99m, due to shipments' increase, ii) positive product mix and price impact of €78m, attributable to the initial deliveries of the Ferrari Monza. On the other hand, it was negatively affected by lower sales from LaFerrari Aperta, Ferrari J50 and lower contribution from other brand related activities.

Net Profit margin. Net Profit (€699m in 2019) decreased - 11.14% vs 2018 (€787m), due to a higher impact of income tax expense (€176m versus €16m in 2018). The Group signed an agreement with the Italian Revenues Agency (Patent Box), providing from 2015 to 2019 a tax benefit for companies generating income through the use of patents, trademarks, designs and know-how. In the latter period, the Group has been enjoying fewer benefits from this regime.

Returns and Cash Flows

Return on capital. ROIC moved from 12.6% in 2014 to 27.7% in 2018, signaling the increase in profitability of its invested capital. In 2018, ROE decreased to 58.1%, showing however an improvement that through the Du-Point Analysis is explained by a higher net profit margin (from 9.59% in 2014 to 22.99% in 2018) and equity financing use. Starting from February 2018 Ferrari announced a buyback program (expected to be executed by 2022), involving the repurchase of €150m in common shares, aiming to optimize the company's capital structure.

Financial structure. 2018's level of financial leverage improved with a Net Debt/EBITDA ratio of 0.22x compared to 1.2x in 2015 (with the exception of 2014, where the company was Net Cash) due to the increases in EBITDA and decreases in the Net Debt. Dividends distribution, started in 2015, increased at 30% of net income as payout ratio. Moreover, the Group was able to reduce the net industrial debt (from €797m to €337m). The interest coverage ratio was ca. 32.18x in 2018 and has been increasing over the last years due to the decreased interest expenses and the improvement in the operating profit, which in 2018 was more than 2.0x the EBIT in 2014.

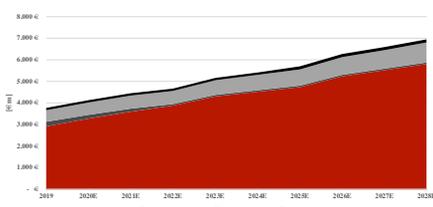
Cash Flows. FCF from Industrial activities were €675m in 2019 (vs €404m in 2018) compared to €245m in 2014, boosted by (i) increase in EBITDA, (ii) decrease in tax payments (see Patent Box), (iii) positive changes in WC. The WC is subject to month-to-month fluctuations due to, among the others, timing of customers payment. We highlighted especially receivables from clients and dealers financing, with an average duration of 67 months, related to US and EMEA market. Capex increased, moving from €330m (12% of Revenues) in 2014 to €706m in 2019 (18.7% of Revenues), with a +10.5% increase vs 2018. This is the results of larger investments in product range renewal, transition to hybrid technology and capitalized development costs. The growing trend of the quick ratio (in 2014 was 1.66x and in 2018 was 1.83x), demonstrated the cash generation power of the company Exceeding cash of the company is used to distribute higher dividends and to pay shares' repurchase. Diluted EPS rose from €2.82 in 2017 to €4.14 in 2018 (+46.8%), the resulting payout ratio of 17.1% was higher than in the past years, with the exception of 2015.

Ferrari financial highlights - Exhibit 21

Amounts in thousands	2014A	2015A	2016A	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Revenues	2762,36	2854,37	3105,08	3416,89	3420,32	3766,00	4120,66	4439,57	4665,66	5169,41	5412,40	5690,71	6251,59	6594,53	6957,09
Growth	-	3,33%	8,78%	10,04%	0,10%	10,11%	9,42%	7,74%	5,09%	10,80%	4,70%	5,14%	9,86%	5,49%	5,50%
Result from investments	13,11	22,10	3,07	2,44	2,67	2,40	2,72	2,72	2,72	2,72	2,72	2,72	2,72	2,72	2,72
COGS	1505,89	1498,81	1579,69	1650,86	1622,90	1736,51	1814,07	1931,28	1832,04	1991,41	2164,80	2353,46	2535,24	2731,28	2942,68
COGS % on sales	54,51%	52,51%	50,87%	48,31%	47,45%	46,11%	44,02%	43,50%	39,27%	38,52%	40,00%	41,36%	40,55%	41,42%	42,30%
Other expenses	39,19	33,14	24,50	6,87	3,20	5,00	5,02	5,02	5,02	5,02	5,02	5,02	5,02	5,02	5,02
Gross profit	1256,47	1355,56	1525,39	1766,03	1797,42	2029,49	2306,59	2508,29	2833,61	3178,00	3247,60	3337,24	3716,35	3863,25	4014,41
Margin	45,49%	47,49%	49,13%	51,69%	52,55%	53,89%	55,98%	56,50%	60,73%	61,48%	60,00%	58,64%	59,45%	58,58%	57,70%
SG&A	300,09	338,63	295,24	329,07	327,34	374,40	439,88	466,15	473,56	551,83	568,30	577,61	667,36	692,43	706,14
SG&A % on sales	10,86%	11,86%	9,51%	9,63%	9,57%	9,94%	10,68%	10,50%	10,15%	10,68%	10,50%	10,15%	10,68%	10,50%	10,15%
R&D	540,83	561,58	613,64	657,12	643,04	735,49	816,92	865,72	879,48	1024,84	1055,42	1072,70	1239,38	1285,93	1311,41
R&D % on sales	19,58%	19,67%	19,76%	19,23%	18,80%	19,53%	19,83%	19,50%	18,85%	19,83%	19,50%	18,85%	19,83%	19,50%	18,85%
EBITDA	389,47	701,13	880,13	1023,13	1087,11	1202,59	1487,04	1706,17	2097,65	2280,87	2320,80	2088,23	2180,52	2207,98	2342,10
Margin	14,10%	24,56%	28,34%	29,94%	31,78%	31,93%	36,09%	38,43%	44,96%	44,12%	42,88%	36,70%	34,88%	33,48%	33,66%
EBIT	389,47	444,32	595,08	775,42	826,51	917,00	1047,49	1174,12	1478,28	1599,03	1621,58	1684,64	1807,32	1882,59	1994,56
Margin	14,10%	15,57%	19,16%	22,69%	24,16%	24,35%	25,42%	26,45%	31,68%	30,93%	29,96%	29,60%	28,91%	28,55%	28,67%
Net financial expenses	8,77	-10,15	-27,73	-29,26	-23,56	-26,85	-28,48	-29,90	-31,40	-32,97	-34,62	-36,35	-38,16	-40,07	-42,08
Pre Tax Income (EBT)	398,23	434,17	567,35	746,16	802,94	705,48	1019,01	1144,22	1446,88	1566,06	1586,96	1648,29	1769,15	1842,52	1952,48
Income Tax Expense	133,22	144,12	167,65	208,76	16,32	130,91	275,13	308,94	390,66	422,84	428,48	445,04	477,67	497,48	527,17
Tax rate	33,45%	33,19%	29,55%	27,98%	2,03%	18,56%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%
Net Income	265,02	290,05	399,71	537,40	786,63	699,00	743,88	835,28	1056,22	1143,23	1158,48	1203,25	1291,48	1345,04	1425,31
Growth	7,69%	9,45%	37,80%	34,45%	46,38%	-11,14%	6,42%	12,29%	26,45%	8,24%	1,33%	3,86%	7,33%	4,15%	5,97%
Unlevered Free Cash Flow	-	290,84	373,98	274,67	-47,65	341,73	498,04	762,95	1108,40	1384,55	1557,07	1290,39	1397,26	1311,81	1601,10
Net Debt	1086,41	3572,92	3062,03	2709,47	2704,23	3071,38	3187,21	3137,58	2664,07	2153,63	1080,59	338,66	-407,51	-1125,64	-2132,95
Capex % on sales	11,95%	12,48%	11,78%	10,92%	18,17%	18,19%	14,28%	13,94%	11,96%	8,34%	6,07%	5,94%	4,05%	5,70%	2,73%
WC % on sales	-2,03%	-1,89%	-1,51%	0,75%	-1,50%	-0,07%	0,84%	0,91%	1,47%	1,57%	1,37%	1,19%	1,30%	1,18%	1,07%
Cash to cash (Days)	-33,37	-30,99	-38,01	-21,39	-36,02	-24,09	-23,55	-23,55	-23,55	-23,55	-23,55	-23,55	-23,55	-23,55	-23,55

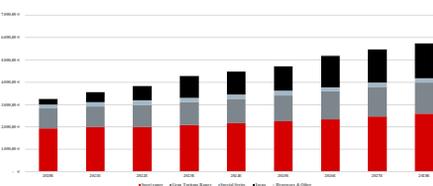
Source: Logos estimate

Revenues growth breakdown – Exhibit 22



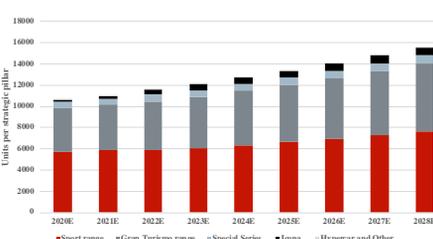
Source: Logos estimate

Revenues Cars & Spare Parts – Exhibit 23



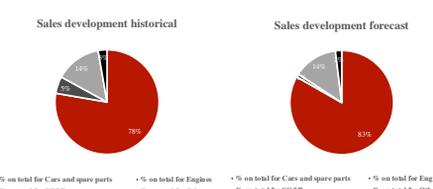
Source: Logos estimate

Shipment breakdown by pillar – Exhibit 24



Source: Logos estimate

Sales development – Exhibit 25



Source: Company data, Logos estimate

Future Analysis

Revenues

A new but still exclusive skin after the end of the industrial plan and beyond. Our Revenues estimates are based on a deep analysis on the dynamics and peculiar characteristics of each Group business unit: (i) **Cars &S.P.** taking into account the price and volume mix between Sport, GT, Special Series, Icona and Hypercars&Others; (ii) **Engines**, where we divide between Revenues from Maserati and F1 activity; (iii) **S.C.&B**, where we explicitly Revenues from Sponsorship, Commercial and Brand activities; and (iv) **Other**, in which we divide between Ferrari Financial Service and Mugello Racetrack Revenues. **Each business unit has thus been explicitly forecasted separately.** According to our estimates, Group Revenues are expected to grow at a +8% CAGR reaching ca. €6bn over the 2019E-2028E period (see Exhibit 22 & Appendix 7).

Cars & Spare Parts. This business is expected to grow at a +8.9% CAGR 2019-2028E and will reach €3,8B in 2022E, increasing its contribution to Group sales from 78% to 83%. **For each model we separately estimated its forecasted % of weight on the total of the whole range as well as its own price** (see Appendix 7 for more details) to arrive at the forecasted Revenues for that specific car model. We distinguish between:

(i) **Sport** series (€2.6bn in 2028E, 15.6% CAGR 2020-2028E). Also if we expect that the historical **weights** within the range models will decrease to 49% to leave room to the GT series in 2028E, we properly modeled the effect of the introduction of 812 GTS, F8 Spider and SF90 models, which increased the **average price** of this series to €340k and thus the segment's Revenues, arriving at €360k in 2028E.

(ii) **GT** series (€1.4bn in 2028E, 25.9% CAGR 2020-2028E). Exploiting the future scenario of GT luxury market, and according to Group's estimate, **we set this series to account 39% of the range in 2022E with an average price of €214k**, drained from the new launch of Ferrari Roma and from the V6 (likely) hybrid Purosangue model. (iii) **Special series** (€191m in 2028E, 2.2% CAGR 2020-2028E). We decided to keep separate this series from the other ones given its strategic feature and setting it to **weight 4% of the range in 2028E**. In particular, the key advantage Ferrari will have been based on the Tailor-Made project and Personalization programs, the latter increasing the retail price of 15-20%. Both these features will boost the average price to €350k per car in 2028E.

(iv) **Icona** series (€1.5bn in 2028E, 147% CAGR 2020-2028E). The introduction of this series will allow the company to boost segment's Revenues, with an average price of €1.6m and a **weight of 4% in 2022E** in our base case scenario, stabilizing them on higher levels (in particular each Monza sales corresponds to the sale of 15 GT Portofinos, according to Bloomberg Intelligence estimates).

(v) **Hypercar & Others** series (€45m in 2028E, 71.6% CAGR 2020-2028E). According to actual and future players in this segment, we expect this series to **weight just 0.1% of the range in 2028E** to preserve the brands' exclusivity, but with a higher price per car reaching €3.2 million per car in 2028E.

Engines. Due to the end of the contract with Maserati expected in 2021E, we anticipate a decrease in Revenues of -15.15% CAGR 2019E-2021E. Regarding the sales from F1 activity, our base case scenario assumes stable Revenues at €71.3m based on actual contracts with other F1 teams.

S.C.&B. This business is expected to grow at a +7.5% CAGR 2019-2028E, strongly increasing its contribution to Group Revenues to €961m from €538m of 2019. The drivers behind this contribution are due to: (i) +6.9% CAGR 2020E-2028E in Sponsorship's Revenues, due to our optimistic view about company's F1 activity; (ii) +2.8% CAGR 2020-2028E in Commercial Revenues, lower than the historical one due to the end of the Corcorde Agreement in 2020E that will result in lower premiums from F1 activity; (iii) A +6% CAGR 2020-2028E in Brand Revenues, drained from the new Brand diversification strategy (ex. Manufacturing agreement with the Giorgio Armani Group, started in 2019).

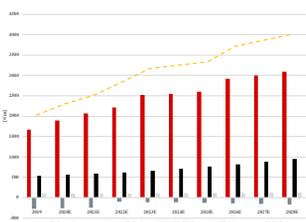
Other: This residual Revenues stream is expected to grow at a +3.4% CAGR 2019-2028E. This increase is mainly driven by the positive relationship between units shipped and financial services provided to U.S. and EMEA clients.

Margins and costs

Given our separate estimates of the consolidated Income Statement among Cars&S.P., Engines, S.C.&B and Other business, allows us to calculate costs and margins according to the peculiarity of each business line. We estimate 2019-2028E values of Gross margin for each segment according to our cost analysis estimates (see Appendix 7 for more details).

Gross margin. (€3.9bn in 2028E equal to 57.7%, +380bp from 2019 to 2028E) This result is mainly driven from: (i) the high-margin Cars&S.P. business (thanks to the introduction of the Icona series, we estimate a GM for this business line to be 44.4% in 2028E); (ii) the conclusion of the contract in 2021E with Maserati that will result in lower industrial costs arising from the production of engines; (iii) the new brand diversification strategy, accounting for a total GM of 57.7% in 2028E.

