



Formula One

Index

Pg. 1	Mental Model Summary
Pg. 9	Formula One Overview
Pg. 36	An Overview of Sports
Pg. 47	Business Model
Pg. 83	How Do Teams Make Money
Pg. 102	Valuation
Pg. 105	Disclosure

For Information Purposes Only – Not an investment recommendation. Please see important disclosures at the end of the report.

Formula One

Formula One Group had been a private organization since its inaugural season in 1950 until it was acquired by Liberty Media, a U.S.-listed company, in 2017. The company has had limited publicly available information, especially in its early years, regarding its business strategy, operations, historical financials, and financing. Our estimated valuation was based on limited public valuation information across non-Formula One sources. We believe if Bernie Ecclestone retained his ownership stake from 2001, when he secured the sport's 100-year commercial rights for approximately \$360 million,¹ through June 30, 2025 – when the market cap of Liberty Media, which derived over 90% revenue from Formula One Group following the spinoff of several other businesses in prior years and before acquiring MotoGP in July 2025,² was around \$24 billion³ – the investment would have returned roughly a 65x, or an estimated 20% CAGR for more than two decades. This calculation assumes that the price paid for the commercial rights represented a reasonable proxy for the organization's equity value at the time. From Liberty Media's perspective, the acquisition has also delivered exceptional returns. Based on an equity purchase price of approximately \$4.4 billion at the beginning of 2017,⁴ the investment is estimated to have appreciated by more than 5x through June 30, 2025, corresponding to a CAGR nearly 22%. If Liberty Media's market capitalization as of January 31, 2026⁵ is assumed to reflect the company's most recent quarterly results (Q3 2025, ended September 30, 2025), including MotoGP's post-consolidation contribution of roughly 15% of operating income, the adjusted market capitalization would indicate a return closer to 4x, or approximately a 16% CAGR.

Mental Model Summary Derived from Formula One

- 1. Formula One combines cutting-edge technological advancement and engineering across typically 20+ races (e.g., 22 in 2021, 24 in 2024), held in over 20 countries across five continents each year, with each race typically spanning 189.5 miles.⁶ It is a global motorsport with a fanbase of nearly 827 million fans as of 2025 and approximately 1.6 billion in global viewership.⁷**

The name "Formula 1" conveys the status of the category as the premier level motor racing.⁸ The "formula" refers to the comprehensive regulatory framework, covering car design, engine specifications, component usage, and numerous other technical requirements, that all competitors must follow, while the "1" denotes its position as the highest tier within that framework.⁹

Despite limited long-term consistency in fanbase data, Nielsen Sports estimates that Formula One's global fanbase reached approximately 827 million in 2025,¹⁰ representing 12% year-over-year growth and a 63% increase since

¹ F1 Is The Empire Bernie Ecclestone Built But Can It Thrive Without Him. The Guardian.

<https://www.theguardian.com/sport/2017/jan/24/f1-bernie-ecclestone-liberty-media-chief-executive>

² For Q3 2025, ended September 30, Liberty Media consolidated MotoGP into its financial results. During the period, MotoGP contributed approximately 15% to 16% of total revenue and operating income, and more than 20% of the group's adjusted OIBDA (operating income before depreciation and amortization, a metric comparable to EBITDA). Liberty Media Corporation Reports Third Quarter 2025 Financial Results. <https://www.libertymedia.com/investors/news-events/press-releases/detail/571/liberty-media-corporation-reports-third-quarter-2025>

³ FactSet.

⁴ Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; Liberty Media Proxy Statement 12/09/2016.

⁵ FactSet.

⁶ Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdzqV5jwc>

⁷ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

⁸ Why Is It Called Formula 1. Formula 1®. <https://www.formula1.com/en/latest/article/why-is-it-called-formula-1-and-12-other-questions-about-the-championships.1GHeel6u4jga6hMpX2eFs1>

⁹ Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdzqV5jwc>

¹⁰ Data From Nielsen Sports Shows F1 Fandom Surging As 2025 Season Gets Underway. Forbes.

<https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-shows-f1-fandom-surging-as-2025-season-gets-underway/>; Records, Growth and Unforgettable Moments – The 2025 Formula 1 Season So Far. <https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1>

2018, implying a CAGR over 7%. **This figure accounts for nearly 40% of the estimated global motorsports fanbase of over 2 billion people.**¹¹ **Most importantly, Nielsen Sports positions Formula One as the world's most popular annual sporting series,**¹² **with a fanbase exceeding that of the NBA, the second-largest global sports league, by more than 11%.**¹³

Formula One is grounded in technological innovation on the cutting-edge, with the sport representing the pinnacle of automotive engineering while frequently influencing the broader automotive industry. Over the decades, advances in aerodynamics, materials, and powertrain design have transformed performance. Cornering speeds rose dramatically (e.g., an average speed of 90 miles per hour at Silverstone in 1950 compared to over 150 miles per hour by the mid-2020s¹⁴) with the introduction of ground-effect aerodynamics, while engine output increased from roughly 300 horsepower in the 1950s to well over 1,000 horsepower today with turbocharged hybrid power systems despite increasingly stringent safety standards.¹⁵

Innovations in structures and material science are equally prominent throughout Formula One's development. For example, Formula One teams first used monocoque (unibody, "single shell" construction) chassis structure in the 1960s and later carbon fiber structure in the 1980s, both of which were originally developed for aerospace applications for being lightweight and strong.¹⁶ **Decades later, monocoque construction has become the most popular architecture in mass-market passenger vehicles.**¹⁷ **Innovations from Formula One have often moved to the mass market.** Carbon fiber is increasingly adopted today in high-performance and luxury consumer vehicles,¹⁸ reflecting Formula One's role as a testing ground for advanced engineering solutions.

We believe that Formula One rules could even (theoretically) cap performance potential (e.g. sometimes reduce speed due to regulations¹⁹). Through limits on horsepower, aerodynamics, drivetrain architecture, and team budgets, Formula One intensifies competition. **Teams must allocate their finite technical and financial resources toward areas that yield the highest marginal returns, typically measured in lap times and ultimately reflected in championship points. In Formula One, every millisecond matters – differences measured in thousandths of a second can determine grid positions, race outcomes, and ultimately a team's standing in the championship.**²⁰

Parallel to technological evolution, Formula One teams transformed into large-scale commercial enterprises. Modern teams operate as multi-million-dollar organizations, employing hundreds, sometimes thousands, of specialized staff

[season-so-far.1usXKBpUsYIndrYz22GQTq](https://corp.formula1.com/formula-1-2025-season-a-half-year-review/); Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

¹¹ The Global Popularity of Football is Rising. <https://www.nielsen.com/insights/2018/fan-favorite-the-global-popularity-of-football-is-rising/>; Population. World Bank. <https://data.worldbank.org/indicator/SP.POP.TOTL>

¹² Data From Nielsen Sports Shows F1 Fandom Surging As 2025 Season Gets Underway. Forbes.

<https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-shows-f1-fandom-surging-as-2025-season-gets-underway/>; Records, Growth and Unforgettable Moments – The 2025 Formula 1

Season So Far. <https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq>; Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

¹³ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

¹⁴ How Fast Are F1 Cars. <https://www.givemesport.com/how-fast-are-f1-cars/>; What Are F1's Fastest Circuits. Motor Sport Magazine. <https://www.motorsportmagazine.com/articles/single-seaters/f1/what-are-f1s-fastest-circuits>

¹⁵ 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®.

<https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>; A Brief History of F1®. <https://f1arcade.com/uk/blog/news/a-brief-history-of-f1>

¹⁶ Evolution of F1 Cars. Red Bull. <https://www.redbull.com/us-en/evolution-of-f1-cars>; Monomail Broke the Monotony. <https://generalaviationnews.com/2021/02/28/monomail-broke-the-monotony/>; How Have Formula 1 Chassis Evolved. <https://thesportsrush.com/f1-news-timeline-how-have-formula-1-chassis-evolved/>

¹⁷ Monocoque Vs. Unibody Construction – The Modern Way To Build Cars. <https://carbuz.com/car-advice/monocoque-vs-unibody-construction-the-modern-way-to-build-cars/>

¹⁸ Carbon Fiber's Journey from Racetrack to Hatchback. BBC News. <https://www.bbc.com/news/technology-12691062>

¹⁹ Chapter 4. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

²⁰ The Beginner's Guide to the F1 Weekend. Formula 1®. <https://www.formula1.com/en/latest/article/the-beginners-guide-to-the-formula-1-weekend.5RFZzGXNhEi9AEuMXwo987>

²¹ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²² Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²³ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²⁴ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²⁵ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²⁶ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²⁷ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²⁸ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

²⁹ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

³⁰ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

³¹ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

³² Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

³³ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

across engineering, logistics, strategy, data science, marketing, and operations.²¹ By 2024, leading teams such as Mercedes reportedly employed around 1,400 staff,²² spanning engineering, aerodynamics, software development, operations, marketing, and strategy. On a typical race weekend, more than 100 personnel per team may be deployed between the circuit and remote operations centers to support the driver on the race track, underscoring the sport's evolution from artisanal competition to industrial-scale performance management.

One of the most visually recognizable elements of Formula One is the pit stop. Modern pit stops now focus exclusively on tire changes and are considered slow if they exceed three seconds. The current record was set by McLaren, which executed a four-tire change in just 1.8 seconds at the Qatar Grand Prix.²³ Pit crews have expanded from around four mechanics in the early years to approximately 20 today, reducing pit stop times by nearly 96%.²⁴

Formula One has long stood at the cutting edge of automotive innovation, making it an early adopter in today's world for artificial intelligence within sports.²⁵ At the team level, data has become the lifeblood of performance.²⁶ **Modern Formula One cars are now equipped with roughly 300 to 600 sensors, generating approximately 3GB of telemetry data per race.**²⁷ These sensors monitor everything from engine performance and tire temperature to airflow, and gear ratios to support real-time decision-making on the track. Beyond real-time analytics, AI-powered simulations allow teams to model billions of potential race scenarios to identify variables most likely to produce favorable outcomes and to forecast the impact of weather patterns, competitor behavior, pit strategies, track evolution, collisions, and mechanical risk with increasing accuracy.²⁸ AI also accelerates factory-side development by rapidly answering complex engineering questions, compressing development cycles and increasing the probability of championship-winning performance.²⁹ At the organizational level, Formula One leverages advanced data analytics through partnerships with technology providers such as Salesforce. By consolidating over 100 data sources, including the F1 app, website activity, fantasy league, ticket purchases, and store activities, the organization constructs unified fan profiles that capture purchase history, marketing engagement, and prior interactions, helping the organization to deliver relevant content faster in a tailored way. Notably, AI-recommended content has increased Formula One's overall click-through rates by roughly 22% compared with human-selected material.³⁰ With unique fan profiles, personalized content delivery allows the organization to connect sponsors with precisely targeted audience. For example, targeted campaigns can deepen engagement with female fans by highlighting Formula One's partnership with LVMH and its portfolio of luxury brands, including Louis Vuitton, Moët Hennessy, and TAG Heuer.³¹

²¹ 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®.

<https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIY3qgzTctXgz1j>

²² Foreword. Formula 1: The Official History.

²³ McLaren Set New F1 Pit Stop Record with Spectacularly Quick Tyre Change in Qatar.

<https://www.formula1.com/en/latest/article/watch-mclaren-set-new-f1-pit-stop-record-with-spectacularly-quick-tyre.5ZBn7RJxE9iTVmSGfeeVHm>

²⁴ A Thorough Analysis of the Pit Stop Strategy in Formula 1. <https://statathlon.com/about/>

²⁵ AI in Formula One - What Role Is The Technology Playing in Race Strategies, Broadcasts And Sustainability.

<https://www.blackbookmotorsport.com/features/f1-ai-machine-learning-race-strategy-broadcast-aws-sustainability-driverless-cars-oracle/>

²⁶ How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes.

<https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

²⁷ How AI is Revolutionizing F1. McLaren. <https://www.mclaren.com/racing/partners/dell-technologies/how-ai-is-revolutionising-f1-presented-by-dell-technologies/>; How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes.

<https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

²⁸ How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes.