Gross Profit – Exhibit 26



Source: Logos estimate

R&D. (€1.31bn in 2028E equal to 19%, -50bs from 2019 to 2028) We foresee a 19% R&D margin up to 2022E due to hybridization, Purosangue SUV and F1 expenditures. Our forecasted R&D are higher than Ferrari competitors given the fact that they can have access to their Group's technology (as in the case of Rolls-Royce, Bentley and Lamborghini).

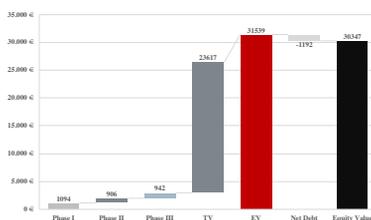
EBIT margin. (€1.9bn in 2028E equal to 28.7%, +470bp from 2019 to 2028E) This outstanding EBIT growth is due to the new Group strategy and new market scenarios, that will allow the company to exploit the higher margins of its new offer in the Cars&S.P. and S.C.&B. segments, and thus to align its EBIT to the one of its luxurious peers (refer to *Relative Valuation* for further details).

Returns and Cash Flows

Returns. Given the new company's strategy, we expect Ferrari N.V. to remain at (above industrial) historical levels reaching 45% in 2022E. Nevertheless, the future highly competitive industrial environment in which we expect the company will operate will stabilize it at more normal levels, moving it at 24% in 2026E.

Cash flows. We estimate Capex to be around €619M in 2021E, mainly due to the new cars' product range and F1 expenses. The Capex are expected to diminish by 230bs in 2022E due to an inferior amount of investments, as stated from the company during 2018-2022E Ferrari N.V. presentation (18th September 2018).

DCF Bridge Analysis – Exhibit 27



Source: Logos estimate

Valuation

We forecast a target year-end price of €163,15 implying a 2.1% upside on 16th 2020 closing price, resulting in a **HOLD recommendation on Ferrari N.V. stock**. First, we evaluate the company growth through a DCF model to take into consideration the change in business driven by the end of sales with Maserati and the new brand diversification strategy, looking also at future market scenarios. To sustain and assess the suitability of our assumption we perform both a sensitivity analysis and a Montecarlo simulation. The relative valuation seems not to support our HOLD recommendation, anyway given the peculiarity of its business not effectively comparable to anyone in the market we believe that Ferrari N.V. should be valued looking at its fundamentals and not at possible irrational market considerations.

WACC Assumption – Exhibit 28

WACC = 6.07%

Parameter	Value	Description
Risk Free Rate	1.05%	Weighted average of 10 years Government Bond yield for EMEA, Americas, China and Rest of APAC based on the Ferrari interest in each area. The average yield for each area is a weighted average of the yield of key countries in terms of shipments based on their 2018 GDP (in USD). (Source: WorldBank and Investing.com as of Feb 16th 2020)
Equity Risk Premium	5.70%	Weighted average of Risk premia for EMEA, Americas, China and Rest of APAC based on the Ferrari interest in each area. The average Risk premium for each area is a weighted average of the yield of key countries in terms of shipments based on their 2018 GDP (in USD). (Source: WorldBank and Damodaran as of Feb 16th 2020)
Beta (β)	0.93	Beta levered estimation based on a bottom-up beta for each of the 4 Ferrari N.V.'s business unit weighted for forward looking revenues estimates weights (Source: Reuters as of Feb 16th 2020)
Ke	6.38%	Capital Asset Pricing Model: Rf+ β*Equity Risk Premium
Kd	1.48%	We estimated the After Tax Cost of Debt as the sum of the risk-free rate and an additional spread (0.98%) linked to the size and the interest coverage ratio of the company. (Source: Damodaran, as of Feb 16th 2020)
Tax rate	27.00%	Company's guidance taking into account the expiry of the Patent Box benefits (Source: Company Data)

Source: Logos estimate

Sensitivity Analysis – Exhibit 29

WACC	Target Price	
	163,15	156,00
6.05%	158 €	157 €
6.07%	161 €	160 €
6.08%	164 €	163 €
6.09%	167 €	166 €

Source: Logos estimate

DCF & Relative Valuation

DCF

We perform a 2 stage DCF model to avoid an overestimation of the long-term growth of the company, resulting in a fair value of €163.2. To calculate the Terminal Value as a perpetuity growth, we think that the company should be in a steady state at the end of the forecasted period.

First stage: 2019 – 2028E: It considers FCFF generated up to 2028E based on our separate estimate of three different future scenarios that the company has to encounter along its way. In particular: (i) The 2019E-2022E period is based on company's guidance data and so the FCFF generated are in line with the detailed forecasts explained in the future analysis; (ii) The 2023E-2025E will be characterized from the cut of emission at (mainly EU) automotive industry level and from the +7.49% CAGR in HNWI population increase; (iii) The 2026E-2028E there will be another cut of emission (but this time) at global level, together with an upside trend of +30% in luxury SUV within the 2030. Given our accurate forward looking estimate of the company's WACC, we consider it to remain at 2020 value.

Second stage – Terminal Value: we calculate the Terminal Value as a perpetuity formula still considering 2020 WACC and FCFF terminal growth of 2%, implying a target price of €163.2.

Relative valuation

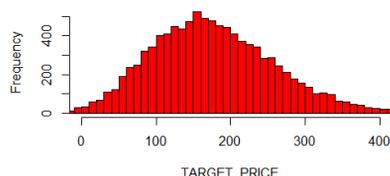
Ferrari closest peers considering product, growth and geography affinity are McLaren and Lamborghini. Here comes the first twist, since the former is a private company and the latter is included in a larger Automotive Group (Porsche SE), operating mainly in lower segment. Other peers included in the Automotive cluster targets a much wider public

showing higher volumes and different performance patterns (in particular, more cyclicality). Those characteristics have a deep influence over the financial and operational structure of Ferrari Automotive Peers which influence their multiples that depart significantly from Ferrari elite levels (see *Appendix 9*). Ferrari has a strong Italian heritage, with high pricing power well reflected in an EBIT Margin of 24%, more than four times its peers' median value (6%) and an EV/Sales nearly six times the median value (0.3%). **It should be clear by now that this is not the correct peer group for Ferrari also if it retains some characteristic of its fellows.**

The only other company where waiting is a pleasure is Hermès, therefore we turn to luxury peers and, as we would expect, values are significantly closer. Some differences still remain, in particular for risk which is reasonably closer to the one of an Automotive company, as Ferrari is after all, having significant higher CAPEX due to the nature of its business. Running a three-factor ordinary-least-square (OLS) regression for EV/EBIT FY2019, we derive an Enterprise Value for FY2020 of 3,2722m, a 31.9x one-year-forward EV/EBIT FY2020 and a related target price of €169.97. **Although the market is pricing higher than our year-end target price arising from the DCF calculation, we do not consider it as a significant indication able to change our HOLD recommendation in the short term.**

*We used median values due to the presence of Porsche as an outlier.

Montecarlo simulation – Exhibit 30



Source: Logos estimate

Automotive Multiples – Exhibit 31

	EBIT Margin	EV/ EBIT 2020E	EV / Sales 2020E	D / E
HMC	5.1%	10.95x	0.60x	86.1%
BMW - FF	9.2%	3.32x	0.31x	150.0%
DAI	5.6%	2.66x	0.20x	224.1%
YOW3	8.4%	2.25x	0.17x	194.7%
GM	3.3%	4.39x	0.29x	270.1%
PAH3	(58.3%)	3.48x	152.60x	0.0%
AML	11.8%	17.47x	2.56x	160.3%
NSU	7.8%	-	-	1.5%
TYO	8.6%	13.04x	1.15x	103.3%
RACE.MI	24.2%	24.66x	5.93x	142.9%
F	2.0%	2.83x	0.14x	429.2%
RNO	6.3%	3.14x	0.20x	149.6%

Source: Facset, Logos estimate

Luxury Multiples – Exhibit 32

	EBIT Margin	EV/ EBIT 2020E	EV / Sales 2020E	D / E
RMS	35.0%	21.31x	7.27x	0.9%
LVMH	21.3%	12.18x	2.62x	34.71%
RL	11.2%	9.56x	1.13x	27.6%
TPR	16.4%	7.98x	1.48x	45.9%
TF	18.0%	11.20x	2.07x	31.8%
SFER	11.7%	15.96x	1.98x	4.9%
MONC	29.2%	13.74x	4.18x	9.0%
CFR	15.2%	11.53x	1.93x	49.4%
BRBY	16.8%	13.34x	2.22x	2.0%
RACE.MI	24.2%	24.66x	5.93x	142.9%
BC	13.8%	25.86x	3.34x	32.1%
TOD	7.8%	14.39x	1.38x	25.0%

Source: Facset, Logos estimate

Risk ranking – Exhibit 33

Risk	Category	Ranking
Competition in Automobiles business	Strategic	1.
Growth strategy	Strategic	2.
General reputational risk	Operational	3.
Raw Material	Operational	4.
Exchange rate	Financial	5.
Recalls	Operational	6.
Intellectual properties	Legal	7.
Unsuccessful model launches	Strategic	8.
Manufacturing facilities disruption	Operational	9.
Internationalization	Legal	10.
AEO compliance	Legal	11.
Tariffs on luxury goods	Macro	12.
Instability in HK region	Macro	13.
Coronavirus and China economy	Macro	14.

Source: Logos estimate

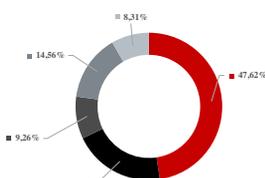
Risk assessment matrix – Exhibit 34

Severity Rating	Likelihood				
	Rare <0,1% chance	Unlikely 0,1% - 10% chance	Possible 10% - 50% chance	Likely 50% - 90% chance	Certain >90% chance
Severely Rating	[9]		[2] [3]		
		[6] [7] [8]	[4]		[1]
	[11] [12] [13] [14]				
		[10]			[5]

Source: Logos estimate

Shareholder's structure – Exhibit 35

■ Exor N.V. ■ Piero Ferrari ■ T. Rowe Price Associates, Inc. ■ Baillie Gifford & Co. ■ Ferrari N.V.



Source: Facset

The intrinsic characteristic of Ferrari activities expose it to several sources of risk. The most relevant unit in terms of revenue generation, as already presented in the *Business description*, is Cars and Spare Parts accounting for 77% (2019), thus events connected with this pillar will have a more severe impact due to ample exposition. We hereby analyze the main threats while remanding to *Appendix 10* for further disclosure.

Macro-economical risks

We tested for correlation between Ferrari performances and the main macro-economical driver (GDP, gini index, inflation, interest) and find no evidence of significant correlation with the selected variables.

[12.]**Tariffs on luxury goods.** In case tariffs will apply to luxury goods all the LPCM will be impacted since none of them is headquartered in America. This region represent 29% of Ferrari 2019 sales, a tariff as announced of 25% on automobiles imports could pose a serious threat to the company. If entirely retained it will cost ca. €247.530.042 in 2020E.

[13.]**Instability in Hong Kong region.** Instability in this region and tension could harm the real estate market from which most of the Hong Kong based billionaires derive their wealth. This could result mainly foster concentration above China while in the short run the *Fifth Protocol of the Double Taxation Avoidance Arrangement between Mainland China and Hong Kong and further legal/tax changes are the main concerns.*

[14.]**Coronavirus and China economic situation.** Ferrari is exposed toward China, Hong Kong and Taiwan, for 8% of its sales which account for 6% of revenues derived by the Cars and Spare Parts revenues but is the market over which LPCM has its eyes on for future growth. A temporary chancing in the deliveries due to a restriction in transportations (assuming that a complete stop occur in 2020) will lead to a reduction in the estimated growth of units shipped of about -0.4% and a -€1.13 DCF target price.

Corporate strategy risks

[1.]**Competition in Automobiles business.** The LPCM is characterized by as little as 11 players of which most have higher volatility (ranging from approximately 1200 up to 5000 points) in sales compared to Ferrari (ca. 900) and its controlled growth strategy. Ferrari could boast a market share of 17%, comparable only to Bentley presence (17%) and Aston Martin (12%) which are exposed to stronger cyclicality in sales. The real threats to Ferrari rock stoned position is the shift toward EVs and increased competition in the Hypercar segment. In a remote case in which Ferrari is no longer able to sell any Icona or Hypercar between 2020 and 2028, then the DCF target price would see a -€20.00 decrease, while if its premium market share decrease to segment avg. (9%)

[2.]**Growth strategy.** Ferrari exclusivity is linked to waiting lists. Although this has proven a winning solution to control growth in a steady and sustainable fashion, allowing to build their current position, it is possible that some changes will be needed. This strategy could limit their potential profits as well as not meet new generations' needs since the average age of Ferrari customer is between 35 - 50 and a request for instantaneous satisfaction characterize potential new public. Changes in the shipment schedule have already been planned but an eventual request for speed up in the process will disrupt much of Ferrari identity.

Operational risks

[3.]**General reputational risk.** Ferrari main asset is undoubtedly its Brand image (see *Appendix 4*), credibility and/or integrity allow them to achieve premium prices. There are several aspect that could be impacted by a decline in the value of the brand: Cars & Spare Parts sales, brand related activities and attraction of new sponsor for F1 not providing coverage for the huge costs incurred in R&D activities (20% of EBIT margin in 2019) and F1 operations.

[6.]**Recalls.** Most recent Takata recall imposed €37m provision and €12m effective funding. Failure by Takata or other key supplier, may cause significant disruption to operations and, needless to say, to brand image. In 2018 Ferrari registered a non-recurrent cost of €1m connected to the recall.

[9.]**Manufacturing facilities.** All cars and all engines used or sold to Maserati are manufactured at the Maranello production facility, where also corporate headquarter and Scuderia Ferrari could be found. Chassis are made in the nearby facility in Modena. Activities are therefore concentrated in a small area and in the event that Ferrari would be unable to continue production, alternative facilities in other regions are not present. An interruption to normal operation due to natural catastrophes, assuming a 80% decrease in Cars and Spare Parts revenues in the first year (2020E) and a progressive return to standard level, the DCF target price would shrink by -€16.56.

[4.]**Raw material.** Ferrari use a variety of raw materials including aluminum and precious metals such as palladium or andrhodium. In order to define the magnitude of the impact of price fluctuation, we performed a log linear regression (see *Appendix 9*) of revenue against typical car constituents: aluminum & light alloys, iron & steel, plastic and glass. The only significative influence is given by aluminum & light alloys for which an increase in prices would result in a decrease in revenues meaning that Ferrari is not able to charge the entire increase on Cars prices.

Financial risks

[5.]**Forex.** Ferrari is exposed to extra UE countries for 52% of its 2019 shipments. Historically the areas outside Euro has always accounted for approximately 55% of which the main foreign currency exposure is USD (57% of total currency risk in 2018). Considering a 98% VaR the loss versus USD is €0.3m, GPB €1.14m while for CNY it results in a gain due to depreciation in connection with Coronavirus spread. The company use derivative instruments as cash flow hedges to fix foreign currency exchange rate at which a predetermined proportion of forecasted transactions denominated in foreign currencies will be accounted for. Therefore, operations are not fully exposed to fluctuations.

Legal risks

[7.]**Intellectual property.** Trademarks and other intellectual property rights are fundamental to Ferrari success and market position. If a third party were to register their trademarks (eg. Dispute for Purosangue), or similar, it could create a barrier to entrance and an earning loss also if from historical analysis we did not detected relevant losses in conjunction with legal disputes regarding patent issues.

Valuation Risks

Methodology risk. Main risk is not being able to correctly assess the LT future outcomes given the structure of our model in terms of company's margin, company's expansion and sector potential. Given the peculiarity of its business, we believe that Ferrari N.V. should be valued looking at its fundamental, and not at possible irrational market

Corporate Governance

Ferrari define its Corporate Governance structure and composition in compliance with the *Dutch Corporate Governance Code(DCGC)*. In an effort toward independency and transparency, the Board of Directors comes for reelection every year, during the Annual General Meeting of Shareholders where a bound to four consecutive mandate apply to independent members. Ferrari Board of Director count twelve members, of which ten Non-Executive and two Executives, Louis C. Camilleri as Chief Executive Officer and John Elkann Chairman and Executive Director.

Social Responsibility

The Governance & Sustainability Committee is the one in charge of social responsibility matters. The ESG valuation (see *Appendix 11*) denote ample room for improvement: (i) high quality demand attention to detail with wastefully approach to materials in the chasing of perfection, (ii) idle implementation of alternative powertrains, (iv) low salaries compared to Industry avg. and (v) no tightening between ESG performance and Management compensation plans. The upside, is an effort toward green energy production and an attention to Supply Chain, in accordance with the OECD Guidance. Still, being a trending topic Ferrari should pursue excellence also in this fields in order not to leave room for competitors to damage its reputation and introduce newer threats to its mightiest position.

Mutiples members (53% absent of possible conflict of interest) of the Board are connected to Ferrari not only by means of their office but also due to relevant interest in companies closely related with Ferraris' activities, therefore conflict of interest may easily arise. In particular, we underline the connection of John Elkann with Exor N.V. and FCA, along with Louis C. Camilleri and Philip Morris, not surprisingly the main Scuderia Ferrari sponsor. Main deviation from DCGC are: (i) the presence of more than one member holding over 10% interest in related companies, (ii) the lack of a retirement schedule and (iii) chairing of Audit Committee by means of an Executive. In addition, the distribution of voting rights follows a preferential "loyalty" approach, giving Exor N.V. and Piero Ferrari double power. Three Internal Committee are in place: Audit, Compensation and Governance & Sustainability.

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1. Product description

Range	Strategic Pillar	Model	Image	Engine	Technical characteristics	Power	Similar models
Road Cars	Sport	812 Superfast		F140 GA aspirated V12	The 812 Superfast is powered by a new 6.5-liter V12 engine, capable of delivering 800 hp, with the maximum power reached at 8500 rpm and a specific power of 123 Hp/l, values never obtained in the past by front engines on standard cars that enhance the feeling of extreme sportiness.	800Hp	Lamborghini Aventador SVJ 60 Roadster, McLaren 720s, Ford GT, Honda NSX, Porsche 911 GT3 RS, Mercedes AMG GT R, Aston Martin DBS Superleggera, Audi R8 V10 Performance Quattro
		812 GTS		F140 GA aspirated V12	Spider version of Ferrari 812 superfast.	800hp	Lamborghini Aventador SVJ 60 Roadster, McLaren 720s, Ford GT, Honda NSX, Porsche 911 GT3 RS, Mercedes AMG GT R, Aston Martin DBS Superleggera, Audi R8 V10 Performance Quattro
		SF90 Stradale		PHEV 4.0/biturbo V8	First hybrid car produced by Ferrari. The hybrid engines ensures 25km in electric mode, and also allow the car to reach 135 km / h top speed without using the petrol engine.	999Hp	Lamborghini Aventador SVJ 60 Roadster, McLaren P1, McLaren Senna, Bugatti Veyron Grand Vitesse, Porsche 918 Spyder, Koenigsegg Jesko, Pagani Huayra
		F8 Tributo		Ferrari 3.9/biturbo V8	Equipped with a V8 engine, is to be considered as the Ferrari with the best V8 ever produced. The engine is capable of developing about 50 more Hp than previous versions of Ferrari with a V8 engine.	720hp	Lamborghini Huracan Performante, McLaren 720s, Porsche 911 GT2 RS, Mercedes AMG R, Aston Martin DB11 Coupé, Audi R8 V8 Coupé, Bentley Continental GT
		F8 Spider		Ferrari 3.9/biturbo V8	Spider version of Ferrari F8 Tributo.	720hp	Lamborghini Huracan Performante, McLaren 720s, Porsche 911 GT2 RS, Mercedes AMG R, Aston Martin DB11 Coupé, Audi R8 V8 Coupé, Bentley Continental GT
	Gran Turismo	GTC4Lusso		Ferrari 3.9/biturbo V8	The first 4 doors Ferrari with shooting brake car body.	690hp	Rolls Royce Wraith, Rolls Royce Ghost, Bentley Continental GT, Mercedes S 63 4 Matic, Aston Martin DB11, Porsche Panamera S E-Hybrid
		GTC4Lusso T		F140 ED aspirated V12	The first 4 doors Ferrari equipped with V12 engine, and with the system 4WS. Against the previous version we can find more performance.	610hp	Rolls Royce Wraith, Rolls Royce Ghost, Bentley Continental GT, Mercedes S 63 4 Matic, Aston Martin DB11, Porsche Panamera S E-Hybrid
		Ferrari Roma		Ferrari 3.9/biturbo V8	Ferrari Roma is the new GT model launched by Ferrari. This type of Ferrari enhances the performance of the V8 engine which delivers 620 Hp and at the same time respects all the most stringent standards in terms of emissions and consumption.	620hp	Aston Martin Vantage, McLaren GT (2020), Porsche 911 GT3
		Portofino		Ferrari 3.9/biturbo V8	It is one of the most appreciated products for its style, shape and price.	600Hp	McLaren 570s, Porsche Panamera S, Audi R8 V8 Performance, Mercedes AMG GT
	Special Series	488 Pista		Ferrari 3.9/biturbo V8	Elected supercar of 2019, it is one of the best performing products ever produced by the Maranello company.	720hp	Lamborghini Aventador SVJ 60 Roadster, McLaren 720s, Ford GT, Honda NSX, Porsche 911GT3 RS, Mercedes AMG GT R, Aston Martin DBS Superleggera, Audi R8
		488 Pista Spider		Ferrari 3.9/biturbo V8	Spider version of Ferrari 488 Pista.	720hp	Lamborghini Aventador SVJ 60 Roadster, McLaren 720s, Ford GT, Honda NSX, Porsche 911GT3 RS, Mercedes AMG GT R, Aston Martin DBS Superleggera, Audi R8 V10 Performance Quattro
	Icona	Ferrari Monza SP1		aspirated V12	Produced for only 500 customers, Ferrari Monza SP1 is the first model of the Icona series, a unique model of its kind thanks to the absence of the roof and the shape of a car of the past with an eye to the future. Version with one seat.	810Hp	McLaren Elva (2020)
		Ferrari Monza SP2		aspirated V12	Same version of Ferrari Monza SP1 with two seats rather than one.	810Hp	McLaren Elva (2020)
	Hypercars & Others	The XX Programme	FXX K EVO		aspirated V12	Track Car	1050Hp
Ferrari Challenge		488 Challenge Evo		Ferrari 3.9/biturbo V8	Track Car	660Hp	Ferrari 488 Challenge Evo
Racing Cars		488 GTE/GT3 Evo		Ferrari 3.9/biturbo V8	Track Car	670Hp	

Source: Company data, Logos estimate

Engine	Image	Technical characteristics	Specific	Power
Ferrari 3.9/biturbo V8		Maximum performance immediate response performance soundtrack. Power at 8000rpm Torque 760nm at 3000rpm Twin scroll turbine: for rapid Spool up and optimal turbo pressure Ball - bearing mounted turbo rotor: minimizes friction loss Long and equidimensional exhaust manifold: 240mm length Specific aspiration and exhaust design: immediate bypass valves opening in race position	Displacement: 3902 cc Specific power: 172hp-l Max Power: 720hp Max Torque: 760nm Emissions: 260g CO2 Engine respons time: 0,8 sec	720hp
PHEV 4.0/biturbo V8		Same engine of the Ferrari 3.9/biturbo V8. The main difference inside this type of engine is, that this engine is equipped on the Ferrari SF90 Stradale the first Hybrid Ferrari with 3 engines (1 Normal V8 + 2 Electric engine). The 2 electric plug-in engines permit to do 25km in full electric mode, and also helps the primar engine to deliver more horse power when the normal engine is working.	Displacement: 3990 cc Specific power: 172hp-l Max Power: 720hp Max Torque: 760nm Emissions: 95g (mixed) CO2 Engine respons time: 0,4 sec	999hp
F140 GA aspirato V12		The F140 engine family is a series of 65° DOHC V12 petrol engines produced by Ferrari since 2002, and used in both Ferrari and Maserati cars. This is one of the most famous engine ever produced by Ferrari.	Displacement: 5998 cc Specific power: 127,75hp-l Max Power: 800hp Max Torque: 690nm Emissions: 340g CO2 Engine respons time: 0,9 sec	800hp

*Ferrari 3.9/biturbo V8 was awarded "International Engine + Powertrain of the year 2019" and "Best Performance Engine"

Source: Logos estimate

2. Porter's Five Forces

Porter's 5 Forces		Automotive
Internal rivalry	Concentration	The Luxury Performance Car Market has moderately concentration (HHI = 1269 and C4 = 60%). There are 11 Automaker considering GT and Sports Cars with power above 500hp, and retail price above €150,000 (including VAT). The Hypercar segment is highly concentrated (HHI = 11507067, 3 players) also if competition is arising from larger automotive companies namely: (i) Aston martin (Valkyrie), (ii) Mercedes (Project ONE), (iii) BMW, Bentley (Centenary edition), (vi) Lamborghini (Sián), (v) Jaguar (C-X75), (vi) Porsche (coming in 2025), (vii) Audi and (viii) Nissan (GT-R50).
	Size of competitors	In top 22 Markets Ferrari is the winning player with its 17% market share (19% in the sport car segment and 14.5% in GT segment) along with Bentley (another 17%) . The others top participants are Porsche (13%) and Aston Martin (12%) followed by Lamborghini (10%) .
	Industry Growth	The Sport Cars Segment is expected to have a moderate global growth, with a CAGR of 6.19% 2019-2022E (source: Marketwatch.com). Ferrari find itself in a Dog market, a mature industry with relatively small market share. Growth is expected to be lead by HNW and UHNWI increase in APAC region where Ferrari (11% market share) is left outside the podium where Bentley (19%), Rolls-Royce (17%) and Porsche (16%) stands.
	Industry life cycle	The industry is heading into a restructuring phase. CASE mobility with its several decline will profoundly change the Industry. Larger automotive groups (eg. Daimler AG and BMW AG) have signed a MoU in order to create synergies for the development of new technologies , while Ferrari most likely would not engage in such relationships eventually dealing with higher costs (shared instead with F1 and FE R&D). Regulation is key in determining the direction and timing of technical innovation as well as demographic changes in the age/level of HNW and UHNWI .
	Fixed costs	The Luxury Performance Car Market is characterized by high fixed costs in order to maintain and develop excellence and be recognize as a Premium Company. Cyclicity of sales and low volume of Ferrari's production could put tension on its liquidity and profitability. (EBITDA / EBIT?)
	Product differentiation	Clients are becoming increasingly demanding, searching for continuative and permanent value from their purchase. Differentiation between product is low and therefore is achieved through customization and immersive after-sale experiences looking at the implicit needs of clients in order to enhance the appeal of the brand and attract youthful and brand-conscious HNW.
	Diversity of competitor	Geographical differentiation is low since firms are present to a different degree in the same markets. Ferrari is the champion of EMEA (27% market share), but is second in America (37% market share goes to Lamborghini) and even behind in APAC. Products do have different technical characteristics while design is frequently based on similar fundamental elements that recall the speed concept. R&D spending is increasing with a CAGR of 7% 2013-2018 , mirroring a deep need for change. Luxury Car segment include both large automotive companies as well as small producers exclusively focused on this segment (as Ferrari is). Other differences could be found in the participation to F1 or other circuit (Formula E and GT Races) with the possibility to exploit knowledge and brand image return.
	Exit barriers	The Luxury Performance Car Market is characterized by high fixed costs and a high degree of specialization. Components are specifically developed in house or by third parties to meet the technical needs of single participants in the market, imposing severe limits to a possible dismissal.
Buyers power	Buyer concentration (number, size)	Dealers are franchisee , not directly own by the companies. Ferrari's dealer network is above the overall Luxury Performance Car Market considering market presence (60 markets against 48avg.) and number of authorized dealers (167 against 142avg.).
	Buyers profit margins	Dealers have an EBITDA margin equaling approximately 3% with reported profits of £3m (considering United Kingdom dealers as proxy).
	Use of multiple sources	Dealers in some cases sell both new and pre-owned cars, comprising other brands. Ferrari impose strict requirement in term of presence, requiring a minimum amount of models to be displayed.
	Buyer's switching costs	Switching costs are high due to specialization and contractual obligation.
Supplier's power	Supplier concentration (number, size)	Ferrari has 34 suppliers , ZF Friedrichshafen AG (1,5% of COGS) is the principal while others account for less than 1% therefore there is low concentration among them also if, due to high specialization, their contribution could be critic.
	Switching cost for supplier's products	Switching costs are high due to specialization. Actual producer are nearly the same for the whole industry, alternatives would be difficult to find.
	Dependence on the industry	Suppliers are generally present in more than one industry, typically trucking and aerospace. There are suppliers dependent on mass automotive manufacturers (cumulatively account for up to 70% of their earnings).
	Supplier's contribution to quality of product or service	The Luxury Performance Car Market and partially new entrants like Tesla Inc share most of the suppliers. Competitive advantages among them are not linked to single components but rely mostly on product design, engine and brand reputation. In this sense a key supplier for Ferrari is Coxa SpA (chairman Piero Ferrari) of which Ferrari represent 38% of revenues, therefore creating strong dependence of the former.
Forward integration	Large components suppliers (Magna International is an example) are able to integrate through M&A operations, although they won't likely become new competitors due to brand reputation importance and capital intensity.	
Threats of new entrants	Switching costs	Luxury Performance Car Market is characterized by high levels of customer loyalty. This aspect rise the switching costs to levels that are considered almost impossible to cut due to the comprehensive (and demanding) experience that companies give to their customers.
	Capital requirements	New entrants need high level of capital to implement and efficient strategy and stay ahead of R&D costs (recalling that those are also following an increasing trend). The mise en place of an entrance strategy could be risk and ineffective thus being inconvenient.
	Access to distribution /inputs channels	Access to distribution channels and to agreements with retailers are difficult due to the consolidated positions and power of present companies.
	Cost advantage	Veichles producing high emissions and not respecting the boundaires imposed, requiring product improvement, are a form of cost advantage for new entrants that could enter directly with new technologies in place.
	Legal and regulatory barriers	Paris Agreement fixed 0 g/km target for car emissions by 2050 requiring companies to advance technologies and favouring Evs.
	Expected retaliation from existing players	Luxury Performance Car Market participant are already introducing hybrid cars and planning to introduce electric models (no discussion has been made for a Ferrari electric model due to concerns related to brand recognition) potentially rising their market share, excluding or at least eroding margins for external players like Tesla.
Threat of substitutes	Potential substitutes	Evs producers could be a serious threat for the Luxury Performance Car Market. Tesla gained a 15% market share in the Sport Car segment. Pressure is made in particular by possible joint-venture between Hyper-car and Evs makers like the union of Koeningsegg and NEVS.
	Relative price	Price competition is not relevant since the drivers for choice are others. High prices are connected with the necessity from the Luxury Performance Car Market to represent a status-quo symbol. Nevertheless, EVs could earn higher margin leveragin on the compared lower price considering the product lifecycle.
	Buyer propension to substitute	Millenials and Generation Z are no longer devoted to the same company. They change according to the brand that reflect them the most. A continuous research and innovation will be needed to win this target.
	Perceived differentiation / quality	In 2020 ICEs will still account for more than 90% of cars. OEMs will have to continue developing more advanced ICEs while investing in alternative powertrain technologies to meet future emissions targets and most of all, the request of demand which is increasingly shifting towards brands that better reflects their attention to environmental issues.