<https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

²⁹ How AI is Revolutionizing F1. McLaren. <https://www.mclaren.com/racing/partners/dell-technologies/how-ai-is-revolutionising-f1-presented-by-dell-technologies/>

³⁰ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

³¹ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

2. **A centralized commercial structure controls race promotion, global media rights, and sponsorship across a worldwide calendar, maximizing economic value for Formula One. Team economics vary considerably and are costly endeavors with many teams struggling to achieve sustainable profitability and/or failing altogether, while even successful teams are anchored on marketing value to sponsors.**

Formula One's sponsorship era began in 1968, with cars starting to carry advertising for the first time.³² At the time, Formula One was still run in an ad-hoc, almost amateur fashion in our opinion. Teams negotiated individually with race organizers, television coverage was inconsistent, and races could be canceled at short notice if too few cars entered.³³ **Formula One's modern economic structure can be contributed largely to Bernie Ecclestone, who recognized earlier than most that television rights, not race winnings, represented the sport's real value.**³⁴ Beginning in the late 1970s as head of the Formula One Constructors Association (FOCA), Ecclestone centralized negotiations by bundling broadcast rights and selling Formula One as a single championship package requiring networks to air every race. This guaranteed global exposure, attracted multinational sponsors, and stabilized team finances.³⁵ In addition, organizers were required to surrender income from trackside advertising and corporate hospitality to Formula One-owned entities, leaving ticket sales as their primary source of revenue.

A notable example in media rights growth is the United States market. Since acquiring Formula One's U.S. broadcasting rights in 2018 for approximately \$90 million annually, ESPN, a subsidiary of The Walt Disney Company, has played a central role in expanding the sport's visibility domestically.³⁶ In 2025, Apple announced that it had secured Formula One's exclusive U.S. broadcast rights for the next five years,³⁷ replacing ESPN. While no official financial terms were disclosed, third-party estimates suggest the deal is worth approximately \$140 million annually,³⁸ implying a CAGR around 7% relative to ESPN's 2019 agreement. **Media rights remain as the core segment of the sport – in 2024, Formula One generated more than \$1.1 billion from media rights (e.g. free-to-air television broadcast, premium and pay-per-view cable and satellite broadcasts, subscription revenue from F1 TV), representing about 33% of total revenue.**³⁹

The pivotal moment of commercialization was marked by the 1981 Concorde Agreement among the FIA, teams, and a newly formed entity headed by Ecclestone, which later becomes Formula One Group today.⁴⁰ which formalized participation, centralized commercial control, and established revenue sharing. It was reported that at that time, under the agreement, roughly 47% of television income flowed to teams, 30% to the FIA, and 23% to Formula One Management,⁴¹ which was mostly controlled, if not all, by Ecclestone.⁴² While the precise economics remain confidential and have evolved over time, prize money is widely regarded as a core component of team revenue. Ferrari historically benefited from a unique arrangement guaranteeing at least 5% of the prize pool, previously rising

³² About Formula 1. ESPN. https://www.espn.com/f1/story/_/id/13715980/about-formula-1

³³ How Ecclestone turned Formula One into the World's Most Watched Series. <https://www.autoweek.com/racing/formula-1/a1933936/how-ecclestone-turned-formula-one-worlds-most-watched-series/>

³⁴ Bernie Ecclestone – How One Man Came to Own A Sport. <https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>

³⁵ F1 Is The Empire Bernie Ecclestone Built But Can It Thrive Without Him. The Guardian.

<https://www.theguardian.com/sport/2017/jan/24/f1-bernie-ecclestone-liberty-media-chief-executive>; About Formula 1. ESPN. https://www.espn.com/f1/story/_/id/13715980/about-formula-1

³⁶ Formula One Revenue up 5.9% in 2024 as Focus Shifts to US Rights Renewal. S&P Global. <https://www.spglobal.com/market-intelligence/en/news-insights/research/formula-one-revenue-up-in-2024-as-focus-shifts-to-us-rights-renewal>

³⁷ Apple is The Exclusive New Broadcast Partner for Formula 1® in the U.S. Apple.

<https://www.apple.com/newsroom/2025/10/apple-is-the-exclusive-new-broadcast-partner-for-formula-1-in-the-us/>

³⁸ Apple TV Wins F1's US Broadcast Rights with Landmark Five-Year Deal. <https://www.motorsport.com/f1/news/apple-tv-f1-us-broadcast-rights-landmark-five-year-deal/10768225/>

³⁹ Liberty Media Annual Report 2024.

⁴⁰ Bernie Ecclestone – A Short History of F1's Billion-Dollar Brain. <https://bleacherreport.com/articles/542560-f1s-billion-dollar-brain-a-short-history-of-bernie-ecclestone>

⁴¹ Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>; Bernie Ecclestone – A Short History of F1's Billion-Dollar Brain.

<https://bleacherreport.com/articles/542560-f1s-billion-dollar-brain-a-short-history-of-bernie-ecclestone>; What is the F1 Concorde Agreement. <https://www.motorsport.com/f1/news/what-is-the-f1-concorde-agreement-all-to-know-about-the-contract/10703778/>

⁴² Bernie Ecclestone – A Short History of F1's Billion-Dollar Brain. <https://bleacherreport.com/articles/542560-f1s-billion-dollar-brain-a-short-history-of-bernie-ecclestone>; Bernie Ecclestone – How One Man Came to Own A Sport.

<https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>

toward 10% under certain conditions,⁴³ while the championship-winning team is generally estimated to receive about 14%, compared with roughly 6% for the lowest-ranked entrant.⁴⁴ A 2025 estimate suggests that the top-ranked team may receive around \$140 million in prize distributions in a strong season, while the lowest-ranked team may receive closer to \$60 million, with intermediate teams scaling down according to final standings.⁴⁵

For most teams, it is estimated that individual sponsorship agreements represent the largest source of revenue, often accounting for 60% or more of total income. Formula One's global reach, premium positioning, and technological sophistication make it especially appealing to multinational brands. Title partnerships such as Petronas with Mercedes and Oracle with Red Bull Racing can exceed \$50 million per season, while smaller deals typically range from several hundred thousand to a few million for targeted logo placement on cars, helmets, or racing suits.⁴⁶ Beyond sponsorship and prize money, teams also generate revenue through merchandise and licensing. Team-branded apparel, accessories, video games, scale models, and collaborative products can generate several million dollars annually, particularly for leading teams with large international fan bases.⁴⁷

Based on our research, we believe running a Formula One team in general is a tough business. Despite rising revenues, operating a Formula One team remains capital intensive. Leading teams now can employ over 1,000 staff, and financial outcomes vary widely depending on competitive success and ownership objectives. Mercedes, for example, saw profitability improve significantly following its championship dominance and the introduction of the cost cap, **initially set at \$145 million and reduced to \$135 million by 2023, excluding driver salaries, marketing expenses, and certain capital costs.** This potentially helped the team achieve an overall operating margin (after charging all operating expenses such as R&D and salaries⁴⁹) near 25% by 2024. Red Bull Racing, by contrast, has historically operated at operating margins below 1%,⁵⁰ suggesting its strategic value may lie more in brand marketing than profit maximization.⁵¹ Top-performing Formula One teams deliver substantial marketing value. Mercedes team principal Toto Wolff once estimated that the team generated approximately \$3 billion in marketing value,⁵² underscoring the scale of exposure for partners. Red Bull Racing's Christian Horner similarly observed that replicating Formula One's global exposure through traditional advertising would cost significantly more.⁵³

On the cost side, operating a Formula One team remains an inherently expensive endeavor. Teams build their cars largely from scratch each season while maintaining large organizations spanning drivers, engineering, operations, marketing, and commercial functions, making Formula One "the only form of motorsport in the world that requires a team to design and build their own car to enter."⁵⁵ For example, in 2022, Mercedes reportedly incurred operating costs of approximately \$400 million against revenues of around \$600 million. Developing a competitive Formula One car alone is estimated to cost roughly \$50 million, with additional millions required for

⁴³ Ferrari Retains Historic Bonus Payment in New Concorde Agreement. <https://www.si.com/onsi/f1/rumours/f1-rumor-ferrari-retains-historic-bonus-payment-in-new-concorde-agreement-01hydcbb5c6b-lm22>

⁴⁴ F1 Prize Money - How Much Do GP Teams And Drivers Really Make. Motor Sport Magazine.

<https://www.motorsportmagazine.com/articles/single-seaters/f1/f1-prize-money-how-much-do-gp-teams-and-drivers-really-make/>

⁴⁵ F1 Prize Money - How Much Do GP Teams And Drivers Really Make. Motor Sport Magazine.

<https://www.motorsportmagazine.com/articles/single-seaters/f1/f1-prize-money-how-much-do-gp-teams-and-drivers-really-make/>

⁴⁶ The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

⁴⁷ The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

⁴⁸ Do F1 Teams Make Money – A Breakdown of Revenue and Costs. <https://www.sportsboom.com/motor-sports/do-f1-teams-make-money-a-breakdown-of-revenue-and-costs/>

⁴⁹ Mercedes-Benz Grand Prix Limited Annual Report 2024.

⁵⁰ Red Bull Racing Ltd. Annual Report 2005 – 2024.

⁵¹ Original response: "It depends how you view it in terms of the recognition for the brand globally, what that would cost to advertise. Absolutely. It's a huge success in the amount that it's promoting the Red Bull brand. And I think as the sponsorship and partnerships and the income improve and cost caps take effect, we're seeing the intrinsic value of Formula 1 teams just increase dramatically." How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

⁵² Toto Wolff Exclusive: Behind the Mercedes Dominance. <https://f1i.com/magazine/29314-toto-wolff-exclusive-behind-the-mercedes-dominance.html>

⁵³ Original response: "It depends how you view it in terms of the recognition for the brand globally, what that would cost to advertise. Absolutely. It's a huge success in the amount that it's promoting the Red Bull brand. And I think as the sponsorship and partnerships and the income improve and cost caps take effect, we're seeing the intrinsic value of Formula 1 teams just increase dramatically." How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

⁵⁴ How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

⁵⁵ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

manufacturing, testing, and race operations. R&D represents the single largest cost category, although teams do not disclose detailed breakdowns.

Driver compensation has grown into a major financial commitment, ranging from roughly \$1 million to more than \$55 million annually.⁵⁶ However, elite drivers can also generate extraordinary off-track income. For example, Michael Schumacher transformed sporting success into a global commercial platform and reportedly became the first athlete to surpass \$1 billion in career earnings, four years before Tiger Woods was said to have reached the same level.⁵⁷

Team valuations nevertheless reflect the sport's strengthening financial foundation. For illustrative purposes, we focus on a select group of leading teams that have existed between 2010 and 2025. **As of 2025, Forbes estimates team valuations of approximately \$6.5 billion for Ferrari, \$6.0 billion for Mercedes, \$4.4 billion for McLaren, and \$4.35 billion for Red Bull Racing,⁵⁸ implying CAGR of roughly 13%, 23%, 12%, and 21%, respectively.** Over the same period, team revenues increased to an estimated \$670 million for Ferrari, \$799 million for Mercedes, \$614 million for McLaren, and \$618 million for Red Bull Racing, corresponding to revenue CAGRs of approximately 5%, 15%, 6%, and 13%. Notably, all four teams were operating at a loss in 2009. By 2024, one year prior to the latest valuation estimates, each had achieved positive operating income, with Ferrari generating approximately \$80 million, Mercedes \$202 million, McLaren \$61 million, and Red Bull Racing \$26 million. These figures imply operating margins of roughly 12%, 25%, 10%, and 4%, respectively.

It is worth noting that the above valuation data involves significant survivorship bias. Given the business model of teams, which rely heavily on sponsorship and prize funds from Formula One, meaning that the financials are largely dictated by their performance on the track. As Niki Lauda, who was the former non-executive chairman at Mercedes Formula One, noted that “formubecause if their competitiveness is compromised, so is there commercial success.”⁵⁹ Therefore, unless lower ranked teams can climb to the top of the grids or continue to receive funding from the team owners, they would eventually go defunct. **Since the championship's inception in 1950, more than 100 teams have entered and exited the sport,⁶⁰ many failing due to sustained financial losses. Some estimates place the average tenure of a Formula One team at fewer than six years before exiting the grid or changing ownership, underscoring the sport's structural financial challenges.**⁶¹

3. Formula One provides powerful storytelling and brand association with the pinnacle of human excellence and has powerful and unique influences on customers. Formula One's recent partnership with media platforms (e.g., Netflix and Apple) has significantly increased audience penetration.