Source: Logos estimate

Altman Z - score

Company	Listed			Private						
	Ferrari	Aston Martin	Bentley	Lamborghini	McLaren	Porsche	Rolls Royce	Bugati	Pagani	Koenigsegg
Z-Score	4.8	2.10	-1.38	0.83	1.06	1.37	1.91	0.91	1.42	0.65

Source: Logos estimate

We performed an Altman Z-Score analysis in order to measure the financial health and related probability of default of Ferrari and its competitors within one year. Ferrari presents the highest score meaning an almost certainty of non-bankruptcy while the situation is far more uncertain for the others, in particular for the private ones. This superior position comes from Ferrari great liquidity and financial strength.

3. SWOT Analysis

Strength	<p>Elitarian brand with strong reputation and recognition as synonymous with excellence.</p> <p>Loyal customer base built with specific customer policies and reward of fidelity to the brand.</p> <p>Racing Heritage benefiting Ferrari brand image (it is the only constructor to be in F1 since the beginning).</p> <p>Leading edge engineering capabilities and high R&D investment (19.2% R&D intensity) in F1 from which Ferrari transfer innovation and know-how, creating synergies between F1 segment and automobiles development.</p> <p>Flexible and efficient development and production process</p> <p>Sound and resilient financial performances with consistent liquidity at their disposal.</p> <p>Continuous renewal of product offering that stimulate customer demand.</p> <p>All models are highly customizable with a range of interior and exterior options (escalating from personalization program, special equipment, tailor-made to one-off designed entirely by the customer in collaboration with Ferrari's design team).</p> <p>Use of licensing and diversification strategy with several collateral activities like customer racing programs, theme parks, branded apparel and products.</p>
Weaknesses	<p>The interests of Jhon Elkann, may differ from the ones of other shareholders and have potential conflicts of interest with FCA and Exor.</p> <p>The interests of Piero Ferrari (minority shareholder) may differ from the ones of other shareholders and have potential conflicts of interest COXA S.p.A., HPE S.r.l.</p> <p>Competitors which are part of larger automotive groups (Daimler, Volkswagen, Ford, Honda) may have larger financial resources, from various sources, achieving a higher level of flexibility in planning product launches and capital spending over time.</p> <p>Larger automotive groups may have more bargain power with supplier due to low volume requests of Ferrari.</p> <p>High level of specialization of employees connected to consistent training costs and a need to retain personnel in order to preserve technical superiority.</p> <p>Lack of full Electric vehicles. Ferrari has not planned to launch EVs but exclusively an hybrid model: the SF90 Stradale.</p> <p>High dependence on mature markets as EMEA and Americas.</p>
Opportunities	<p>Increase market penetration in emerging countries and APAC where the bulk of HNW growth happened (+92% in 2011-2018 compared to a global +62%, Capgemini).</p> <p>New and regular model launches to continuously boost demand and meet changes in preferences.</p> <p>Pursue excellent results in Formula 1 to enhance brand value and appeal.</p> <p>Diversification and clearer focus in connected luxury and lifestyle categories.</p> <p>Design and development of EVs.</p>
Threats	<p>Brand image in the long term may be impacted by negative Formula 1 performances. Though, there is no sign of correlation between wins and sales.</p> <p>Brand image depends also on the automobile collectors and enthusiast community.</p> <p>Waiting lists and a long waiting periods (6 months to 5year) could negatively impact sales also due to new habits in buying experience.</p> <p>Technology disruption in the Luxury Car Market.</p> <p>Consistent shift towards HEVs and EVs.</p> <p>Engine revenues will depend on the ability of Maserati to sell its cars in the next year (contract expiring).</p> <p>New type of buyer personas (women, Millennials and Gen Z) may disrupt the traditional demand behavior with a shift in client preferences.</p> <p>Volatility of Luxury goods demand and exposure to macro-economic trends.</p> <p>Single source supplier may fail to deliver spare parts and/or impose higher costs due to the relative position and bargain power of Ferrari.</p> <p>Failure in retention and succession plans of Scuderia Ferrari may result in a loss of key skill that in turn will impact performances and ultimately brand image.</p> <p>Delays or the inability to enter new key markets will adversely affect Ferrari position.</p> <p>Presence in a wide range of markets expose Ferrari to threats of non-compliance with laws, regulations, local standards (including tax) and codes which could affect product development and distribution.</p> <p>Environmental, fuel economy, vehicle safety and noise emission concerns may have a significant effect on costs of operations.</p> <p>Presence in a wide range of markets expose Ferrari to threats associated with exchange rate fluctuations, interest rate changes, credit risk and other market-specific risks.</p> <p>Misconduct of dealers in their network, employees, agents, or other representatives may harm Ferrari revenues and reputation.</p> <p>Dependence on manufacturing facilities in Maranello and Modena.</p> <p>Dependence on the strength of their trademarks and other intellectual property rights.</p> <p>Car recalls, liability claim, warranties may be costly and harm reputation.</p>

Source: Logos estimate

4. Marketing Mix

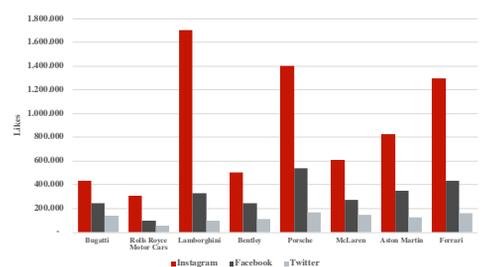
Marketing Mix	Product	Luxury Performance Cars.
	Price	The entry price is close to 200.000 euros (first customer selection) and is not displayed in the Ferrari.com site, choosing a non-pricing strategy that allows the potential customer to focus on the aesthetic and experiential side of their purchasing , thus allowing Ferrari to separate value from price and putting it into context. Ferrari provide a suggested retail price or a maximum retail price to dealers that are free to negotiate different prices with clients and to provide direct or indirect financing. Price is not driven by demand and supply that is itself controlled by Ferrari through the use of waiting lists.
	Promotion	<p>Ferrari pursue a no-advertising policy relying on other activities to enhance its attractiveness:</p> <ul style="list-style-type: none"> • Formula 1: Scuderia Ferrari Mission Winnow is the only constructor that has taken part to all the Formula 1 World Championships (Longest Standing Team). Its brand image is tied to the victories in the F1 Championship, where all the people see the Ferrari's supremacy and started to associate the brand to excellence in the field of speed and racing. Formula 1 attendance (4.1 million in 2019) have been growing 4% on average 2015-2019 slowing down in last years but paired with a growth in TV and digital audience of about 3% (1.7 billion). • GT Races: Ferrari won its first 24h of Le Mans in 1949 and since then it has won 24 constructor titles in FIA Championships and 5 World Endurance Championship Cup (last in 2017). • Client selection: Ferrari along with Hermes is the only Luxury company to use waiting lists. They select their clientele based on representativeness of brand and further segmenting between normal and loyal customers. Clients are the first brand ambassador and are selected through a background check with a target towards famous personalities and celebrities globally. • Private events: selected clients are invited to presentations and other events in luxurious locations. This selection and the activity in which clients are involved, enhance the aura of exclusivity of Ferrari. • Retail store: 35 retail Ferrari stores of which 17 franchised stores (including 5 Ferrari Store Junior) and 18 stores owned and operated. Recently Ferrari signed a partnership with Armani to produce both clothing and accessories and had planned to review all the collateral product lines (reduction of about 30% planned), reducing the numbers of shops and licenses (of about 50%). This action is made in order to further states the brand exclusivity (DNA Ferrari and customized client products), but also "inclusivity" focusing on Made in Italy. • Museums & Theme parks: the Maranello and MEF Museums celebrate Ferrari's Heritage and Italian DNA. The number of visitors have been steadily increasing with an average 10% growth. Ferrari World in Abu - Dhabi and Ferrari Land in PortAventura are both licensed parks (YAS & PortAventura Entertainment) on which Ferrari gets 12% of revenues. Ferrari World won the World's Leading Theme Park and other awards, the park was open in 2010 and after several request, Ferrari decided to open a second theme park: the Ferrari Land. • Corse client: in order to strengthen its brand image and give a comprehensive experience, Ferrari designed a series of activities specifically thought for its customers and coordinated by the Ferrari Corse Client Department. This department is in charge to organize the Trofeo Pirelli reserved to official dealers network, support previous customer in the GT Championship, and manage non-competitive activities as F1 Clienti and XX Programmes.
	Place	Events and a dealer network that covers 60 markets worldwide are the main touchpoint were selling are made. Ferrari cars are sold exclusively through this network of authorized dealers (with the exception of one-offs and track cars which they sell directly to end clients) which are not directly owned by Ferrari. In larger markets they act as importer either through wholly owned subsidiaries or, in China, through a subsidiary partly owned by a local partner, and sell the cars to dealers for resale to end clients. In smaller markets Ferrari generally sell the cars to a single importer/dealer. A regularly assessment of the composition of the dealer network is made in order to maintain the highest level of quality. Rigorous design, layout and corporate identity guidelines guarantee uniformity of the Ferrari image and client interface.
	People	A careful and strict selection of dealers is a key factor for promoting the integrity and success of the brand. The selection criteria are based on the candidates' reputation, financial solidity and proven track records. Other criteria are connected with choosing dealers who are able to provide a purchase and after-sales experience aimed at exceeding clients' high expectations. Through in-house Ferrari Academy it provide training to dealers for sales, after-sales and technical activities.

Source: Logos estimate

Ferrari largely relies on its well-known brand, recognized by Brand Finance as the most powerful brand in the World. Its ability to achieve premium prices is connected with a clear Marketing strategy: maximize the appeal of the Ferrari brand by engaging in activities that picture the image of Ferrari declination of Luxury in the mind of their prospect customers.

We deepen our Marketing Mix analysis by closer looking at the social presence of Ferrari and its competitors. Social networks are increasingly the natural showcase for luxury brands, in particular focusing on attracting future customer from Gen Y and Z. Lamborghini is the clear winner in the race to web recognition with Porsche and Ferrari closely following its way.