Across more than seven decades, Formula One has produced moments of breathtaking intensity, races decided by milliseconds and rivalries remembered for generations. We believe these dramatic episodes extend far beyond the racetrack, sometimes making global sports news headlines and even inspiring major media productions. For example, From the 2010 documentary *Senna* to Netflix's *Formula 1: Drive to Survive* (2019 to present), the 2024 drama miniseries *Senna*, and Apple's *F1 The Movie* in 2025, the sport has repeatedly proven itself for cinematic storytelling.

Few narratives, from our perspective, capture this better than the legendary rivalry between Ayrton Senna and Alain Prost, widely described as the sport's "defining rivalry."⁶² Their clashes in the late 1980s and early 1990s, including championship alternations while driving identical McLarens and controversial collisions in consecutive seasons in 1989 and 1990,⁶³ transcended sport. Their symbolic reconciliation on the 1993 Australian Grand Prix podium became even more remarkable after Senna's fatal crash in 1994, an event witnessed by millions live on television and followed by three days of national mourning in Brazil, Senna's home country, where an estimated three million people lined in

⁵⁶ Do F1 Teams Make Money – A Breakdown of Revenue and Costs. <https://www.sportsboom.com/motor-sports/do-f1-teams-make-money-a-breakdown-of-revenue-and-costs/>

⁵⁷ Michael Schumacher Would Give Formula 1 a Boost. Wall Street Journal.

<https://www.wsj.com/articles/SB10001424052748704304504574610031362683024>

⁵⁸ Forbes Formula 1's Most Valuable Teams 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/11/20/formula-1s-most-valuable-teams-2025/>

⁵⁹ Foreword. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁶⁰ Top 10... Defunct Formula 1 Teams. <https://www.goodwood.com/grr/f1/top-10...-defunct-formula-1-teams>

⁶¹ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁶² Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®.

<https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

⁶³ Prost-Senna Rivalry Unlikely to Be Repeated. <https://www.grandprix247.com/formula-1-news/prost-senna-rivalry-unlikely-to-be-repeated>; Prost-Senna Rivalry Unlikely to Be Repeated. <https://www.grandprix247.com/formula-1-news/prost-senna-rivalry-unlikely-to-be-repeated>

the street of as his coffin was transported through the city.⁶⁴ Such drama has proven Formula One's cinematic appeal, inspiring productions from *Senna* (2010) to Netflix's *Formula 1: Drive to Survive* (2019 – present), the 2024 *Senna* miniseries, and Apple's *F1 The Movie* in 2025.

A notable example was the launch of the Netflix documentary series *Formula 1: Drive to Survive* in 2019.⁶⁵

The series significantly expanded Formula One's cultural footprint, particularly in the United States, and is widely regarded as a breakthrough in penetrating the American market. Now in its eighth season as of 2026,⁶⁶ the series has helped broaden the sport's appeal beyond traditional superfans. **An early 2025 report indicates that, of the roughly 45 million American fans of Formula One, around half began following the sport within the past five years, coinciding with the show's release.**⁶⁷ Nielsen Sports' 2022 analysis shows that during the premiere week of each season from Season One through Season Four, viewership rose from 288,779 viewers in 2019 to 407,678 viewers in Season Four, representing a CAGR of approximately 12%, excluding an additional 68,000 viewers who continued watching earlier seasons. The same report indicates that 34% of respondents became fans after watching the series, 30% reported a better understanding of the sport, and 29% felt more engaged with Formula One overall.⁶⁸ Reflecting this momentum, the estimated number of American Formula One fans increased from approximately 34.6 million, according to Formula One, the year of the series' launch in 2019, to around 52 million by late 2025.⁶⁹

We believe the storytelling resonates partly because the thrill of speed is universally relatable. While many people might never play cricket, football, or basketball, a large proportion of population have driven a car and understand the exhilaration, and risk, of going fast. Research shows that high-speed experiences trigger adrenaline, endorphins, and dopamine, producing a biochemical "rush" that reinforces pleasure.⁷⁰ Psychologist Richard Stephens at Keele University further notes that perceived control, such as driving a fast car, intensifies this emotional payoff, helping explain motorsport's enduring appeal. Scientists also attribute this connection to mirror neurons, which activate both when people act and when they watch others perform, allowing spectators to share in athletic intensity.⁷¹ Live sports therefore uniquely combine emotional intensity, authenticity, and record-setting human performance, making them among the most trusted advertising environments. The World Economic Forum reports that 81% of consumers view sports sponsorship as credible.⁷² Academic research supports this advantage – scholars from Oregon State University and the University of Oregon found that suspense enhances advertising effectiveness through excitation transfer, with ads shown immediately after tense moments generating stronger emotional responses and more favorable brand attitudes.⁷³

The economics reflect this demand. From 2015 to 2024, Formula One Group increased sponsorship revenue from \$244 million to \$634 million, about 11% CAGR, and media rights revenue from \$548 million to over \$1 billion, around 8% CAGR.⁷⁴ Third-party data shows that teams collectively generated an estimated \$2.04 billion in sponsorship

⁶⁴ Ayrton Senna's Death – The Car, The Helmet, The Funeral, The Trial And More. <https://www.autoweek.com/racing/formula-1/a1894831/ayrton-sennas-death-car-helmet-funeral-trial-and-more/>

⁶⁵ Formula 1 and Netflix Announce 'Drive to Survive'. Formula 1®. <https://www.formula1.com/en/latest/article/formula-1-and-netflix-put-drive-to-survive-on-pole-position.7MyqMggwrYJ5qUxjj1igeB>

⁶⁶ Netflix confirm release date for Drive to Survive Season 8. Formula 1®. <https://www.formula1.com/en/latest/article/netflix-confirm-release-date-for-drive-to-survive-season-8.6ULJefRBR2n4UPWR6nc9aN>

⁶⁷ Drive to Survive: F1 Boom Sparked by Unlikely Stars and Stretching Truth. The Times. <https://www.thetimes.com/sport/formula-one/article/drive-to-survive-netflix-formula-one-bl0nwkqkg>

⁶⁸ Driven to Watch – How A Sports Docuseries Drove U.S. Fans to Formula 1. Nielsen. <https://www.nielsen.com/insights/2022/driven-to-watch-how-a-sports-docuseries-drove-u-s-fans-to-formula-1/>

⁶⁹ The discrepancy in fan counts (52 million vs. 45 million above) likely reflects differences in reporting periods, as this figure was cited in August 2025, whereas the earlier number was reported in February 2025. Formula 1 Viewing Figures 2019 – F1 Broadcast to 1.9 Billion Total Audience in 2019. Formula 1®. <https://www.formula1.com/en/latest/article/f1-broadcast-to-1-9-billion-fans-in-2019.4leYkWSOexxSleJyuTrk22>; Records, Growth and Unforgettable Moments – The 2025 Formula 1 Season So Far. <https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq>

⁷⁰ The World's Fastest Human and Experts on Our Need for Speed. <https://robbreport.com/lifestyle/sports-leisure/human-speed-commander-andy-green-1236474930/>

⁷¹ Getting into The Game. CBC News. <https://www.cbc.ca/news/science/getting-into-the-game-1.971516>

⁷² Sports for People and Planet – Insight Report. January 2026. World Economic Forum.

⁷³ It's Not Whether You Win or Lose, It's How The Game is Played: The Influence of Suspenseful Sports Programming on Advertising. Colleen Bee. Oregon State University; Robert Madrigal. University of Oregon.

⁷⁴ Liberty Media Annual Report 2017 – 2024; Liberty Media Proxy Statement 12/09/2016.

revenue in 2024.⁷⁵ Against a global sports sponsorship market that expanded from roughly \$30 billion in 2013 to \$105 billion in 2023, and is projected to reach about \$190 billion by 2030,⁷⁶ Formula One commands ~3% share, with some estimates placing it near 6.6% of global sponsorship spend.⁷⁷

Sponsors are drawn not only to exposure but also to innovation spillovers. For example, Shell's decades-long partnership with Ferrari illustrates this dynamic. The company's fuels and lubricants developed under Formula One's extreme conditions inform its commercial products, with compounds used in Ferrari race engines closely mirrored in Shell's road fuels.⁷⁸

⁷⁵ Formula 1 Report 2024 & 2025 – SponsorUnited; F1 Sponsorship Spend Projected to Hit US\$2.9bn for 2025. BlackBook Motorsport. <https://www.blackbookmotorsport.com/news/f1-sponsorship-spend-revenue-liberty-media-ampere-analysis-viagogo-march-2025>

⁷⁶ Getting Measurement Right to Understand Sponsorship Impact. <https://www.warc.com/content/paywall/article/warc-exclusive/getting-measurement-right-to-understand-sponsorship-impact/en-GB/156708>

⁷⁷ Formula 1 Now Sees 750 Million Fans Due To Growth With Women And Middle East. Forbes. <https://web.archive.org/web/20250321050512/https://www.forbes.com/sites/maurybrown/2024/12/03/formula-1-now-sees-750-million-fans-due-to-growth-with-women-and-middle-east-demo/>; Inside The Race for Brand Visibility in F1 Sponsorship. BlackBook Motorsport. <https://www.blackbookmotorsport.com/features/brand-visibility-f1-sponsorship-relo-metrics/>

⁷⁸ More Than Just A Sticker – How Shell Boosted Ferrari's F1 Performance By 25%. <https://www.forbes.com/sites/csylt/2016/06/13/more-than-just-a-sticker-how-shell-boosted-ferraris-f1-performance-by-25/?sh=2b0962116523>

Formula One Overview

Formula One (commonly known as “F1”) is the premier global championship of single-seater motor racing and one of the most commercially sophisticated organizations in international motorsports in our opinion. Established in 1950 under the governance of the Fédération Internationale de l’Automobile (FIA), **Formula One combines elite engineering competition with a centralized commercial structure that controls race promotion, global media rights, and sponsorship across a worldwide calendar.** Over time, the sport has evolved from a fragmented, promoter-led series into a highly integrated global enterprise, an evolution that accelerated with the consolidation of commercial rights in the late twentieth century and reinforced in its acquisition by Liberty Media in 2017. Today, Formula One operates simultaneously as a sporting institution and a global entertainment business, underpinned by long-term contracts with teams, broadcasters, and host cities, and sustained by diversified revenue streams, which we will discuss in greater detail.

Formula One holds the exclusive commercial rights to the FIA Formula One World Championship, an annual motor racing competition that typically runs for approximately nine months, from March to December.⁷⁹ Teams compete for the Constructors’ Championship, while individual drivers compete in the Drivers’ Championship. The World Championship has been held annually since 1950 and takes place on a rotating calendar of high-profile, iconic circuits in different countries across multiple continents. The number of circuits could vary from time to time. As of the 2026 season, it is expected to feature 24 races across five continents.⁸⁰ Over its history, Formula One has raced on more than 70 different circuits worldwide.⁸¹

By 2024, Formula One reached hundreds of millions of unique television viewers across nearly 200 territories worldwide, with the largest race weekends drawing live attendance in excess of 450,000 spectators.⁸² Cumulatively, Formula One was estimated to have 1.6 billion TV viewers in 2024, with a global fanbase of 750 million.⁸³ **A 2025 Nielsen report estimates its global fanbase at approximately 827 million as of 2025.⁸⁴ This makes it the world’s most popular annual sports series, in terms of global fanbase on an annual basis, surpassing the NBA, the second-largest global sports league, by more than 11%.**

Key Participants And Stakeholders in Formula One⁸⁵

Fédération Internationale de l’Automobile (FIA)

The Fédération Internationale de l’Automobile (FIA) is the global governing body for international motorsports and is solely responsible for regulating the sporting, technical, and safety aspects of the Formula One World Championship. This authority extends to the race circuits to be used, the approval of sporting regulations, and the enforcement of safety standards applicable to teams, drivers, and event promoters.⁸⁶

The FIA owns the Formula One World Championship as an intellectual and sporting property. Under the 100-Year Agreement signed in 2001, the FIA granted Formula One the exclusive commercial rights to the championship through 2110, while retaining full regulatory control.

Teams

Formula One teams are the primary competitive participants in the World Championship. Each team competes for the annual Constructors’ Championship, while its drivers compete for the Drivers’ Championship. To be eligible to enter the championship, teams must design and manufacture specific listed components of their cars, including the chassis.

As of 2024, teams source power units from one of four suppliers: Ferrari, Mercedes, Renault, or Red Bull Powertrains (purchased from Honda). Looking ahead, Audi and Honda have committed to becoming engine suppliers from the 2026 season, while Renault is scheduled to withdraw as an engine supplier after 2025.⁸⁷

⁷⁹ Liberty Media Annual Report 2024.