Number of likes by social



Source: Companies social networks, Logos estimate

5. Financial Analysis

Income statement

Amounts in Millions of Euro	2014A	2015A	2016A	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Net sales	2762.36	2854.37	3105.08	3416.89	3420.32	3766.00	4120.66	4439.57	4665.66	5169.41	5412.40	5690.71	6251.59	6594.53	6957.09
Growth	-	3.33%	8.78%	10.04%	0.10%	10.11%	9.42%	7.74%	5.09%	10.80%	4.70%	5.14%	9.86%	5.49%	5.50%
Cost of goods sold	-1505.889	-1498.806	-1579.69	-1650.86	-1622.904851	-1736.51	-1814.07	-1931.28	-1832.04	-1991.41	-2164.80	-2353.46	-2535.24	-2731.28	-2942.68
Gross profit	1256.47	1355.56	1525.39	1766.03	1797.42	2029.49	2306.59	2490.86	2826.07	3148.91	3231.98	3316.75	3542.00	3837.61	3984.02
SG&A	-300.09	-338.63	-295.24	-329.07	-327.34	-374.40	-439.88	-466.15	-473.56	-551.83	-568.30	-577.61	-667.36	-692.43	-706.14
% on sales	-10.86%	-11.86%	-9.51%	-9.63%	-9.57%	-9.94%	-10.68%	-10.50%	-10.15%	-10.68%	-10.50%	-10.15%	-10.68%	-10.50%	-10.15%
R&D	-540.83	-561.58	-613.64	-657.12	-643.04	-735.49	-816.92	-865.72	-879.48	-1024.84	-1055.42	-1072.70	-1239.38	-1285.93	-1311.41
% on sales	-19.58%	-19.67%	-19.76%	-19.23%	-18.80%	-19.53%	-19.83%	-19.50%	-18.85%	-19.83%	-19.50%	-18.85%	-19.83%	-19.50%	-18.85%
Other expenses and income	-39.19	-33.137	-24.501	-6.867	-3.195	-5.00	-5.02	-5.02	-5.02	-5.02	-5.02	-5.02	-5.02	-5.02	-5.02
Results from investments	13.11	22.10	3.07	2.44	2.67	2.40	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72
EBITDA	389.47	701.13	880.13	1023.13	1087.11	1202.59	1487.04	1706.17	2097.65	2280.87	2320.80	2088.23	2180.52	2207.98	2342.10
Margin	14.10%	24.56%	28.34%	29.94%	31.78%	31.93%	36.09%	38.43%	44.96%	44.12%	42.88%	36.70%	34.88%	33.48%	33.66%
D&A	-	256.81	285.04	247.72	260.61	285.59	439.55	532.06	619.38	681.84	699.22	403.59	373.20	325.38	347.54
% on sales	-	9.00%	9.18%	7.25%	7.62%	7.58%	10.67%	11.98%	13.28%	13.19%	12.92%	7.09%	5.97%	4.93%	5.00%
EBIT	389.47	444.32	598.08	775.42	826.51	917.00	1047.49	1174.12	1478.28	1599.03	1621.58	1684.64	1807.32	1882.59	1994.56
Margin	14.10%	15.57%	19.16%	22.69%	24.16%	24.35%	25.42%	26.45%	31.68%	30.93%	29.96%	29.66%	28.91%	28.55%	28.67%
Net financial (expense) income	8.765	-10.151	-27.729	-29.26	-23.563	-26.85	-28.48	-29.90	-31.40	-32.97	-34.62	-36.35	-38.16	-40.07	-42.08
EBT	398.23	434.17	567.35	746.16	802.94	790.15	1019.01	1144.22	1446.88	1566.06	1586.96	1648.29	1769.15	1842.52	1952.48
Taxes	-133.218	-144.115	-167.645	-208.76	-163.17	-130.91	-167.13	-208.94	-390.66	-422.84	-428.48	-445.04	-477.67	-497.48	-527.17
Tax rate	-33.45%	-33.19%	-29.55%	-27.98%	-2.03%	-18.56%	-27.00%	-27.00%	-27.00%	-27.00%	-27.00%	-27.00%	-27.00%	-27.00%	-27.00%
Net Revenues	265.02	290.05	399.71	537.40	786.63	659.24	743.88	835.28	1056.22	1143.23	1158.48	1203.25	1291.48	1345.04	1425.31
Non controlling interests	-3.64	-2.24	-0.96	-2.00	-1.95	-3.12	5.45	5.45	5.45	5.45	5.45	5.45	5.45	5.45	5.45
Net profit	261.37	287.82	398.75	535.39	784.68	696.88	749.33	840.73	1061.67	1148.68	1163.94	1208.71	1296.93	1350.49	1430.76
Growth		10.12%	38.54%	34.27%	46.56%	-11.32%	7.68%	12.20%	26.28%	8.20%	1.33%	3.85%	7.30%	4.13%	5.94%
Margin	9.46%	10.08%	12.84%	15.67%	22.94%	18.48%	18.18%	18.94%	22.76%	22.22%	21.50%	21.24%	20.75%	20.48%	20.57%

Source: Company data, Logos estimate

Balance sheet

Amounts in Millions of Euro	2014A	2015A	2016A	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Assets															
Goodwill	787.18	787.18	785.18	785.18	785.18	785.18	785.18	785.18	785.18	785.18	785.18	785.18	785.18	785.18	785.18
Intangible assets	265.262	307.81	354.394	440.456	645.797	968.70	1079.91	1131.93	1090.53	871.06	543.49	534.94	464.56	337.75	148.42
PP&E	585.185	626.13	669.283	710.26	850.55	1005.48	1043.29	1078.23	1058.16	1027.15	983.78	926.52	876.84	1053.86	1085.47
Investment and other financial assets	47.43	11.84	33.94	30.04	32.13	32.04	32.04	32.04	32.04	32.04	32.04	32.04	32.04	32.04	32.04
Deferred tax assets	111.72	122.62	119.36	94.09	60.74	91.40	82.08	82.08	82.08	82.08	82.08	82.08	82.08	82.08	82.08
Inventory	296.01	295.44	324.00	393.77	391.06	412.43	433.56	461.57	437.85	475.94	512.08	562.47	605.91	652.77	703.29
Trade receivables	183.64	158.17	243.98	239.41	211.40	250.06	273.89	298.09	310.12	343.60	359.75	378.25	415.83	438.32	462.42
Receivables from financing activities	1224.45	1173.83	790.38	732.95	878.50	890.24	995.83	1072.90	1127.53	1249.27	1308.00	1375.25	1510.80	1593.68	1681.30
Current tax liabilities	3.02	15.37	1.31	6.13	128.23	30.81	30.81	30.81	30.81	30.81	30.81	30.81	30.81	30.81	30.81
Other current assets	52.05	46.48	53.73	45.44	64.30	65.27	69.95	75.37	79.20	87.76	91.88	96.61	106.13	111.95	118.10
Current financial assets	8.75	8.63	16.28	15.68	10.17	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
Cash and cash equivalents	1076.75	321.93	457.78	647.71	793.66	898.00	914.97	1198.83	1805.12	2605.17	3928.05	4933.72	6003.57	7014.82	8332.27
Total assets	4641.43	3875.40	3849.60	4141.10	4851.73	5441.49	5753.40	6255.92	6850.53	7601.96	8674.34	9749.77	10925.35	12145.15	13473.28
Equity															
Total Equity	2478.31	-19.40	329.81	783.94	1353.84	1472.12	1651.22	1919.51	2381.33	2843.15	3665.70	4477.40	5329.29	6255.98	7273.96
Liabilities															
Employee benefit	76.81	78.37	91.02	84.16	86.58	86.58	86.58	86.58	86.58	86.58	86.58	86.58	86.58	86.58	86.58
Provisions	134.77	141.85	215.23	197.39	182.54	209.92	226.71	244.85	254.64	264.83	275.42	280.93	286.55	292.28	298.13
Deferred tax liabilities	5.37	12.60	10.52	9.89	39.14	15.55	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50
Debt	510.22	2260.39	1848.04	1806.18	1927.17	2090.00	2194.50	2304.23	2419.44	2540.41	2667.43	2800.80	2940.84	3087.88	3242.28
Other liabilities	670.38	654.78	656.28	620.35	589.74	781.38	812.63	875.52	920.11	1019.45	1067.37	1122.26	1232.87	1300.50	1372.00
Other financial liabilities	104.09	103.33	39.64	1.44	11.34	51.97	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94
Trade payables	535.71	507.50	614.89	607.51	653.75	665.21	672.81	716.28	679.47	738.58	802.89	872.86	940.27	1012.98	1091.39
Current tax payables	125.76	135.97	44.19	30.25	7.64	68.76	54.51	54.51	54.51	54.51	54.51	54.51	54.51	54.51	54.51
Total liabilities & equity	4641.47	3875.44	3849.62	4141.11	4851.74	5441.51	5753.40	6255.92	6850.53	7601.96	8674.34	9749.77	10925.35	12145.15	13473.28

Source: Company data, Logos estimate

Statement of Cash Flow

	2014A	2015A	2016A	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
EBIT	444.32	595.08	775.42	826.51	917.00	1047.49	1174.12	1478.28	1599.03	1621.58	1684.64	1807.32	1882.59	1994.56	
Operating taxes (27%)	-144.12	-167.65	-208.76	-16.32	-130.91	-282.82	-317.01	-399.13	-431.74	-437.83	-454.85	-487.98	-508.30	-538.53	
NOPAT	300.21	427.44	566.66	810.19	786.09	764.67	857.11	1079.14	1167.29	1183.75	1229.79	1319.34	1374.29	1456.03	
D&A from PP&E	144.29	156.38	129.62	143.48	153.23	163.28	173.72	181.80	189.74	197.44	204.82	142.33	68.50	73.77	
D&A from intangible assets	112.53	128.66	118.10	117.12	132.36	276.27	358.34	437.58	492.10	501.78	198.77	230.87	256.88	273.77	
Gross Cash Flow	557.02	712.48	814.37	1070.80	1071.68	1204.22	1389.16	1698.52	1849.13	1882.98	1633.38	1692.54	1699.68	1803.57	
Trade receivables	25.48	-85.81	4.57	28.01	-38.66	-23.83	-21.20	-15.03	-33.48	-16.15	-18.50	-37.28	-22.79	-24.10	
Inventory	0.57	-28.56	-69.77	2.70	-21.36	-21.13	-28.01	23.72	-38.09	-41.44	-45.09	-43.44	-46.85	-50.52	
Trade payables	28.21	-107.39	7.38	-46.25	-11.46	7.59	-43.47	-36.81	59.11	64.31	69.97	67.42	72.71	78.40	
Investments in Working Capital	54.25	-221.76	-57.82	-15.53	-71.48	-37.37	-5.74	-28.12	-12.46	6.72	6.38	-13.31	3.06	3.78	
Capex from PP&E	-185.23	-199.54	-170.59	-283.77	-										

Financial ratios

	2014A	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
ROCE	11,77%	17,24%	23,48%	26,90%	22,95%	23,36%	24,86%	25,47%	28,45%	27,62%	24,02%	21,88%	20,78%	19,26%	18,21%
ROIC	12,61%	17,81%	19,30%	23,54%	27,75%	11,13%	15,63%	24,32%	41,61%	64,29%	144,10%	381,03%	-342,88%	-116,54%	-75,07%
ROE	10,69%	-1494,89%	121,20%	68,55%	58,10%	47,27%	45,38%	43,80%	44,58%	40,40%	31,75%	27,00%	24,34%	21,59%	19,67%
ROA	5,71%	7,48%	10,38%	12,98%	16,21%	12,79%	13,02%	13,44%	15,50%	15,11%	13,42%	12,40%	11,87%	11,12%	10,62%
Tax Rate	33,45%	33,19%	29,55%	27,98%	2,03%	18,56%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%	27,00%
Avg interest rate	0,32%	0,74%	1,65%	1,98%	1,33%	1,33%	1,30%	1,30%	1,30%	1,30%	1,30%	1,30%	1,30%	1,30%	1,30%
Asset turnover	0,59	0,73	0,8	0,82	0,7	0,69	0,71	0,7	0,68	0,68	0,62	0,58	0,57	0,54	0,51
Capex/D&A	n.a.	1,39	1,28	1,51	2,38	2,40	1,34	1,16	0,90	0,63	0,47	0,84	0,68	1,15	0,55
Net Debt/Equity	0,43x	(184,12x)	9,28x	3,45x	1,99x	2,08x	1,93x	1,63	1,11x	0,75x	0,29x	0,07x	(0,07x)	(0,17x)	(0,293x)
Net debt/EBITDA	2,789	5,096	3,479	2,648	2,488	2,554	2,143	1,839	1,270	0,944	0,466	0,162	-0,187	-0,510	-0,911
INTEREST Coverage ratio	44,43	-43,77	-21,46	-26,50	-35,08	-34,15	-36,78	-39,26	-47,08	-48,50	-46,84	-46,35	-47,36	-46,98	-47,40
Payout Ratio	n.a.	n.a.	1,27%	n.a.	n.a.	0,61%	0,69%	0,72%	0,81%	1,02%	1,11%	1,12%	1,17%	1,25%	1,30%
Goodwill/CE	23,78%	30,54%	30,98%	27,23%	21,81%	20,00%	18,64%	17,03%	15,11%	13,56%	11,63%	10,20%	9,03%	8,03%	7,17%

Source: Logos estimate

Multiples

Multiple	2014A	2015A	2016A	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
PRICE			55,30	87,45	86,78	147,90	159,75	163,15	163,15	163,15	163,15	163,15	163,15	163,15	163,15
NUMBER OF SHARES OUSTANDING			188,94	188,94	188,94	188,94	188,94	188,94	188,94	188,94	188,94	188,94	188,94	188,94	188,94
MARK CAP			10448,60	16523,15	16396,55	27944,81	30183,79	30826,20	30826,20	30826,20	30826,20	30826,20	30826,20	30826,20	30826,20
GROSS DEBT			3519,81	3357,18	3497,90	3969,38	4102,18	4336,41	4469,19	4758,80	5008,64	5272,38	5596,06	5889,18	6199,32
NET DEBT			3062,03	2709,47	2704,23	3071,38	3187,21	3137,58	2664,07	2153,63	1080,59	338,66	-407,51	-1125,64	-2132,95
EV			13052,84	18584,91	18307,12	30118,19	32456,03	32764,94	31685,15	30374,66	27978,74	26231,14	24415,12	22685,74	20360,99
EPS			2,11	2,83	4,15	3,68	3,96	4,44	5,61	6,07	6,16	6,39	6,86	7,14	7,57
EV/CE			5,15x	6,44x	5,08x	7,67x	7,70x	7,10x	6,09x	5,24x	4,14x	3,40x	2,80x	2,32x	1,85x
EV/SALES			4,20x	5,43x	5,35x	7,99x	7,87x	7,38x	6,79x	5,87x	5,16x	4,60x	3,90x	3,44x	2,92x
EV/EBITDA			14,83x	18,16x	16,84x	25,04x	21,82x	19,20x	15,10x	13,31x	12,05x	12,56x	11,19x	10,27x	8,69x
EV/EBIT			21,93x	23,96x	22,14x	32,84x	30,98x	27,90x	21,43x	18,99x	17,25x	15,57x	13,50x	12,05x	10,2x
EV/NOPAT			30,53x	32,79x	22,59x	38,31x	42,44x	38,22x	29,36x	26,02x	23,63x	21,32x	18,50x	16,50x	13,98x
P/E			26,20x	30,86x	20,89x	40,15x	40,28x	36,66x	29,03x	26,83x	26,48x	25,50x	23,76x	22,82x	21,54x
Div Yield			n.a.	n.a.	0,82%	0,73%	0,78%	0,88%	1,11%	1,20%	1,21%	1,26%	1,35%	1,41%	1,49%
PB			1,74x	4,14x	7,16x	7,79x	8,73x	10,15x	12,60x	15,04x	19,40x	23,69x	28,20x	33,11x	38,49x
Equity FCF yield			3,58%	1,66%	-0,29%	1,22%	1,65%	2,47%	3,60%	4,49%	5,05%	4,19%	4,53%	4,26%	5,19%