⁸⁰ Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdzV5jwc>

⁸¹ F1 Circuit Count: How Many F1 Tracks Are There. <https://f1mix.com/how-many-f1-tracks-are-there>

⁸² Liberty Media Annual Report 2024.

⁸³ Liberty Media Q4 2024 Earnings Call. 2/27/2025.

⁸⁴ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

⁸⁵ Liberty Media Annual Report 2024.

⁸⁶ Liberty Media Annual Report 2024.

⁸⁷ Liberty Media Annual Report 2024.

Teams receive substantial financial distributions from Formula One's central prize fund, formally established in 1981 under the Concorde Agreement, which we will discuss in greater detail later. The Concorde Agreement, whose terms are subject to strict confidentiality and are not publicly disclosed,⁸⁸ governs revenue sharing, cost controls, and the conditions of team participation. Prize fund distributions, also addressed later, are primarily based on teams' performance in prior Constructors' Championships, although additional factors such as heritage and longevity may also influence payouts.⁸⁹ A notable exception within the prize structure is Ferrari, which, as Formula One's only team to have competed continuously since the inaugural 1950 season, receives a heritage-based payment estimated by third parties at approximately 5% of the total prize fund, regardless of on-track performance.⁹⁰ The remainder of the prize fund is distributed largely according to championship standings, including Ferrari.

Formula One does not hold any ownership interest in teams and has no contractual relationships with drivers.⁹¹ Teams operate as independent businesses, responsible for hiring drivers, managing operations, and securing funding. Their revenues typically comprise prize fund distributions, team-specific sponsorships, and commercial partnerships, which we will also discuss later in this document briefly as individual teams also do not disclose the teams' financial conditions.

Drivers

Drivers are one of the most distinctive participants in Formula One and play a critical role in shaping the sport's global appeal. The World Championship features a highly international driver roster, with differences in nationality, personality, and racing style contributing to Formula One's commercial and cultural resonance. High-profile drivers often act as catalysts for audience growth in their home markets. For example, drivers such as Lewis Hamilton (United Kingdom), Max Verstappen (Netherlands), and Fernando Alonso (Spain), according to Liberty Media, the parent company of Formula One, have significantly boosted television viewership, sponsorship interest, and fan engagement in their local market. Although the company has not disclosed driver-specific figures, we found that China provides a particularly illustrative example of this dynamic. Zhou Guanyu, the first and only Chinese Formula One driver, raced for Sauber in the 2024 season and was later appointed a reserve driver at Ferrari. His participation in the 2024 Chinese Grand Prix was reported to have contributed to a 39% increase in the Chinese fanbase that year to 221 million, compared with approximately 12% growth in Formula One's global fanbase overall, making the country the main driver of such growth.⁹² As a result, Formula One has strong incentives to cultivate driver talent from strategically important markets.

All drivers are employed or contracted directly by teams and have no contractual relationship with Formula One itself. The organization supports driver development through its feeder series, most notably Formula 2 and Formula 3, which serve as the principal training and evaluation platforms for future Formula One drivers.

Although Formula One was formally inaugurated in 1950, its origins lie in the earlier era of Grand Prix (literally meaning "Grand Prize," and later referring to each individual race within a Formula One World Championship season⁹³) racing decades earlier. In the early twentieth century, manufacturers such as Mercedes and Bugatti competed in open-wheel events across Europe, laying the technological and cultural foundations of modern motorsport. Between 1931 and 1939, the sport was governed by the Association Internationale des Automobile Clubs Reconnus (AIACR), which organized the European Championship. Despite its name, the European Championship was indeed a world championship. This competition employed an unusual scoring system that rewarded drivers based on race completion percentages, with the lowest cumulative score determining the champion. Dominated by manufacturers such as Alfa Romeo, Mercedes, and Auto Union, the championship came to an abrupt end with the outbreak of World War II in 1939.

⁸⁸ F1 and FIA Announce New Concorde Agreement Signed with Teams through 2030. The Athletic.

<https://www.nytimes.com/athletic/6884612/2025/12/12/f1-fia-concorde-agreement/>

⁸⁹ Liberty Media Annual Report 2017 – 2024.

⁹⁰ TEAM GUIDE – Get up to Speed on Ferrari And Their Rich F1 History as They Aim for Title Glory in 2023. Formula 1®.

<https://www.formula1.com/en/latest/article/team-guide-get-up-to-speed-on-ferrari-and-their-rich-f1-history-as-they-aim.4sQqdN83VRCx7kW3eHWhtd>

⁹¹ Liberty Media Annual Report 2024.

⁹² F1 Sees Global Fanbase Increase 12% to 826.5m in 2024. <https://www.blackbookmotorsport.com/news/f1-global-fanbase-tv-viewership-2024-season-nielsen-sports-march-2025>; Formula One Fan Growth Continues, Boosted by China. Reuters.

<https://www.reuters.com/sports/formula1/formula-one-fan-growth-continues-boosted-by-china-2025-03-19/>; Records, Growth and Unforgettable Moments – The 2025 Formula 1 Season So Far. <https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYlndrYz22GQTq>

⁹³ Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdzqV5jwc>

In 1949, the Federation Internationale de l'Automobile ("FIA") officially confirmed that the Formula One World Championship would be inaugurated the following year. The championship formally launched on May 13, 1950, with the first World Championship Grand Prix held at Silverstone in the United Kingdom. The event was notable not only for marking the beginning of this new championship but also for its symbolic significance – it marked the first time a reigning British monarch attended a motor race.⁹⁴ The presence of King George VI and the royal family helped cement Formula One's early prestige.

When the new racing category was approved by the Commission Sportive Internationale (CSI) in 1946, it was initially believed that the term "formula" best captured the concept of a racing classification defined by a fixed set of rules. The category was first referred to as Formula Internationale, and some suggested Formula A. **Ultimately, the name Formula 1 was adopted, as it clearly conveyed the status of the category as the premier level motor racing.**⁹⁵ The "formula" refers to the comprehensive regulatory framework, covering car design, engine specifications, component usage, and numerous other technical requirements, that all competitors must follow, while the "1" denotes its position as the highest tier within that framework.⁹⁶

Figure 1-1: 1950 British Grand Prix⁹⁷



⁹⁴ Why Is It Called Formula 1. Formula 1®. <https://www.formula1.com/en/latest/article/why-is-it-called-formula-1-and-12-other-questions-about-the-championships.1GHeel6u4jga6hMpX2eFs1>

⁹⁵ Why Is It Called Formula 1. Formula 1®. <https://www.formula1.com/en/latest/article/why-is-it-called-formula-1-and-12-other-questions-about-the-championships.1GHeel6u4jga6hMpX2eFs1>

⁹⁶ Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdgV5jwc>

⁹⁷ Why Is It Called Formula 1. Formula 1®. <https://www.formula1.com/en/latest/article/why-is-it-called-formula-1-and-12-other-questions-about-the-championships.1GHeel6u4jga6hMpX2eFs1>

Figure 1-2: King George VI Met with Drivers Before Race⁹⁸



Unlike today, the early decades of Formula One were characterized by rapid technological evolution but relatively modest financial rewards. **Based on limited available data from the early 1960s, total prize funds for Grands Prix likely did not exceed £1,000 (approximately \$1,300), with winners receiving approximately £350 (\$455).**⁹⁹ **By contrast, as of 2024, although Formula One does not publicly disclose the total size of its prize fund, it distributed more than \$1.2 billion to teams, including payments to winning drivers.**¹⁰⁰ Despite these early financial constraints, the sport quickly gained momentum, with teams such as Ferrari, Alfa Romeo, and Maserati emerging as dominant forces.¹⁰¹ Each race in the championship became known as a Grand Prix.¹⁰²

Technological innovation has always been central to Formula One's identity. While front-engine cars dominated the early years, a major shift occurred in 1958 when Cooper introduced rear-engine designs. This architectural change transformed car performance and soon became the industry standard.¹⁰³

⁹⁸ Noise And Smoke – How Silverstone Gave F1 Blast-off 70 Years Ago. The Guardian.

<https://www.theguardian.com/sport/2020/may/13/noise-and-smoke-silverstone-f1-blast-off-70-years-go>

⁹⁹ Why Is It Called Formula 1. Formula 1®. <https://www.formula1.com/en/latest/article/why-is-it-called-formula-1-and-12-other-questions-about-the-championships.1GHeel6u4jga6hMpX2eFs1>

¹⁰⁰ Liberty Media Annual Report 2024.

¹⁰¹ A Brief History of F1®. <https://f1arcade.com/uk/blog/news/a-brief-history-of-f1>

¹⁰² Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdzqV5jwc>

¹⁰³ A Brief History of F1®. <https://f1arcade.com/uk/blog/news/a-brief-history-of-f1>