Source: Logos estimate

6. Cost Analysis

COGS Subdivision by business unit

Business lines			Average Gross Annual Earnings (G.A.E.)/Employee	G.A.E.+ Employees taxes (45%), rounded	Nr Employees	Labor cost	Weights Labour	Labor cost	Total Labor costs in thousand
Cars and spare parts (CSP)			22	40	2048	80000	72.50%	58000	82483
Engines (Eng.)							27.00%	21600	
Sponsorship, commercial and brand (SCB)							0.50%	400	
Other expenses, net (FFS activities and Mugello Racetrack)	FFS	FFS Spa	29	65	8	1710			
		FFS Inc					10		
	Mugello Racetrack		30	64	12	773			

Source: Company data, Logos estimate

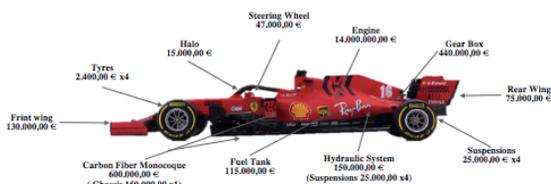
Based on the 49.9% incidence of COGS on Revenues (avg. in the 2014-2019 period), we performed an analysis to determine the split of COGS per business line. The methodology described in the following lines, was used to perform the historical analysis and also the future one. Key costs include: cost of materials & components and labour, while other costs relate mainly to D&A and services (such as transportation, utilities/energy consumption, insurance and warranty). From the official financial reports of Ferrari S.p.A. and Mugello S.p.A., we determined the total amount related to cost of materials. Ferrari S.p.A. shows €1,209m of COGS (to be allocated between C.&S.P. and engines) while Mugello S.p.A. shows €0,658m. SC&B does not bear these costs since external providers carry out merchandising and brand - related activities. We estimated engine's expenses considering costs incurred for Scuderia F1, engines supplied to Sauber – Alfa Romeo, Haas and Maserati. For the latter, we estimated an average price per engines of €6,700, separated the implied mark-up (approximately 25%), and achieved €5,025 as manufacturing cost. Given information included in Ferrari N.V. report, we considered the total number of engines produced: 900 V8 turbo engines, 1,500 V8 aspirated and 28,000 V6 engines, ranging from 330 hp to 450 hp. Scuderia's expenses includes F1 car manufacturing (nearly €15.5M) and related spare parts. The considered units are attributable to the number of pilots per Scuderia (2), plus the reserves. The remaining amount (light alloys, steel, other metals etc.) has been fully attributed to C.&S.P. production. Ferrari N.V. Sustainability report

Engine costs

Engines	Cost	Units	Costs * Units
Scuderia:			
Formula 1 car	15.574.400	4,00	62.297.600
Rear wing	75.000	3	225.000
Front wing	130.000	3	390.000
Spare parts:			
Carbon fiber monocoque - chassis	150.000	1	150.000
Suspensions - hydraulic systems	25.000	4	100.000
Engines for clients			
Sauber-Alfa Romeo	14.000.000	4	56.000.000
Haas	14.000.000	4	56.000.000
Maserati engines	5.025	30.400	152.760.000
Total engines	43.959.425	30.423	327.922.600
Total engines in thousand	43.959,43	30,00	327.922,60

Source: sportfair.com, Logos estimate

FORMULA 1 CAR Average price per part Total: 15.574.400,000



Source: sportfair.com, Logos estimate

Services and D&A are computed on a weighted basis according to the general impact of the business lines as well as the inherent nature of the services provided (generally: 72.51% for C.&S.P., 27.03% Engines, 0.12% S.C.&B. and 0.35% for FFS&Mugello racetrack).

Weights by business unit

Business Lines	General	Transportation	Utilities	Insurance	Warranty	Weights D&A
Cars and spare parts	72.51%	73.00%	73.00%	72.50%	72.50%	73.00%
Engines	27.03%	27.00%	27.00%	27.00%	27.00%	27.00%
Sponsorship,commercial and brand	0.12%			0.50%	0.50%	
Other (FFS and Mugello Racetrack)	0.35%					

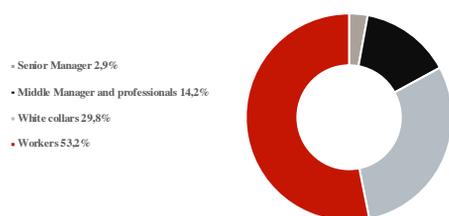
Source: Logos estimate

As a final component of COGS, we estimate workmanship cost of Mugello Racetrack starting from its financial report, moving backward and computing the gross annual earning (G.A.E.), considering the number of employees (12) and the impact of Italian taxes for personnel (nearly 45%). For FFS (split in FFS Spa and FFS Inc.), we found out the number of employees employed and computed an average salary through the job and recruiting sites “Glassdoor”, considering at least 4 reviews. For C.&S.P., engines and S.C.&B. (including mechanics and technicians for F1), we adopted the same methodology, weighing again each division. The number of workers involved in the B.U. is computed as the total number of staff members, 3,851, multiplied by the percentage of workers identified by the company, 53.2%.

Business lines			Average Gross Annual Earnings (G.A.E.)/Employee	G.A.E.+ Employees taxes (45%), rounded	Nr Employees	Labor cost	Weights Labour	Labor cost	Total Labor costs in thousand
Cars and spare parts (CSP)			22	40	2048	80000	72.50%	58000	82483
Engines (Eng.)							27.00%	21600	
Sponsorship, commercial and brand (SCB)							0.50%	400	
Other expenses, net (FFS activities and Mugello Racetrack)	FFS	FFS Spa	29	65	8	1710			
		FFS Inc						10	
	Mugello Racetrack		30	64	12	773			

Source: glassdoor.com, Logos estimate

Workmanship expenses breakdown



Source: glassdoor.com, Logos estimate

7. Business income statement Analysis

Historical Analysis

Business Income Statement, 2014 – 2019 Analysis

Following the 4 business lines identified by the company for Revenues, we mirrored the same division for COGS and therefore for Gross Profit. Indeed, the company provides detailed information for Revenues breakdown but not for related expenses. For this reason, we estimated COGS and consequently Gross Profit % for each business line (see Cost Analysis). This results in: i) Cars and spare parts Gross Profit's path steady growing year by year with higher Revenues (€2,929m in 2019 vs €2,535m 2018) and lower costs (€1,259m in 2019 vs €1,777m in 2018) increasing therefore the unit efficiency ii) Engines performing negatively in terms of Gross Profit, being in our opinion one of the major reasons why Ferrari and Maserati decided to not renew the agreement (started in the early 2000s) and to cease their relationship after 2021 iii) Sponsorship, Commercial and Brand as well as Other (FFS activities and Mugello racetrack) having maintained positive trends throughout the period, with an outstanding Gross Profit. However, this is particularly influenced by the limited incidence of cost of sales (respectively, 0.4% and 5.8% in 2019).

Cars and spare parts	2014A	2015A	2016A	2017A	2018A	2019A
Sales	1944	2080	2180	2456	2535	2926
COGS	1092	1087	1145	1197	1177	1259
% Sales	56,18%	52,24%	52,54%	48,74%	46,42%	43,03%
Gross Margin	852	993	1035	1259	1359	1667
% Sales	43,82%	47,76%	47,46%	51,26%	53,58%	56,97%
Engines	2014A	2015A	2016A	2017A	2018A	2019A
Sales	311	219	338	373	285	198
COGS	407	405	427	446	439	469
% Sales	130,82%	185,28%	126,36%	119,53%	154,16%	237,06%
Gross Margin	-96	-186	-89	-73	-154	-271
% Sales	-30,82%	-85,28%	-26,36%	-19,53%	-54,16%	-137,06%
Sponsorship, commercial and brand	2014A	2015A	2016A	2017A	2018A	2019A
Sales	417	441	489	494	506	538
COGS	2	2	2	2	2	2
% Sales	0,42%	0,39%	0,38%	0,39%	0,37%	0,38%
Gross Margin	415	439	487	492	504	536
% Sales	99,58%	99,61%	99,62%	99,61%	99,63%	99,62%
Other	2014A	2015A	2016A	2017A	2018A	2019A
Sales	91	114	99	94	95	104
COGS	5	5	5	6	6	6
% Sales	5,73%	4,53%	5,54%	6,10%	5,92%	5,77%
Gross Margin	86	109	93	88	89	98
% Sales	94,27%	95,47%	94,46%	93,90%	94,08%	94,23%

Source: Company data, Logos estimate

Forecast Analysis
Business Income Statement, 2020 – 2028 Analysis

Starting from these results, our Revenues estimates are based on a deep analysis on the dynamics and peculiar characteristics of each Group business unit: (i) For the Cars&S.P. business, we take into account the price and volume mix for Sport, GT, Special Series, Icona and Hypercars&Others and we forecast revenues based on our estimate of future volumes and price of that range model, given company expectations and industry scenarios. (ii) For the Engines business, we separately consider the revenues from Maserati and F1 activity in order to isolate the end in 2021E of the sales with the former; (iii) For S.C.&B. we explicit consider the revenues Sponsorship, Commercial and Brand in order to take into account the end of the Concorde Agreement in 2020E and the new brand diversification strategy of the company; (iv) For the Other business, we consider in tandem the revenues generated from FFS and Mugello racetrack.

This breakdown in revenues and our estimation of COGS, allow us to forecast also the GM for each business line. Focusing on the main results, Gross Margin increases thanks to a higher incidence of Cars&S.P. segment (more profitable) and a marginal improvement of S.C.&B., company target to reach ca. 10% of Group's EBIT in the medium-long run. The table below provide an exemplification of our results.

Cars and spare parts	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Sales	3277,015	3575,697	3861,175	4318,023	4510,955	4735,834	5230,857	5502,862	5789,011
COGS	1378,725	1509,704	1653,126	1801,907	1964,079	2140,846	2312,113	2497,082	2696,849
% Sales	42,07%	42,22%	42,81%	41,73%	43,54%	45,21%	44,20%	45,38%	46,59%
Gross Margin	1898,290	2065,993	2208,049	2516,116	2546,877	2594,988	2918,744	3005,779	3092,162
% Sales	57,93%	57,78%	57,19%	58,27%	56,46%	54,79%	55,80%	54,62%	53,41%
Engines	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Sales	172,66	162,53	71,31						
COGS	427,00	412,90	169,88	180,08	190,88	202,33	212,45	223,07	234,23
% Sales	247,30%	254,05%	238,22%	252,52%	267,67%	283,73%	297,91%	312,81%	328,45%
Gross Margin	-254,34	-250,37	-98,57	-108,76	-119,57	-131,02	-141,14	-151,76	-162,91
% Sales	-147,30%	-154,05%	-138,22%	-152,52%	-167,67%	-183,73%	-197,91%	-212,81%	-228,45%
Sponsorship, commercial and brand	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Sales	564,90	593,15	622,80	666,40	713,05	762,96	824,00	889,92	961,11
COGS	2,16	2,31	2,47	2,67	2,88	3,11	3,36	3,67	4,00
% Sales	0,38%	0,39%	0,40%	0,40%	0,40%	0,41%	0,41%	0,41%	0,42%
Gross Margin	562,74	590,83	620,33	663,73	710,16	759,85	820,63	886,25	957,11
% Sales	99,62%	99,61%	99,60%	99,60%	99,60%	99,59%	99,59%	99,59%	99,58%
Other	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Sales	106,08	108,20	110,37	113,68	117,09	120,60	125,42	130,44	135,66
COGS	6,18	6,37	6,56	6,76	6,96	7,17	7,31	7,46	7,61
% Sales	5,83%	5,89%	5,94%	5,94%	5,94%	5,94%	5,83%	5,72%	5,61%
Gross Margin	99,90	101,83	103,81	106,92	110,13	113,43	118,11	122,98	128,05
% Sales	94,17%	94,11%	94,06%	94,06%	94,06%	94,06%	94,17%	94,28%	94,39%

Source: Company data, Logos estimate

8. WACC Computation

WACC is given by a weighted average of cost of equity and cost of debt, which are respectively estimated with the CAPM formula and with a default spread for Ferrari N.V.. We present hereafter the procedure that has been followed in the WACC computation.

1. Risk-free rate estimate

To take into account Ferrari N.V.'s geographical exposure, we estimate the risk-free rate as a weighted average of countries' GDP in which Ferrari operates (see *Business Description* for further explanation). We used the value of 2018 GDP for each of the region considered.

Gov. Bond 10Y	Yield	GDP (in \$)	Weight given Ferrari's revenues in that area
Italy	0.938%		13.14%
Germany	-0.388%	3.947.620.16	
France	-0.137%	2.777.535.24	
UK	0.573%	2.855.296.73	
Switzerland	-0.733%	705.140.35	
Qatar	2.437%	191.362.09	
Average EMEA	-0.031%		40.94%
USA	1.582%	20.544.343.46	
Canada	1.326%	1.713.341.70	
Mexico	6.833%	1.220.699.48	
Brazil	6.580%	1.868.626.09	
AVERAGE Americas	2.186%		26.98%
Japan	-0.025%	4.971.323.08	
Australia	1.029%	1.433.904.35	
Singapore	1.690%	364.156.66	
Indonesia	6.665%	1.042.173.30	
South Korea	1.602%	1.619.423.70	
Average APAC	1.220%		10.92%
Mainland China	2.859%	13.608.151.86	
Hong Kong	1.418%	362.682.02	
Taiwan	0.563%	589.906.00	
Average CHINA+	2.73%		8.02%
Risk-free rate	1.05%		

Source: Logos estimate

2. Equity risk premium

We compute Equity Risk Premium as weighted average of Country risk premium (source: *Damodaran, January 2020*) on countries' GDP in which Ferrari operates weighted for the % of the Group exposure in that area.