Figure 2-1: Ferrari Front-Engine F1 Car 1950¹⁰⁴

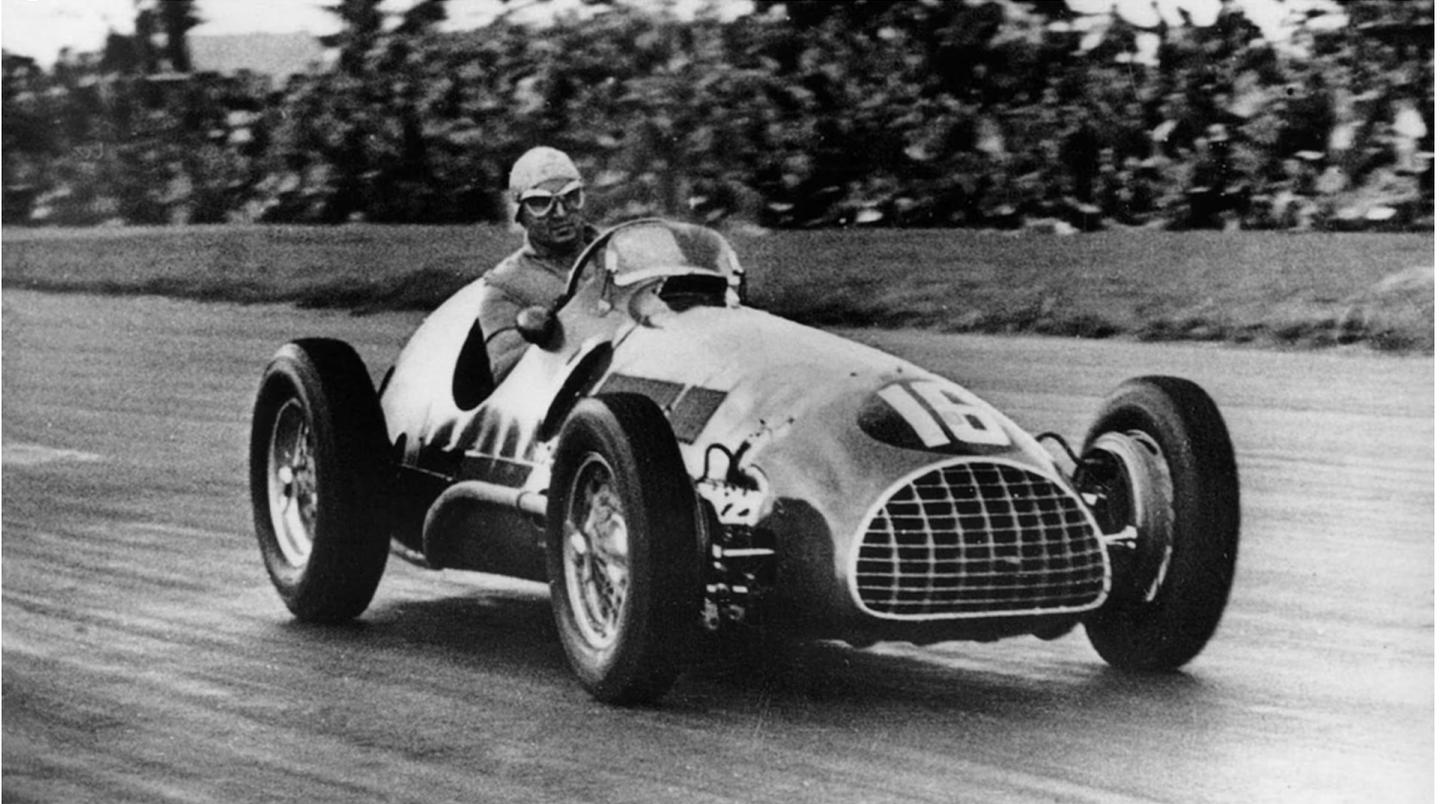


Figure 2-2: Cooper Rear-Engine F1 Car 1958¹⁰⁵

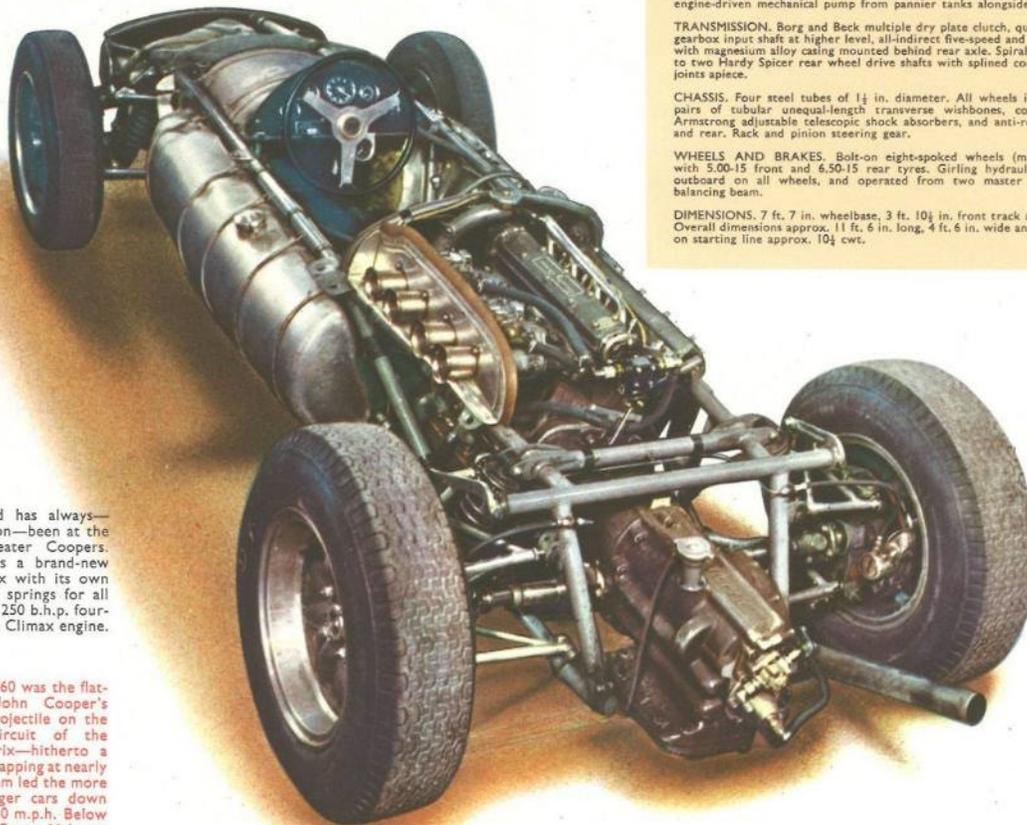


¹⁰⁴ DEBUT IN F1. Ferrari History. <https://www.ferrari.com/en-EN/history/moments/1950/debut-in-f1/more>

¹⁰⁵ Cooper T43 – Formula 1’s Groundbreaking Rear-Engined Winner. <https://www.goodwood.com/grr/f1/cooper-t43-formula-1s-groundbreaking-rear-engined-winner/>

Figure 2-3: Cooper Rear-Engine F1 Car 1960¹⁰⁶

BASIS of SUCCESS



The business end has always—with one exception—been at the back of single-seater Coopers. The 1960 car has a brand-new five-speed gearbox with its own finned sump, coil springs for all four wheels and a 250 b.h.p. four-cylinder Coventry Climax engine.

The surprise of 1960 was the flat-out speed of John Cooper's trimmed-down projectile on the Rheims-Gueux circuit of the French Grand Prix—hitherto a Ferrari preserve. Lapping at nearly 135 m.p.h., Brabham led the more powerful but bigger cars down the straights at 180 m.p.h. Below is his team-mate Bruce McLaren

SPECIFICATION

ENGINE. Coventry Climax 4 cylinder, mounted just ahead of rear axle with 18° tilt to right; 94 mm. bore x 69.9 mm. stroke, giving 2,495 cc. displacement and 43 sq. in. piston area. Compression ratio approx. 12/1. Two inclined overhead valves per cylinder operated by two gear-driven overhead camshafts. Approx. 240 b.h.p. at 6,750 r.p.m., with 210-215 lb. ft. maximum torque at 5,000 r.p.m.

CARBURATION. Two Weber 58 mm. twin-choke horizontal carburetters, fed by engine-driven mechanical pump from pannier tanks alongside cockpit.

TRANSMISSION. Borg and Beck multiple dry plate clutch, quick-change spur gears to gearbox input shaft at higher level, all-indirect five-speed and reverse Cooper gearbox with magnesium alloy casing mounted behind rear axle. Spiral bevel final drive gearing to two Hardy Spicer rear wheel drive shafts with splined coupling and two universal joints apiece.

CHASSIS. Four steel tubes of 1½ in. diameter. All wheels independently sprung by pairs of tubular unequal-length transverse wishbones, coil springs mounted on Armstrong adjustable telescopic shock absorbers, and anti-roll torsion bars at front and rear. Rack and pinion steering gear.

WHEELS AND BRAKES. Bolt-on eight-spoked wheels (magnesium alloy castings) with 5.00-15 front and 6.50-15 rear tyres. Girling hydraulic disc brakes mounted outboard on all wheels, and operated from two master cylinders coupled with balancing beam.

DIMENSIONS. 7 ft. 7 in. wheelbase, 3 ft. 10½ in. front track and 4 ft. 0 in. rear track. Overall dimensions approx. 11 ft. 6 in. long, 4 ft. 6 in. wide and 2 ft. 6 in. high. Weight on starting line approx. 10½ cwt.

¹⁰⁶ Designers – Coopermen: “Action with A Purpose” – A Comparison of Cooper with Lotus.
http://colinchapmanmuseum.co.uk/?page_id=3538

The 1970s and 1980s marked a period of significant growth in popularity of Formula One. Advances in aerodynamics, including ground-effect technology, dramatically increased cornering speeds (e.g., an average speed of 90 miles per hour at Silverstone in 1950 compared to over 150 miles per hour by the mid-2020s¹⁰⁷), while turbocharged engines delivered unprecedented power (e.g., from around 300 horsepower in the 1950s to over 1,000 today¹⁰⁸).¹⁰⁹ Iconic cars such as the Lotus 79 and McLaren MP4/4 exemplified this era of innovation. At the same time, intense rivalries between drivers captured global attention. The 1976 championship battle between Niki Lauda and James Hunt became one of the sport's most dramatic narratives, later popularized in the film *Rush*. In the 1980s, the rivalry between Ayrton Senna and Alain Prost further elevated Formula One's profile among audience.

Figure 3-1: Lotus 79 in 1978¹¹⁰



¹⁰⁷ How Fast Are F1 Cars. <https://www.givemesport.com/how-fast-are-f1-cars/>; What Are F1's Fastest Circuits. Motor Sport Magazine. <https://www.motorsportmagazine.com/articles/single-seaters/f1/what-are-f1s-fastest-circuits>

¹⁰⁸ 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®.

<https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>

¹⁰⁹ A Brief History of F1®. <https://f1arcade.com/uk/blog/news/a-brief-history-of-f1>

¹¹⁰ The Lotus 79, F1's Ground Effect Marvel. <https://www.formula1.com/en/latest/article/tech-tuesday-the-lotus-79-f1s-ground-effect-marvel.sAD9PXt7mC8iMSwwe6CCw>

Figure 3-2: McLaren MP4/4 in 1988¹¹¹



From the 1990s onward, Formula One continued to globalize while growing increasingly sophisticated from a technical and organizational standpoint. The emotional intensity of the competition, including tragic moments such as Ayrton Senna's fatal crash in 1994, which was broadcast live, has contributed to the sport's deep resonance with fans worldwide. **Over its history, 52 drivers have lost their lives in Formula One races,¹¹² out of approximately 800, underscoring both the inherent risks of the sport and the importance of the safety advances that followed.**

¹¹¹ MP4/4. McLaren. <https://www.mclaren.com/racing/heritage/formula-1/cars/1988-formula-1-mclaren-mp4-4/>

¹¹² List of Fatal Accidents in F1. F1 History. <https://www.formulaonehistory.com/list-of-fatal-accidents-in-f1/>

Figure 4: Ayrton Senna Crash 1994¹¹³



This period was also marked by the emergence of a new professional archetype for the Formula One driver. No figure better exemplifies this transformation than Michael Schumacher, whose career redefined performance standards within the sport, characterized by extreme physical preparation, technical fluency, and close integration with engineering teams.

Schumacher's competitive achievements were unprecedented. He won seven World Drivers' Championships,¹¹⁴ including five consecutive titles with Ferrari between 2000 and 2004,¹¹⁵ secured 91 Grand Prix victories, and broke nearly every record in Formula One of his eras. This sustained dominance established one of the most successful periods in Formula One history and elevated expectations of what elite performance could entail. Beyond race results, Schumacher's meticulous preparation, relentless work ethic, and deep technical collaboration with engineers reshaped expectations of driver professionalism and team integration.¹¹⁶

While the precise magnitude of Schumacher's broader impact on Formula One is difficult to quantify, his influence extended well beyond the racetrack. During his Formula One career (1991–2006; 2010–2012), he turned sporting excellence into a global commercial enterprise. **In 2005, he became the first athlete reportedly to earn \$1 billion, four years before Tiger Woods was said to have reached the same level.**¹¹⁷ **Schumacher's commercial portfolio included branded merchandise ranging from caps and sunglasses to action figures and even a signature vacuum cleaner, reflecting his unprecedented marketability.** Schumacher also redefined physical conditioning in Formula One.

¹¹³ Ayrton Senna: The Tragic Loss for F1. <https://discover.hubpages.com/sports/Ayrton-Senna-The-Tragic-Loss-to-F1>

¹¹⁴ Michael Schumacher Would Give Formula 1 a Boost. Wall Street Journal. <https://www.wsj.com/articles/SB10001424052748704304504574610031362683024>

¹¹⁵ Formula 1 Records- Most Wins, Poles And Championships. <https://motorsporttickets.com/blog/formula-1-records-most-wins-pole-positions-and-world-championships/>

¹¹⁶ Michael Schumacher – The legend of Formula 1. <https://www.monzanet.it/en/michael-schumacher-the-legend-of-formula-1/>

¹¹⁷ Michael Schumacher Would Give Formula 1 a Boost. Wall Street Journal. <https://www.wsj.com/articles/SB10001424052748704304504574610031362683024>

He was among the first drivers to travel with a personal gym, integrating disciplines such as football, skiing, basketball, and mountain biking into an intense training regimen that set new benchmarks for endurance and fitness. His famed stamina extended to the technical side of the sport, where his feedback during testing and development was widely credited with shaping a succession of championship-winning cars.

At the same time, Schumacher cultivated a controversial reputation for pushing the boundaries of sporting conduct, and occasionally safety, in pursuit of victory.¹¹⁸ This approach culminated in his disqualification from the 1997 World Drivers' Championship following a collision with title rival Jacques Villeneuve, underscoring the dual legacy of brilliance and controversy that continues to define his place in Formula One history.

Figure 5: Michael Schumacher¹¹⁹



Eye-Catching Rivalry, Drama, and Storytelling Potential

Across more than seven decades, Formula One has delivered moments of breathtaking intensity, competitions decided by milliseconds, and most importantly rivalries defined by fierce competition yet enduring respect and remembered for generations. These dramatic episodes extend far beyond the racetrack, sometimes making global sports news headlines and even inspiring major media productions. From the 2010 documentary *Senna* to Netflix's *Formula 1: Drive to Survive* (2019 to present), the 2024 drama miniseries *Senna*, and Apple's *F1 The Movie* in 2025, the sport has repeatedly proven itself for cinematic storytelling.

Perhaps no narrative better captures this storytelling power than the legendary rivalry between Ayrton Senna and Alain Prost. Widely regarded as one of the fiercest rivalries in motorsport, and described by Formula One itself as the sport's "defining rivalry,"¹²⁰ their clashes during the late 1980s and early 1990s transcended competition and entered legend. Together they won seven world championships, including the time when they alternated titles in 1988 and 1989 while

¹¹⁸ Michael Schumacher Would Give Formula 1 a Boost. Wall Street Journal.

<https://www.wsj.com/articles/SB10001424052748704304504574610031362683024>

¹¹⁹ Exclusive: Schumacher Family Reveals Rare Watch Collection for Auction. <https://barringtonwatchwinders.com/en-us/blogs/blog/exclusive-schumacher-family-reveals-rare-watch-collection-for-auction>

¹²⁰ Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®.

<https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

driving identical cars at McLaren.¹²¹ The central question captivated fans and media alike: with the same car and team, who was truly the better driver? Senna himself captured the ruthless essence of elite sport when he remarked during an interview with Prost, “There can only be one winner,” underscoring the cruel nature of Formula One competition.¹²²

The rivalry reached its dramatic peak in Suzuka, Japan. In 1989, the two collided in a controversial, championship-deciding incident that continues to divide opinion among fans even today.¹²³ One year later, history appeared to repeat itself when they crashed again at the same circuit, this time with Prost driving for Ferrari while Senna remained at McLaren. These moments cemented the rivalry not merely as sporting conflict but as high drama unfolding on a global stage.

Figure 6-1: Prost and Senna Collide in Title Showdown in Japan 1989¹²⁴



¹²¹ Prost-Senna Rivalry Unlikely to Be Repeated. <https://www.grandprix247.com/formula-1-news/prost-senna-rivalry-unlikely-to-be-repeated>

¹²² Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®. <https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

¹²³ Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®. <https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

¹²⁴ Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®. <https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

Figure 6-2: Prost and Senna Collide Again in Title Showdown in Japan 1990¹²⁵



Yet the story ultimately evolved beyond hostility. By the time of their final race together in Adelaide, Australia, in 1993, the relationship between the two all-time frenemies softened. After winning the race in Australia, as they stood together on the podium for the last time, they shook hands. Senna pulled Prost twice onto the top step of the podium, and the two sprayed champagne together in a symbolic reconciliation.¹²⁶

Prost later reflected:

“I triumphed in the [1993] World Championship by taking the podium [in Adelaide], but Ayrton who had won the race took my arm and wanted to share the top step with me. That moment actually changed our relationship, and today I can say that ours was a magnificent story.”¹²⁷

¹²⁵ Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®.

<https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

¹²⁶ Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®.

<https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

¹²⁷ Prost-Senna Rivalry Unlikely to Be Repeated. <https://www.grandprix247.com/formula-1-news/prost-senna-rivalry-unlikely-to-be-repeated>

Figure 7-1: Ayrton Senna Pulled Alain Prost to Stand Together at the Podium 1993¹²⁸



Figure 7-2: Ayrton Senna And Alain Prost Sprayed Champagne 1993¹²⁹



¹²⁸ Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®.

<https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

¹²⁹ Alain Prost vs. Ayrton Senna: The Top 10 Moments of F1's Defining Rivalry. Formula 1®.

<https://www.formula1.com/en/latest/article/prost-vs-senna-the-top-10-moments-of-f1s-defining-rivalry.HXTkvgrOpnaYJoanGiwGq>

Tragically, that reconciliation preceded one of the darkest moments in the sport's history. In 1994, Senna, who then raced for Williams, was killed at the San Marino Grand Prix in Imola at just 34 years old when his car left the track and struck the concrete wall at Tamburello corner.¹³⁰ Millions witnessed the accident live on television. Brazil, Senna's home country, declared three days of national mourning, and an estimated three million people lined the streets of São Paulo as his coffin was transported through the city.¹³¹ Senna's death transformed him from champion into national icon and global legend.

Figure 8: Ayrton Senna Farewell



Decades later, the Prost–Senna narrative continues to resonate, even among audiences previously unfamiliar with Formula One, demonstrating the sport's ability to generate stories that transcend its technical complexity. This cross-demographic appeal was evident in Asif Kapadia's critically acclaimed 2010 documentary *Senna*, which holds a Rotten Tomatoes score above 90%,¹³² despite some criticized that the film oversimplifies the story between Senna and Prost.¹³³ Notably, Kapadia approached the project as an outsider to the sport:

"Before the film I had never read a book on Ayrton Senna, never looked at one website and never read a book on Formula One... I had never been to a race.... I could see that Ayrton Senna was an amazing driver and had this deep spiritual side, which was really fascinating... somebody who doesn't like Formula One, or a person who has never heard of Ayrton Senna, will get the film, understand the character and actually be moved by his story... It's all about the character."¹³⁴

We believe the emphasis on character rather than machinery (i.e., cars) revealed an important commercial insight that Formula One attracts millions of fans worldwide not solely through the advanced technologies powering its cars, but through the human drama that unfolds in moments of intense competition. Rivalries, ambition, risk, and personal triumph transform the sport from a technical contest into emotionally compelling entertainment, broadening its appeal

¹³⁰ Ayrton Senna. Formula 1®. <https://www.formula1.com/en/information/drivers-hall-of-fame-ayrton-senna.FLD7ZtO0nUn7JzLEn5rOJ>

¹³¹ Ayrton Senna's Death – The Car, The Helmet, The Funeral, The Trial And More. <https://www.autoweek.com/racing/formula-1/a1894831/ayrton-sennas-death-car-helmet-funeral-trial-and-more/>

¹³² Senna. Rotten Tomatoes. <https://www.rottentomatoes.com/m/senna>

¹³³ Talking about F1. <http://www.talkingaboutf1.com/2011/07/in-defence-of-alain-prost.html>

¹³⁴ SENNA: The Whole Story. <https://www.ayrton-senna.net/senna-movie-the-whole-story/>

In recent years, streaming platforms have increasingly recognized this narrative strength. Netflix's 2024 miniseries *Senna*, released on November 29, quickly became the world's most-watched non-English-language production, surpassing 37 million viewing hours within two weeks.¹³⁵ Its success reinforced the enduring narrative power of the sport's history.

Figure 9: Netflix – Senna¹³⁶



However, Formula One's storytelling potential extends far beyond individual rivalries. Netflix's *Drive to Survive*, first released in 2019,¹³⁷ helps reshape the sport's cultural footprint, particularly in the United States, and is widely credited with accelerating Formula One's penetration into the American market. Following Liberty Media's acquisition of Formula One in 2017, an executive reportedly approached Netflix with the idea of opening the paddock, the sport's traditionally guarded area for teams, to camera crews.¹³⁸ This unprecedented access allowed audiences to witness team dynamics, executive decision-making, and driver personalities, transforming a technically dense sport into emotionally compelling entertainment.

In many aspects, Formula One is inherently difficult to televise compared to other sports. Drivers are hidden behind helmets, their expressions invisible; the nuances of technique are often imperceptible at 200 miles per hour. Unlike court or field sports that naturally showcase athletic movement, Formula One relies heavily on commentary, telemetry

¹³⁵ TOP 1: Senna Is The Most Watched Non-English Language Series in The World. <https://www.senna.com/en/portugues-top-1-senna-se-torna-a-serie-de-lingua-nao-inglesa-mais-assistida-do-mundo/>

¹³⁶ How 'Senna' TV Show Deepens Relationship Between Netflix, F1 - Los Angeles Times. <https://www.latimes.com/entertainment-arts/tv/story/2024-11-29/senna-netflix-f1-drive-to-survive>

¹³⁷ Formula 1 and Netflix Announce 'Drive to Survive'. Formula 1®. <https://www.formula1.com/en/latest/article/formula-1-and-netflix-put-drive-to-survive-on-pole-position.7MyqMggwrYJ5qUxjj1igeB>

¹³⁸ How a Netflix Show Has Become A Key Driver Behind F1's Rising Popularity. <https://theconversation.com/how-a-netflix-show-has-become-a-key-driver-behind-f1s-rising-popularity-221924>

graphics, onboard footage, and team radio to convey the stakes of competition.¹³⁹ Drive to Survive addressed this challenge by plotting the human dimension, ambition, conflict, risk, and rivalry, inviting viewers to emotionally resonate with the team crews. The result is unscripted drama at scale, where unpredictability is not manufactured but genuine.

Now in its eighth season as of 2026,¹⁴⁰ the series has helped broaden the sport's appeal beyond traditional superfans. An early 2025 report indicates that, of the roughly 45 million American followers of Formula One, around half began following the sport within the past five years, coinciding with the show's release.¹⁴¹ Just as importantly, the average age of U.S. television viewers declined from 36 to 32 between 2017 and 2023, a demographic shift highly valued by broadcasters and commercial partners concerned about attracting Gen Z audiences.¹⁴²

Taken together, we believe these developments underscore that Formula One is not merely a racing championship but a storytelling platform capable of resonating across demographics and generations. Its blend of elite performance, technological innovation, personal rivalry, and breathtaking moments creates a unique narrative structure that continues to attract fans, media producers, and global brands alike.

¹³⁹ How a Netflix Show Has Become A Key Driver Behind F1's Rising Popularity. <https://theconversation.com/how-a-netflix-show-has-become-a-key-driver-behind-f1s-rising-popularity-221924>

¹⁴⁰ Netflix confirm release date for Drive to Survive Season 8. Formula 1®. <https://www.formula1.com/en/latest/article/netflix-confirm-release-date-for-drive-to-survive-season-8.6ULJefRBR2n4UPWR6nc9aN>

¹⁴¹ Drive to Survive: F1 Boom Sparked by Unlikely Stars and Stretching Truth. The Times. <https://www.thetimes.com/sport/formula-one/article/drive-to-survive-netflix-formula-one-bl0nwkqkg>

¹⁴² How a Netflix Show Has Become A Key Driver Behind F1's Rising Popularity. <https://theconversation.com/how-a-netflix-show-has-become-a-key-driver-behind-f1s-rising-popularity-221924>; How 'Drive to Survive' remade Formula One for America. <https://www.nytimes.com/athletic/4245028/2023/02/24/formula-1-drive-to-survive-american-fans/>

Formula One's Top Paid Drivers 2025

Formula One teams generally do not publicly disclose figures for driver salaries or bonuses, treating contract details as confidential. Compensation is largely estimated by media, industry insiders, and publications such as Forbes based on their sources. Our research shows that driver salaries remain a major expense to individual teams, ranging from approximately \$1 million to over \$55 million per year depending on drivers' experience and marketability.¹⁴³

According to Forbes estimates, the highest-paid drivers in 2025 typically receive a combination of base salary and performance-related bonuses tied to points accumulation, race victories, or championship outcomes.¹⁴⁴ Bonus structures vary considerably based on team resources and the driver's experience. Forbes figures exclude off-track income, including endorsement partnerships with global brands such as Sony, Puma, IWC, Heineken, and EA Sports, sponsorships held by star drivers such as Max Verstappen and Lewis Hamilton.¹⁴⁵ However, it is unclear to the public how much these deals could bring them as they are not publicly disclosed.