ERP by country	ERP	GDP (in \$)	Weight given Ferrari's revenues in that area
Italy	7.217%		13.14%
Germany	5.200%	3.947.620.16	
France	5.365%	2.777.535.24	
UK	5.471%	2.855.296.73	
Switzerland	5.200%	705.140.35	
Qatar	9.529%	191.362.09	
Average EMEA	5.397%		40.94%
USA	5.200%	20.544.343.46	
Canada	5.448%	1.713.341.70	
Mexico	7.064%	1.220.699.48	
Brazil	7.276%	1.868.626.09	
AVERAGE Americas	5.460%		26.98%
Japan	5.342%	4.971.323.08	
Australia	5.306%	1.433.904.35	
Singapore	5.200%	364.156.66	
Indonesia	6.745%	1.042.173.30	
South Korea	5.530%	1.619.423.70	
Average APAC	5.518%		10.92%
Mainland China	5.825%	13.608.151.86	
Hong Kong	5.448%	362.682.02	
Taiwan	5.796%	589.906.00	
Average CHINA+	5.81%		8.02%
ERP for Ferrari N.V.	5.70%		

Source: Logos estimate

3. Beta

Given the extreme peculiarity of each of Ferrari N.V.'s business, the corporate restructuring in 2015 from the I.P.O. and the new targets of the 2022E business plan, we do not consider a top-down beta an appropriate measure to take into account the Ferrari N.V.'s market risk. Hence, according to the Hamada's formula, for each of the Group's business line we estimate a different pure play beta and then we multiplied them according to our future % on revenues estimates. The resulting pure play beta of the operating business is weighted for Market Capitalization and Total Debt of 2019.

C&S.P.	Market Cap	Minority Interest	Mkt cap - Min interest	Total Debt	Cash & S.T.I	Net debt	Revenue	Weekly Beta - 2 Year	WACC Tax Rate, (%)	EV	EV/Sales	Cash/EV	D/E	[1+D/E]*(1-marg. Tax rate)
Average	4162760748	984761916,7	3512114482	2234416768	1592598156	640818611,7	9863075724	1,054672245	0,202541366	4152933094	76,51013496	0,199192708	0,556327855	1,443648451
Median	539199886,2	14616139,97	495361993	190385038,8	106470397,8	54888930,32	80674744,7	1,133479818	0,1986152	661542046,6	0,766466907	0,135966321	0,117032089	1,093787737

Average unlevered beta	0,7305603
Median unlevered beta	1,036288651

Average pure play unlevered	0,912279779
Median pure play unlevered	1,199361408

Engine	Market Cap	Minority Interest	Mkt cap - Min interest	Total Debt	Cash & S.T.I	Net debt	Revenue	Weekly Beta - 2 Year	WACC Tax Rate, (%)	EV	EV/Sales	Cash/EV	D/E	[1+D/E]*(1-marg. Tax rate)
Average	620476469,1	64374491,65	577976804,7	219670436,5	127652179,6	92018256,9	1014645810	1,035732323	0,224331838	669995061,6	5,163990014	0,043719955	0,395334225	1,306648172
Median	268548970,4	6243313,593	199241360,4	69856153,16	31977294,25	19231448,07	218073861,2	1,036755032	0,22220653	237909663,5	0,674886732	0,093662804	0,081711699	1,063554826

Average unlevered beta	0,792663508
Median unlevered beta	0,974801681

Average pure play unlevered	0,828903114
Median pure play unlevered	1,075539750

S.C.&B.	Market Cap	Minority Interest	Mkt cap - Min interest	Total Debt	Cash & S.T.I	Net debt	Revenue	Weekly Beta - 2 Year	WACC Tax Rate, (%)	EV	EV/Sales	Cash/EV	D/E	[1+D/E]*(1-marg. Tax rate)
Average	3856629096	40910133.51	3832386054	319724864.2	341280451.7	2920633268	564004819.5	0.777719932	0.239931945	3929250465	5.973925876	0.382299721	-18.4697002	-13.03822909
Median	205217169.6	2257341.66	212481463.7	16649580.8	24410850.08	187738.0088	139005287.7	0.899944273	0.2293347	132900964.3	0.745564628	0.156525399	0.00099208	1.000764562

Average unlevered beta	-0.0596492
Median unlevered beta	0.899256736

Average pure play unlevered	-0.096566574
Median pure play unlevered	1.066133747

Other	Market Cap	Minority Interest	Mkt cap - Min interest	Total Debt	Cash & S.T.I	Net debt	Revenue	Weekly Beta - 2 Year	WACC Tax Rate, (%)	EV	EV/Sales	Cash/EV	D/E	[1+D/E]*(1-marg. Tax rate)
Average	959121247.7	18756936.09	955995091.7	3261913720	341280451.7	2920633268	564004819.5	0.889451461	0.268691902	3876628360	8.03089424	0.675355625	1.673920092	2.224151319
Median	141485190.9	1081228.99	140944576.4	186165549	21363459.38	95880019.65	108384697.1	0.901863421	0.2565222	176643916.6	3.161648875	0.120656514	0.595515397	1.442752478

Average unlevered beta	0.399906002
Median unlevered beta	0.625099201

Average pure play unlevered	1.231827909
Median pure play unlevered	0.710870338

Business	Revenues 2019(in milion)	EV/Sales	Estimated EV	Team corrected Weights for 2028E	Pure play beta	Weight*beta
Automotive	2.926 €	0.766466907	2.243 €	83%	1.20	0.997861163
Engines	198 €	0.674886732	134 €	1%	1.08	0.014002608
S.C.&B	538 €	0.745564628	401 €	14%	1.07	0.148333126
FFS	104 €	3.161648875	329 €	2%	0.71	0.011271073
Total operating business	3.766 €	-	3106.23	100%	-	1.17146797

Other inputs	
Cash	898
Total value	4.004.23
Total debt (2019)	2.090
Mkt capitalization (2019)	30.766
Marginal tax rate	27.00%

Unlevered beta for operating assets	1.17146797
Unlevered beta for Ferrari N.V.	0.908751561

D/E ratio (actual)	3.87%
[1+(1-marg. Tax rate)*D/E]	1.03
Levered beta for Ferrari	0.93

Source: Logos estimate

Given all the previous exposed calculation we arrive to the levered beta.

4. After tax cost of debt

We estimated the After Tax Cost of Debt as the sum of the risk-free rate and the additional spread (0.98%) linked to the size and the interest coverage ratio of the company (source: Damodaran, 2020)

Interest coverage ratio	Rating	Spread
8.5	AAA	0,63%
6.5	AA	0,78%
5.5	A+	0,98%
4.25	A	1,08%
3	A-	1,22%
2.5	BBB	1,56%
2.25	BB+	2,00%
2	BB	2,40%
1.75	B+	3,51%
1.5	B	4,21%
1.25	B-	5,15%
0.8	CCC	8,20%
0.65	CC	8,64%
0.2	C	11,34%
-1	D	15,12%

Input	
Risk-free rate	1.05%
Company Default spread (Reuters, A+)	0.98%
Marginal tax rate	27.00%
1 - marg. Tax rate	73.00%
After-tax cost of debt	1.48%

Source: Logos estimate

5. Tax Rate

Given the Italian taxation regime to which the company is subject, we considered the effect of the "Imposta sul reddito delle società" (IRES) and "Imposta Regionale sulle attività Produttive" (IRAP) of 24 and 3.9%, respectively, taking into account also the tax deductions that the company is expected to exploit in the future.

9. Relative valuation

Automotive Peers

	Market Cap. 2018 [€]	Revenues 2018 [€]	Profitability		EV/EBIT		EV/Sales		FCF Yield		Growth	Risk
			EBIT Margin	ROIC	EV / EBIT 2019E	EV / EBIT 2020E	EV / Sales 2019E	EV / Sales 2020E	FCF Yield 2019E	FCF Yield 2020E	PEG Ratio	D / E
Honda Motor	41.526,9	120.912,1	5.1%	6.0%	11.79x	10.95x	0.63x	0.60x	-	-	-	86.1%
BMW	46.014,1	97.480,0	9.2%	6.4%	3.55x	3.32x	0.32x	0.31x	5.64%	6.80%	-	150.0%
Daimler	49.116,2	167.362,0	5.6%	4.9%	2.83x	2.66x	0.21x	0.20x	5.02%	5.09%	-	224.1%
Volkswagen Vz	69.693,1	235.849,0	8.4%	5.8%	2.91x	2.25x	0.19x	0.17x	5.08%	13.97%	1.32x	194.7%
General Motors	41.299,4	124.644,2	3.3%	7.5%	4.15x	4.39x	0.30x	0.29x	6.25%	5.75%	0.95x	270.1%
Porsche AutoHldg Vz	15.814,7	103,0	(58.3%)	10.7%	4.35x	3.48x	177.96x	152.60x	3.25%	4.71%	0.41x	0.0%
Aston Martin Lagonda Global Holdings	3.108,2	1.239,3	11.8%	(6.3%)	23.08x	17.47x	2.98x	2.56x	(2.68%)	(0.68%)	0.83x	160.3%
AUDI	33.626,0	59.248,0	7.8%	11.8%	-	-	-	-	-	-	-	1.5%
Toyota Motor	165.553,7	230.679,4	8.6%	6.3%	13.71x	13.04x	1.17x	1.15x	-	-	1.31x	103.3%
Ferrari	21.273,2	3.420,3	24.2%	30.2%	26.43x	24.66x	6.36x	5.93x	0.92%	0.88%	2.10x	142.9%
Ford Motor	26.621,3	135.908,5	2.0%	2.7%	2.86x	2.83x	0.13x	0.14x	0.86%	8.41%	-	429.2%
Renault	16.131,7	57.419,0	6.3%	8.2%	3.38x	3.14x	0.21x	0.20x	3.59%	6.76%	2.75x	149.6%
Ferrari	21.273,2	3.420,3	24.2%	30.2%	26.43x	24.66x	6.36x	5.93x	0.92%	0.88%	2.10x	142.9%
Average	46.227,8	111.895,0	0.9%	5.8%	7.26x	6.35x	18.41x	15.82x	3.38%	6.35%	1.26x	160.8%
Median	41.299,4	120.912,1	6.3%	6.3%	3.85x	3.40x	0.31x	0.30x	4.30%	6.25%	1.13x	150.0%

Source: Factset, Logos estimate

Luxury Historical

	Market Cap. 2018 [€]	Revenues 2018 [€]	Profitability		EV/EBIT		EV/Sales		FCF Yield		Growth	Risk
			EBIT Margin	ROIC	EV / EBIT 2019E	EV / EBIT 2020E	EV / Sales 2019E	EV / Sales 2020E	FCF Yield 2019E	FCF Yield 2020E	PEG Ratio	D / E
Hermes International	51.180,0	5.966,1	35.0%	26.5%	23.53x	21.31x	8.04x	7.27x	2.33%	2.47%	4.07x	0.9%
LVMH Moet Hennessy Louis Vuitton	130.398,4	46.826,0	21.3%	17.1%	13.52x	12.18x	2.88x	2.62x	4.45%	5.05%	1.36x	34.71%
Ralph Lauren A	7.281,7	5.371,1	11.2%	10.8%	10.20x	9.56x	1.15x	1.13x	11.05%	10.47%	1.54x	27.6%
Tapestry	8.555,8	5.075,7	16.4%	14.7%	9.27x	7.98x	1.61x	1.48x	8.05%	9.11%	1.18x	45.9%
Tiffany	8.585,0	3.769,2	18.0%	13.4%	12.13x	11.20x	2.17x	2.07x	3.08%	4.31%	1.09x	31.8%
Salvatore Ferragamo	2.980,0	1.346,8	11.7%	11.7%	18.02x	15.96x	2.08x	1.98x	3.29%	3.46%	2.14x	4.9%
Moncler	7.394,4	1.420,1	29.2%	31.1%	16.37x	13.74x	4.92x	4.18x	3.58%	4.34%	1.36x	9.0%
Cie Financiere Richemont	32.139,3	13.069,3	15.2%	14.1%	13.65x	11.53x	2.13x	1.93x	2.53%	5.09%	1.01x	49.4%
Burberry Group	7.954,0	3.057,1	16.8%	24.0%	14.21x	13.34x	2.32x	2.22x	3.35%	5.06%	2.99x	2.0%
Ferrari	21.273,2	3.420,3	24.2%	30.2%	26.43x	24.66x	6.36x	5.93x	0.92%	0.88%	2.10x	142.9%
Brunello Cucinelli	2.043,4	553,0	13.8%	16.1%	28.96x	25.86x	3.70x	3.34x	1.28%	1.83%	4.34x	32.1%
TODS	1.366,1	940,5	7.8%	4.0%	15.68x	14.39x	1.44	1.38x	4.61%	5.00%	5.28x	25.0%
Ferrari	21.273,2	3.420,3	24.2%	30.2%	26.43x	24.66x	6.36x	5.93x	0.92%	0.88%	2.10x	142.9%
Average	20.768,6	7.462,9	16.8%	17.0%	16.90x	15.09x	2.80x	2.57x	3.78%	4.62%	2.04x	44.9%
Median	8.254,9	3.420,3	15.8%	14.4%	14.95x	13.54x	2.17x	2.07x	3.26%	4.67%	1.45x	32.0%

Source: Factset, Logos estimate

OLS Regression

Company	Beta 5 yr.	D/E	2019 FY EV/EBIT	EPS Growth 5 yrs
Hermes International	0,60	0,9%	23,53x	77,62
Cie Financiere Richemont	1,06	49,4%	13,65x	26,05
LVMH Moet Hennessy Louis Vuitton	1,01	34,1%	13,52x	84,61
Ralph Lauren A	0,95	27,6%	10,20x	-25,75
Tapestry	0,86	45,9%	9,27x	-18,29
Tiffany	0,87	31,8%	12,13x	129,63
TODS	0,72	25,0%	15,68x	-67,40
Brunello Cucinelli	0,49	32,1%	28,96x	66,33
Burberry Group	1,14	2,0%	14,21x	13,86

Source: Factset, Logos estimate

Regression line $y=41.827+0.048\text{eps}5+0.080\text{de}-35.61\text{b}5$
R^2 0.77

Tot debt	2090
Liquidity	898
NFP	1.192
EV/EBIT	31.9027487
EBIT 2020	1.026
EV	32722.6494
EV-NFP	31.531
Share	185.5
Target Price	169.2