1. Max Verstappen – Red Bull Racing, \$76 Million

Figure 10-1: Max Verstappen – Red Bull Racing¹⁴⁶



Nationality: Netherlands
Age: 28
Salary: \$65 million
Bonuses: \$11 million

2. Lewis Hamilton – Ferrari, \$70.5 Million

Figure 10-2: Lewis Hamilton – Ferrari¹⁴⁷



Nationality: United Kingdom
Age: 40
Salary: \$70 million
Bonuses: \$0.5 million

¹⁴³ Do F1 Teams Make Money – A Breakdown of Revenue and Costs. <https://www.sportsboom.com/motor-sports/do-f1-teams-make-money-a-breakdown-of-revenue-and-costs/>; Salaries F1 drivers 2026. <https://racingnews365.com/f1-drivers-salaries-2026>

¹⁴⁴ Forbes Highest-Paid Formula 1 Drivers 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/12/09/formula-1s-highest-paid-drivers-2025/>

¹⁴⁵ Lewis Hamilton Net Worth 2025. <https://racingnews365.com/lewis-hamilton-net-worth/>; Max Verstappen Net Worth 2025. <https://racingnews365.com/max-verstappen-salary-and-net-worth>

¹⁴⁶ Verstappen's Focus Will Be Mainly Endurance Once F1 Career Is Over. <https://www.motorsport.com/f1/news/verstappen-focus-will-be-mainly-endurance-once-f1-career-is-over/10408334/>

¹⁴⁷ Ferrari Told to 'Keep Mouths Shut' as New Lewis Hamilton Car Branded 'A Handful'. <https://www.planetf1.com/news/lewis-hamilton-ferrari-sf-26-handful>

3. Lando Norris – McLaren, \$57.5 Million

Figure 10-3: Lando Norris – McLaren¹⁴⁸



Nationality: United Kingdom
Age: 26
Salary: \$18 million
Bonuses: \$39.5 million

4. Oscar Piastri – McLaren, \$37.5 Million

Figure 10-4: Oscar Piastri – McLaren¹⁴⁹



Nationality: Australia
Age: 24
Salary: \$10 million
Bonuses: \$27.5 million

5. Charles Leclerc – Ferrari, \$30 Million

Figure 10-5: Charles Leclerc – Ferrari¹⁵⁰



Nationality: Monaco
Age: 28
Salary: \$30 million
Bonuses: \$0

¹⁴⁸ Lando Norris Admits He’s ‘Still Trying to Accept’ World Champion Status as He Gears up for 2026 Title Defense. <https://www.formula1.com/en/latest/article/norris-admits-hes-still-trying-to-accept-world-champion-status-as-he-gears.5seFDK9HXyDDfctXrGUrGG>

¹⁴⁹ Spanish Grand Prix 2025 – Oscar Piastri Beats McLaren Team-Mate Lando Norris to Pole in Barcelona. BBC. <https://www.bbc.com/sport/formula1/articles/ce80epy1e2lo>

¹⁵⁰ Charles Leclerc ‘Very Happy’ with Unexpected Podium Finish in Spain as He Outlines Clash with Max Verstappen. <https://www.formula1.com/en/latest/article/leclerc-very-happy-with-unexpected-podium-finish-in-spain-as-he-outlines.5hMNzvPWT76JEvpcpFRWh4>

6. Fernando Alonso – Aston Martin, \$26.5 Million

Figure 10-6: Fernando Alonso – Aston Martin¹⁵¹



Nationality: Spain
Age: 44
Salary: \$24 million
Bonuses: \$2.5 million

7. George Russell – Mercedes, \$26 Million

Figure 10-7: George Russell – Mercedes¹⁵²



Nationality: United Kingdom
Age: 27
Salary: \$15 million
Bonuses: \$11 million

8. Lance Stroll – Aston Martin, \$13.5 Million

Figure 10-8: Lance Stroll – Aston Martin¹⁵³



Nationality: Canada
Age: 27
Salary: \$12 million
Bonuses: \$1.5 million

¹⁵¹ Alonso: Aston the Most Confidence-Inspiring Project in My F1 Career. <https://www.autosport.com/f1/news/alonso-aston-the-most-confidence-inspiring-project-in-my-f1-career/10486457/>

¹⁵² 'It's Amazing to Be Back on The Top Step' – George Russell Jubilant after Hard-Fought Victory in Canada. Formula 1®. <https://www.formula1.com/en/latest/article/its-amazing-to-be-back-on-the-top-step-russell-jubilant-after-hard-fought.3UhTotoF3ZNFcQ1NC0z0SU>

¹⁵³ Lance Stroll 'Shouldn't Be in Formula 1 Anymore' Says Schumacher. <https://www.autoracing1.com/pl/468111/formula-1-news-lance-stroll-shouldnt-be-in-formula-1-anymore-says-schumacher/>

9. Carlos Sainz – Williams, \$13 Million

Figure 10-9: Carlos Sainz – Williams¹⁵⁴



Nationality: Spain
Age: 31
Salary: \$10 million
Bonuses: \$3 million

10. Kimi Antonelli – Mercedes, \$12.5 Million

Figure 10-10: Kimi Antonelli – Mercedes¹⁵⁵



Nationality: Italy
Age: 19
Salary: \$5 million
Bonuses: \$7.5 million

Compared with other elite professional athletes, the very top Formula One drivers are not fundamentally different in income, though their salaries may be marginally higher than those in other major sports leagues. Formula One, however, has relatively tight clustering of compensation among its highest-paid drivers, particularly when compared with the wider gap seen in some U.S. leagues.

For example, Forbes estimates that among the ten highest-paid NBA players in 2025, Stephen Curry leads with nearly \$60 million in on-court earnings, while Shai Gilgeous-Alexander ranks the lowest in terms of on-court earnings at approximately \$38 million.¹⁵⁶ Off-court income further widens total earnings, with Curry generating roughly \$100 million from endorsements, licensing, appearances, and memorabilia, compared with about \$25 million for Gilgeous-Alexander.

The NFL exhibits a similar structure. Justin Herbert tops the league with roughly \$60 million in on-field compensation, whereas Travis Kelce earns closer to \$17 million among the top ten. Their off-field earnings, however, partially

¹⁵⁴ Sainz Announced as Williams Driver. <https://thejudge13.com/2024/06/21/sainz-announced-as-williams-driver/>

¹⁵⁵ 'My Mum Really Cares About It' – Kimi Antonelli on Balancing F1 with Schoolwork as Rookie Reveals His Least Favorite Subjects. <https://www.formula1.com/en/latest/article/my-mum-really-cares-about-it-antonelli-on-balancing-f1-with-schoolwork-as.3jVRMIxgRmaHBGg79TLIaM>

¹⁵⁶ Forbes Highest-Paid NBA Players 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/10/21/the-nbas-highest-paid-players-2025/>

rebalance the gap – Herbert is estimated to generate about \$11 million, while Kelce earns roughly \$30 million from off-field activities.¹⁵⁷

Major League Baseball shows a markedly different picture, with a far wider spread in salary among its highest-paid players. Juan Soto is estimated to earn nearly \$122 million in on-field salary in 2025, while Shohei Ohtani receives only about \$2 million. Most other top players fall within the \$30 million to \$60 million range. However, Soto is estimated to earn approximately only \$5 million off the field, whereas Ohtani's global appeal drives close to \$100 million in annual endorsements.¹⁵⁸

By comparison, publicly available data on off-track income for Formula One drivers is limited. Nevertheless, third-party reports such as Forbes and Yahoo Sports estimate Lewis Hamilton as the sport's current most marketable driver, estimating roughly \$20 to \$30 million in off-track earnings in 2025, followed by Max Verstappen at approximately \$6 million.¹⁵⁹ These revenues primarily stem from endorsements and sponsorship agreements – Hamilton's portfolio reportedly includes brands such as Tommy Hilfiger, Puma, Dior, IWC, and Lululemon, while Verstappen is associated with partners including Heineken and EA Sports.¹⁶⁰

¹⁵⁷ Forbes Highest-Paid NFL Players List 2025. Forbes. <https://www.forbes.com/sites/brettknight/2025/09/07/the-nfls-highest-paid-players-2025/>

¹⁵⁸ The 10 Highest-Paid MLB Players Of 2025. <https://www.forbes.com/sites/justinbirnbaum/2025/03/25/baseballs-highest-paid-players-2025/>

¹⁵⁹ Forbes Highest-Paid Formula 1 Drivers 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/12/09/formula-1s-highest-paid-drivers-2025/>; Lewis Hamilton Net Worth. Yahoo Sports. <https://sports.yahoo.com/articles/lewis-hamilton-net-worth-f1-071140530.html>

¹⁶⁰ Forbes Highest-Paid Formula 1 Drivers 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/12/09/formula-1s-highest-paid-drivers-2025/>; Lewis Hamilton Net Worth. Yahoo Sports. <https://sports.yahoo.com/articles/lewis-hamilton-net-worth-f1-071140530.html>; Max Verstappen. <https://www.formulaonehistory.com/max-verstappen-net-worth/>

By the early 21st century, Formula One had evolved into one of the most technologically advanced sports in the world, from all aspects of, on and behind, the racetracks.¹⁶¹ The contrast between early and modern Formula One machinery illustrates this transformation vividly. For example, the 1950 Alfa Romeo 158 featured a front-mounted 1.5-litre supercharged inline-eight engine producing approximately 350 horsepower, weighed around 709 kilograms, and relied on aluminum drum brakes. By comparison, the 2020 Alfa Romeo C39 employed a rear-mounted 1.6-litre turbo-hybrid V6 generating over 1,000 horsepower, weighed approximately 746 kilograms, and utilized carbon braking systems capable of generating up to 5G of deceleration while withstanding temperatures exceeding 1,000 degrees Celsius (over 1,800 degrees Fahrenheit). Acceleration times halved from roughly four seconds to two seconds for 0 to 60 miles per hour, while top speeds increased from approximately 180 miles per hour to over 220, despite vastly enhanced safety requirements.

Figure 11: Select Car Specs 1950s. vs. 2020s¹⁶²

	1950s	2020s
Engine	Front-engine, 1.5-liter supercharged in-line eight cylinder, >300 horsepower	Rear-engined, 1.6-liter V6 turbo hybrid, >1,000 horse power
Gearbox	Four-speed, H-pattern, manual transmission, with clutch paddle	Clutch-less sequential paddle shifter on steering wheel (fast and convenient)
Top Speed	~180 miles per hour	>220 miles per hour
0-60mph Acceleration	~4 seconds	~2 seconds
Safety	Helmet-less and seatbelt-less.	Six-point racing harnesses, roll and crash structure. Venue equipped with hospital-grade medical facilities, helicopter, medical teams, etc.

Parallel to technological evolution, Formula One teams transformed into large-scale commercial enterprises. Modern teams operate as multi-million-dollar organizations, employing hundreds, sometimes thousands, of specialized staff across engineering, logistics, strategy, data science, marketing, and operations.¹⁶³ **On a typical race weekend, more than 100 personnel per team may be deployed between the circuit and remote operations centers to support the driver on the race track, underscoring the sport’s evolution from artisanal competition to industrial-scale performance management.**

The demographic profile of drivers has also shifted dramatically. In the inaugural 1950 British Grand Prix, the average driver age was approximately 39, with several drivers in their fifties. Many were part-time racers, including aristocrats, medical professionals, and even musicians. Such part-time participation has long gone. Contemporary Formula One drivers become a career, with drivers begin karting in early childhood, often before the age of ten, and progress through structured junior categories.¹⁶⁴ Today’s grid averages around 26 years of age, reflecting both the physical demands of modern cars and the intense early specialization required to reach the sport’s highest level.

As Martin Brundle, a former Formula One driver, has observed:

“Kids are starting at eight years old. By the time they’re sixteen they’ve done literally hundreds of races. So they are experienced, have confidence and race craft, and they are so mature. Most will have had some media training along with a fitness regime and they are more ready for it; they’re not as green as we were.”¹⁶⁵

¹⁶¹ 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>

¹⁶² 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>

¹⁶³ 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>

¹⁶⁴ 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>

¹⁶⁵ Chapter 6. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

Figure 12: Lewis Hamilton Won His First Trophy at Eight-Year-Old in 1993¹⁶⁶



Operational practices at circuits have undergone equally dramatic change. For example, in the 1950s, pit stops for refueling and tire changes often exceeded 20 to 30 seconds and could sometimes last more than a minute.¹⁶⁷ Refueling during races was banned in 2010 due to safety concerns, requiring teams to design cars capable of completing races with full fuel loads¹⁶⁸ while balancing the car's performance with added weight. **Modern pit stops now focus exclusively on tire changes and are considered slow if they exceed three seconds.** The current record was set by

¹⁶⁶ Lewis Hamilton – In Karting, Some of The Kids Had More Money Than Me...I Was Just Faster Than Them. Daily Mail.

<https://www.dailymail.co.uk/sport/formulaone/article-2674235/Lewis-Hamilton-In-karting-kids-money-i-just-faster-them.html>

¹⁶⁷ Pit Stops, 1950 vs. Now. <https://www.thedrive.com/vintage/1828/pit-stops-1950-vs-now>; 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIY3qgzTctXgz1j>

¹⁶⁸ Why Do F1 Cars Not Refuel During a Race. <https://www.motorsport.com/f1/news/why-was-refuelling-banned-in-f1/10555079/>

McLaren, which executed a four-tire change in just 1.8 seconds at the Qatar Grand Prix.¹⁶⁹ Pit crews have expanded from around four mechanics in the early years to approximately 20 today, reducing pit stop times by nearly 96%.¹⁷⁰

Figure 13: Ferrari Team at Pit Stop¹⁷¹



Safety represents another profound evolution in Formula One over its course of development. Early drivers often raced without helmets or seatbelts, and serious injuries or fatalities were frequent. Over time, repeated tragedies catalyzed systemic reform. Today, Formula One events are supported by hospital-grade medical facilities, rapid-response medical teams, evacuation helicopters, and rigorously trained marshals. Drivers wear full-face carbon-fiber helmets, fire-resistant suits, and even biometric gloves transmitting real-time health data such as drivers' pulse and blood oxygen levels.¹⁷² Cars are equipped with six-point harnesses, reinforced roll and crash structure, the halo cockpit protection device introduced in 2018, and automated crash-warning systems triggered by extreme g-forces that sustains for more than five milliseconds.