10. Risk Assessment

Macro-economical		Cost	Reputation	Severity	Likelihood	Score	Mitigation
Tariffs on luxury goods	The world's two largest economies China and US have been locked in trade battle for more than 18 months. It is possible for Ferrari to retain part of this increase and charge a certain percentage of the increase on clients also if this strategy could work only in the short run. Low volume and the comparison with the financial resources at disposal of competitors included in larger automotive conglomerates will not allow to sustain that strategy in the long term.	[4]	[2]	[3]	[1]	3	
Coronavirus and China economic situation	Companies (imposed) longer-than-expected vacations, airports and transportation shut downs and fear of importing/exporting not only Chinese goods but also desases will impact the economic equilibrium not only at regional level. Still, markets seem confident that a solution will be found in the near future.	[4]	[2]	[3]	[1]	3	Differencing across different region coherently with projected trend in HNWI and UHNWI. Continuous monitoring of economic conditions, geo-political events and backlog orders to improve capital budgeting.
Instability in Hong Kong region	Instability in this region and tension could harm the real estate market from which most of the Hong Kong based billionaires derive their wealth. Although, since prices for real estate in this region are the highest in the world, when there is a correction in prices demand tend to remain still, but with protest taking the streets, many luxury brands are looking elsewhere. In an extreme scenario there could be a shift from this area to Mainland China and a decrease in demand due to a shrink in the real estate market, while the most relevant uncertainty at the moment in the region is related to possible modification in tax laws and import policies along with social acceptability of luxury goods considering that inequalities had been one of the reasons behind protests.	[4]	[2]	[3]	[1]	3	
Corporate strategy							
General competition	The LPCM as denoted in the previous "Industry overview and competitive positioning" is characterized by a few players generally characterized by higher volatility in sales pattern compared to Ferrari (3% YoY) and its controlled growth strategy. For the sponsorship and commercial unit their ability to win and attract increasing fund will be critical. Considering brand activities Ferrari faces competition by the Lifestyle division of other LPCM as well as luxury sport brands.	[5]	[4]	[4]	[5]	20	Strong client-relationship attention through several initiative connected to Ferrari in order to enhance lifetime value, financing of pre-owned cars and Ferrari clubs. Personalization services (Atelier and Tailor Made).
Growth strategy	Ferrari base its exclusivity above other strategies (refer to Appendix 4) on waiting lists and a controlled growth strategy that has proven successful but pose some upside limitations.	[5]	[5]	[5]	[3]	15	×
Unsuccessful model launches	Ferrari planned to introduce 15 new models in the 2019-2022 period (unprecedented for Ferrari) to meet new request in term of preferences and type of vehicles (hybrid progressive introduction), this could damage Ferrari position if those product don't meet demand expectations or result in a dispersion of Ferrari brand identity.	[4]	[4]	[4]	[2]	8	×
Operational risks							
General reputational	Ferrari largely relies on its Brand image, credibility and/or integrity (refer to Appendix Mkt Mix). The value of the brand and ability to achieve premium pricing for Ferrari-branded products would decline if they are unable to maintain the highest quality and exclusivity. In particular their appeal in the long run may depend from Scuderia Ferrari performance also if their sales seems not to be related with victories.	[5]	[5]	[5]	[3]	15	Selective licensees and franchising of the Ferrari brand while monitoring dealers.
Recalls	Defective airbags manufactured by Takata have led to widespread recalls by several automotive manufacturers. Failure in key supplier operations may cause significant disruption to Ferrari, substituting costs in terms of image, substitution of the recalled components and eventual research for other suppliers.	[3]	[5]	[4]	[2]	8	Founded risk through the accumulation of provisions.
Raw material	Price for raw materials especially precious one tend to fluctuate creating uncertainty.	[3]	[1]	[4]	[3]	12	Fluctuation in prices are mitigated through the use of derivatives contract.
Manufacturing facilities	Ferrari production is completely centered in Maranello and Modena, Italy. In case of disruptive event their production will be ceased with severe damages in term of ability to recover the operation routine.	[5]	[5]	[5]	[1]	5	Design of business continuity plan while identify alternative suppliers and investing/insuring to reduce the effect of possible damages in particular due to earthquakes.
Financial risks							
Exchange rate	The majority of operations are carried out in non-Eurozone countries, therefore currency exchanges provide profit/loss opportunities. In order to exploit their potential, a close monitoring is needed.	[2]	[1]	[2]	[5]	10	Foreign exchange hedging instruments and monitoring interest rate movements for hedging purposes. Credit approval policies applied to dealers and retail clients.
Legal risks							
Intellectual property	Trademarks and other intellectual property rights are fundamental to Ferrari's success and market position. Therefore, the ability to protect the brand at Global level is crucial.	[4]	[4]	[4]	[2]	8	Monitoring trademark applications and domain names worldwide while interacting with national and local authorities and customs and avail ourselves of a network of experienced outside counsels.
AEO Compliance	The AEO certificate allow Ferrari to benefit from special expedited customs treatment, which significantly facilitates shipment in the various markets. The AEO certificate is subject to periodical mandatory audit review, (last in May 1, 2019) and losing the AEO status, would change business practices affecting results of operations.	[5]	[2]	[3]	[1]	3	Monitoring, reviewing, reporting and adapting to relevant changes in rules and regulations.
Internationalization	Ferrari operates in several different countries that have various operational characteristics, including employment and labor, transportation, logistics, real estate, environmental regulations and local reporting or legal requirements introducing a risk of non-compliance with regional requirements.	[3]	[2]	[2]	[2]	4	Monitoring, reviewing, reporting and adapting to relevant changes in rules and regulations through the strengthening of IT infrastructure, risk-based reviews of operations by HSE professionals and developing key procedures and policies for all relevant financial and business areas.

Source: Company data, Logos estimate

Forex VaR Historical Analysis

Currency	VaR 98% of total revenue expressed in foreign currency	Geography breakdown	VaR 98% for different geographies
GBP	30.581,77	20%	6.116,35
CNY	311.985,60	8%	24.958,85
USD	45.132,47	30%	13.539,74

Currency	Actualized Revenues	VaR	Loss
GBP	7.310,46	6.116,35	1.194,11
CNY	23.864,85	24.958,85	(1094,00)
USD	13.570,07	13.539,74	30,33

Source: Logos estimate

Log-linear regression for the main commodities

Coefficients	Estimate	Standard Error	t-value	Pr(> t)
Intercept	4.33	1,70E-01	2,56E+01	<2E-16
Lumex	-1,90E+03	7,52E-05	-2,52E+00	1,38E-02
Djusst	1,06E-03	6,85E-04	1,55E+00	1,26E-01
Rubber and plastic	1,01E-02	9,95E-04	1,02E+01	8,64E-16
Glass	2,76E-05	1,22E-04	2,27E-01	8,21E-01

R-squared	0.6803
Adjusted R-squared	0.6633
P-value	< 2.2E-16

Residuals				
Min	1Q	Median	3Q	Max
-0,41885	-0,18955	-0,00871	0,1818	0,55863

Source: Logos estimate

In order to test the risk derived from raw material we performed a log-linear regression of quarterly revenues against the commodities implied in the production of Ferrari's Cars. What we can derive from the results presented aside, is that having a negative t-value, the aluminium & light alloys are the only commodities for which historically, an increase in price would result in a decrease in Ferrari's revenue. Thus we can conclude that the company is not able to fully charge the eventual increase in prices or at least is not able to recover what it loose from the increasing cost.

11. Corporate Governance

Board of Directors

Board of directors											
Full Name	Offices	Age	(M/m)	In charge since	Committees						Background
					Executive	Non executive	Independent	Audit	Compensation	Governance & Sustainability	
John Jacob Philip Elkann	Executive Chairman	43	M	15 Apr. 2016	x					x President	Degree in Management Engineering
Louis C. Camilleri	Chief Executive Director	65	M	2 Jan. 2016	x						Degree in Economics & Business Administration
Delphine Arnault	Non-Executive Director	44	m	15 Apr. 2016		x	x				Degree in Economics
Maria Patrizia Grieco	Non-Executive Director	67	m	15 Apr. 2016		x	x	x			Degree in Law
Adam Phillip Charles Keswick	Non-Executive Director	47	m	15 Apr. 2016		x	x				n.a.
Giuseppina Capaldo	Non-Executive Director	50	m	2 Jan. 2016		x	x	x	x President	x	Degree in Economics & Law
Piero Ferrari	Vice Chairman and Non-Executive Director	74	M	2 Jan. 2016		x			x		Industrial expert
Eduardo H. Cue	Non-Executive Director	56	m	2 Jan. 2016		x	x		x		Degree in Computer Science & Economics
Elena Zambon	Non-Executive Director	55	m	2 Jan. 2016		x	x			x	Degree in Business Administration
Sergio Duca	Senior Non-Executive Director	72	m	2 Jan. 2016		x	x	x President			Degree in Economics & Business

Source: Company data, Logos estimate

Upon completion of the separation from FCA Group Mr. Sergio Marchionne was Chairman and Executive Director (serving in this role since October 2014) while Mr. Amedeo Felisa was the Chief Executive Officer (since 2008). Mr. Piero Ferrari and Mr. John Elkann were both Vice Chairman and Non Executive Directors (respectively from 1988 and 2016). In May 2016 Mr. Amedeo Felisa retired as a CEO (retaining his role as Executive Director until April 2017), leaving space to Mr. Sergio Marchionne that has retained this role until his recent departure in July 2018. Then, Mr. John Elkann was appointed Chairman in July 2018 and, on his proposal, Mr. Louis C. Camilleri (Non Executive Director since October 2015) was named CEO in September of the same year. The current structure for Ferrari Board of Directors comprehend 10 key members, as displayed above, all more or less connected to Ferrari with an indirect relation due to their participation in other connected companies, thus many conflicts of interest could arise. The distribution of the vote inside the board does not following the "one-share-one-vote" system since Ferrari established a "loyal voting structure" that allows two votes for Exor group and Mr. Piero Ferrari. It is relevant to notice that Mr. John Elkann is Chairman and CEO of Exor Group and Chairman of FCA, while Mr. Louis C. Camilleri started his role as CEO for Ferrari in September 2018, but his background is related to 40 years in the tobacco industry for Phillip Morris, of which he is CEO. The relationship between Philip Morris and Ferrari is therefore very tight, with the tobacco company being the Main Sponsor of Scuderia Ferrari since 1984.

Compensation plan

Compensation Plan					
Full Name	Offices	Period in office	Fixed remuneration (€)	Other compensation (€)	Total (€)
John Jacob Philip Elkann	Executive Chairman	1 Jan 2018 - 31 Dec 2018	79.554,00 €	13.025,00 €	92.579,00 €
Louis C. Camilleri	Chief Executive Director	1 Jan 2018 - 31 Dec 2018	270.412,00 €	-	270.412,00 €
Delphine Arnault	Non-Executive Director	1 Jan 2018 - 31 Dec 2018	63.889,00 €	-	63.889,00 €
Maria Patrizia Grieco	Non-Executive Director	1 Jan 2018 - 31 Dec 2018	72.408,00 €	-	72.408,00 €
Adam Phillip Charles Keswick	Non-Executive Director	1 Jan 2018 - 31 Dec 2018	63.889,00 €	-	63.889,00 €
Giuseppina Capaldo	Non-Executive Director	1 Jan 2018 - 31 Dec 2018	73.781,00 €	-	73.781,00 €
Piero Ferrari	Vice Chairman and Non-Executive Director	1 Jan 2018 - 31 Dec 2018	68.149,00 €	12.397,00 €	80.546,00 €
Eduardo H. Cue	Non-Executive Director	1 Jan 2018 - 31 Dec 2018	68.149,00 €	-	68.149,00 €
Elena Zambon	Non-Executive Director	1 Jan 2018 - 31 Dec 2018	72.030,00 €	-	72.030,00 €
Sergio Duca	Senior Non-Executive Director	1 Jan 2018 - 31 Dec 2018	94.840,00 €	-	94.840,00 €

Source: Company data, Logos estimate

The criteria determining the compensation plan for the BoD are defined in accordance to the internal remuneration policy of Ferrari. Those principles states the followings: (i) alignment with Ferrari strategy, (ii) pay for performance (Meritocracy Principle), (iii) competitiveness, (iv) long term shareholders' value creation (action in the long term interest of shareholders) and (v) compliance (Law and Corporate Governance requirements). The compensation of the BoD is based on a fixed component determined in relation to other members of the BoD with similar experience, and a variable incentive related to achievements of pre-established financial and performance target. In the variable part short-term incentives as well as long-term incentives are included. Short term incentives target results on an annual basis, while long-term incentives relates to the equity incentive plan. For what concern the non-executive Directors, compensation is fixed and not dependent on the company's financial results. The remuneration is periodically reviewed by the Compensation Committee. For what concern the stock option plan, a minimum number of shares must be bought, in a value equalling multiples of net base base salary. The CEO have to buy a minimum amount of shares that represent 6 times net base salary, other SMT Members 2 times net base salary, other senior leaders and key employees 1 time net base salary. The stock option plans have become the main objective to link a part of the remuneration of employees and managers to the trend of stock prices on the market. In other words, with this sharing of intent the company hopes that employees and managers are encouraged to increase their productivity.

ISS Analysis

Corporate Governance Assessment	Score/10	Weight	Calculation
Board and committee structure	5,8	35,00%	20,00%
67% of independent directors			
33% women on board			
Chairman and CEO chairs are covered by the same person			
Is the majority of the board independent?			
The CEO does not serve on outside board but the chairman do			
Are there the executives on the compensation committee			
The executives serve on an excessive number of outside board			
Compensation and remuneration	6,5	15,00%	10,00%
Non executive directors participate to performance related remuneration			
Has an equity-based compensation plan			
Non executive directors remuneration is not link to group performances			
Shareholders rights	4,5	25,00%	12,00%
Directors are not elected annually			
One share one vote			
Does the company have controlling a shareholder?			
Audit	6,5	25,00%	16,00%
9 directors serve on the board			
No regulatory initiated enforcement action against the company			
No adverse opinion by the auditor in the past year			
TOTAL Corporate Governance score	5,8	100%	5,80%

Source: Logos estimate

We performed a more detailed analysis of Corporate Governance practices using ISS (Institutional Shareholders Services) rating methodology. The result is not in line with Ferrari unbeated performances and confirm the possibility to further improve its Corporate-related practices.

ESG

Ferrari is one of the top brands in the automotive sector. We assessed the company's ESG. Ferrari, who seeks perfection in every details still has a lot to work on in terms of emissions. Sustainability and emission reduction is a hot topic and many of Ferrari competitors are already implementing fully electric vehicles.

Workforce is Ferrari Achilles' heel, since laborers are not paid well compared to its peers and Management incentives are not related to any ESGs performance.

The final judgment reflects a negative situation for Ferrari, compared to its direct competitors who are far ahead in terms of sustainability and personnel management.

Ferrari ESG (Environmental Social Governance)						
	Environmental	Score A-D Environmental	Social	Score A-D Social	Governance	Score A- D Governance
Resource use	6	B				
Emissions	4	C+				
Innovation	8	A-				
Workforce			2	C-		
Human Rights			2	C-		
Community			8	A-		
Management					3	C
Shareholders					7	B+
CSR strategy					5	B-
Total	6	B	4	C	5	B-
Final Score	5					
Grade	B-					

Source: Logos estimate