Institutionally, Formula One has also evolved. While the World Drivers' Championship existed from Formula One's inception in 1950, the Constructors' ("Teams") Championship was introduced only in 1958, reflecting the early presence of independent driver entries.¹⁷³ **According to Formula One website, that inaugural season featured just six teams –**

¹⁶⁹ McLaren Set New F1 Pit Stop Record with Spectacularly Quick Tyre Change in Qatar.

<https://www.formula1.com/en/latest/article/watch-mclaren-set-new-f1-pit-stop-record-with-spectacularly-quick-tyre.5ZBn7RJxE9iTVmSGfeeVHm>

¹⁷⁰ A Thorough Analysis of the Pit Stop Strategy in Formula 1. <https://statathlon.com/about/>

¹⁷¹ F1 Racing Often Comes Down to the Tires. The New York Times.

<https://web.archive.org/web/20221225022016/https://www.nytimes.com/2022/10/06/sports/autoracing/f1-tires-racing.html>

¹⁷² 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®.

<https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>

¹⁷³ 1950 DRIVERS' STANDINGS. <https://www.formula1.com/en/results/1950/drivers>; 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIIY3qgzTctXgz1j>

Vanwall, Ferrari, Cooper Climax, BRM, Maserati, and Lotus Climax.¹⁷⁴ **By 2025, the grid had expanded to (still only) 10 teams and 20 drivers, with each team fielding two cars.** Legacy teams such as Ferrari, present continuously since 1950, and McLaren coexist alongside newer entrants such as Haas, which joined in 2016.¹⁷⁵

Formula One limits the number of teams on the grid. While the 2025 season featured 10 teams, the championship is expected to expand to 11 teams in 2026.¹⁷⁶ Historically, team participation has not been static, with periodic withdrawals, most often for financial reasons, occurring throughout the sport's history.

The modern Formula One calendar comprises 24 races (which might vary slightly every year) across 21 countries on five continents. Race distances are standardized at just over 305 kilometers (189.5 miles), with the exception of Monaco, where the race distance is reduced to 260 kilometers (161.5 miles) due to the circuit's narrow, low-speed layout.¹⁷⁷ In terms of competitive success, Ferrari remains the most successful constructor with 16 Constructors' Championships, followed by McLaren with 10, Williams with 9, Mercedes with 8, and Red Bull with 6. In Drivers' Championships, Ferrari again leads with 15 titles, ahead of McLaren's 13, Mercedes' 9, Red Bull's 8, and Williams' 7.

Putting together, these developments illustrate Formula One's transformation from a loosely organized post-war competition into a technologically intensive, globally commercialized sporting organization, one that now represents elite performance, advanced engineering, and international business strategy.

For most of its history following its 1950 inauguration, Formula One operated as a privately held organization. This changed in 2017, when the sport was acquired and consolidated by Liberty Media, a publicly traded company, for an enterprise value of approximately \$8.0 billion and an equity value of \$4.4 billion, with an estimated net loss (negative net income). It is important to note that Liberty Media acquired the Formula One Group, the entity holding the exclusive commercial rights to the Formula One World Championship,¹⁷⁸ rather than ownership interests in the competing teams themselves. The teams remain independently owned by individual entities such as automobile manufacturers, corporations, and high-net-worth individuals. **This transaction implied an estimated multiple of roughly 18x trailing-twelve-month EBITDA,**¹⁷⁹ **based on our estimates.** As a result of its long period as a private entity primarily owned by Bernie Ecclestone, which we will discuss later, publicly available financial data, particularly for Formula One's early decades, remains limited, requiring reliance on third-party estimates where available. Available data suggests that between 1995 and 2024, Formula One's revenues increased from approximately \$140 million to \$3.4 billion,¹⁸⁰ representing a CAGR of 12% over nearly three decades.

¹⁷⁴ 1958 TEAMS' STANDINGS. <https://www.formula1.com/en/results/1958/team>

¹⁷⁵ Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdzqV5jwc>

¹⁷⁶ 2025 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2025/team>; F1 Racing Teams 2026 - Ferrari, Mercedes, Red Bull And More. <https://www.formula1.com/en/teams>; The Future of F1 – Deadline Approaches for New Team Applications. <https://www.skysports.com/f1/news/30778/12865624/the-future-of-f1-deadline-approaches-for-new-team-applications-should-there-be-more-cars-on-the-grid>

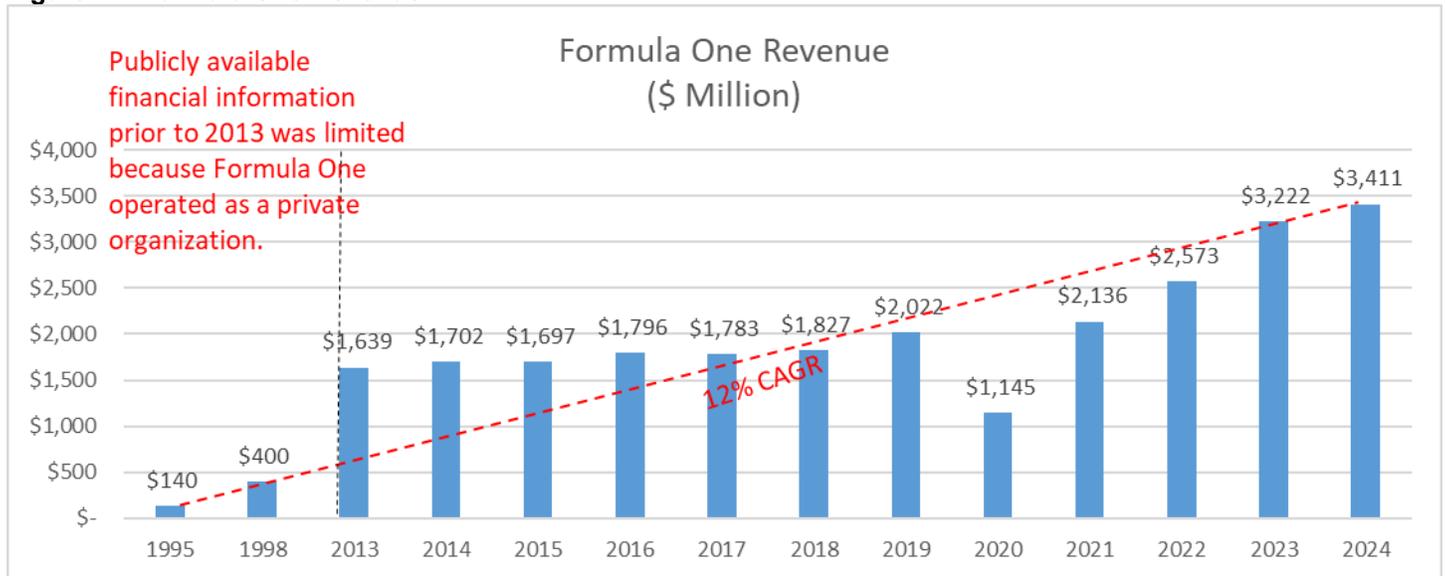
¹⁷⁷ Everything You Need to Know About Formula 1. <https://www.formula1.com/en/latest/article/drivers-teams-cars-circuits-and-more-everything-you-need-to-know-about.7iQfL3Rivf1comzdzqV5jwc>

¹⁷⁸ Liberty Media Annual Report 2024.

¹⁷⁹ Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; Liberty Media Proxy Statement 12/09/2016.

¹⁸⁰ 1995: How Ecclestone turned Formula One into the World's Most Watched Series. <https://www.autoweek.com/racing/formula-1/a1933936/how-ecclestone-turned-formula-one-worlds-most-watched-series/>; 1998: Ecclestone to sell half of Formula One. ESPN. <https://www.espn.com/auto/formulaone/news/1999/1026/134415.html>; 2013 – 2015: Liberty Media Proxy Statement 12/09/2016. 2016 – 2024: Liberty Media Annual Reports 2017 – 2024.

Figure 14: Formula One Revenue¹⁸¹



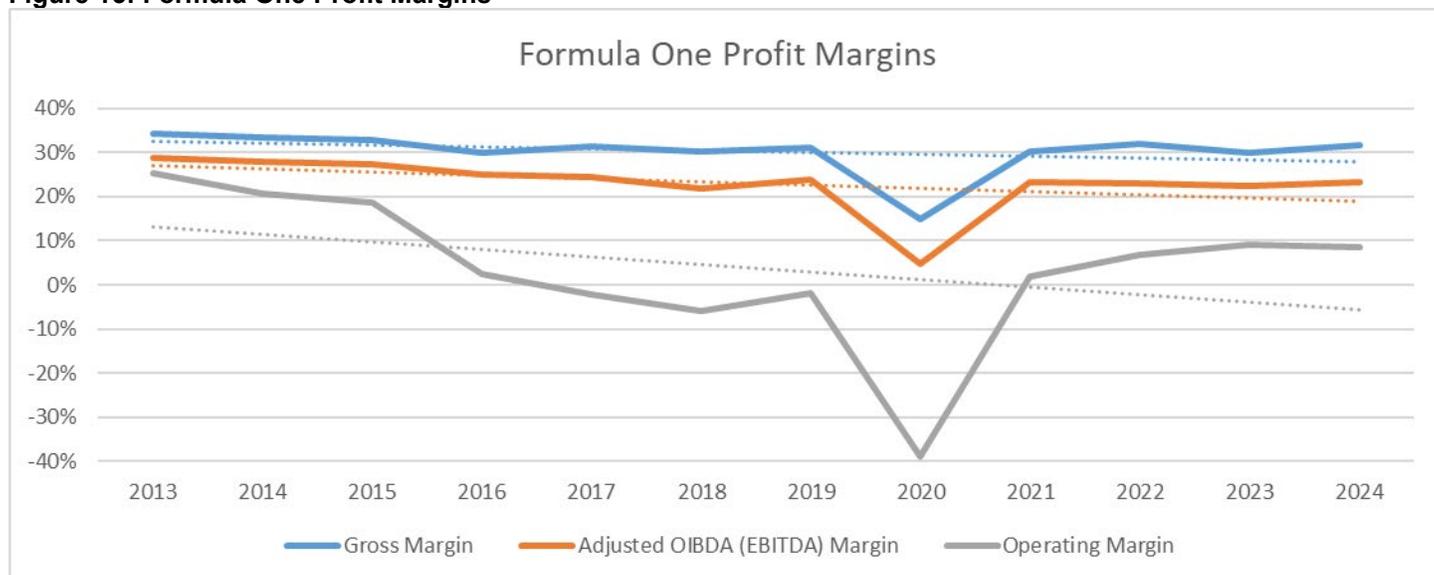
Notes:

1. Financial information on Formula One prior to 2016 is limited because the organization operated as a private entity from its inception in 1950 until its acquisition by Liberty Media in 2016, after which its results were consolidated starting in 2017.
2. Data prior to 2016 are third party estimates.

¹⁸¹ 1995: How Ecclestone turned Formula One into the World's Most Watched Series. <https://www.autoweek.com/racing/formula-1/a1933936/how-ecclestone-turned-formula-one-worlds-most-watched-series/>; 1998: Ecclestone to sell half of Formula One. ESPN. <https://www.espn.com/auto/formulaone/news/1999/1026/134415.html>; 2013 – 2015: Liberty Media Proxy Statement 12/09/2016. 2016 – 2024: Liberty Media Annual Reports 2017 – 2024.

From 2013, the earliest year for which Formula One's profitability data are available as disclosed by Liberty Media, through 2024, the organization's gross margin has remained largely stable at approximately 30%, declining modestly from 34% to 32%.¹⁸² Over the same period, the company's reported adjusted operating income before depreciation and amortization (OIBDA, which we view as broadly comparable to EBITDA) margin averaged approximately 23%, declining from 29% to 23%. **This compression was driven primarily by higher SG&A expenses, including personnel, property, marketing and research, advisory fees, etc.,¹⁸³ which increased from approximately 5% to 6% of revenue prior to the 2016 acquisition to roughly 8% of revenue by 2024.**

Figure 15: Formula One Profit Margins¹⁸⁴



Notes:

1. The significant decline in operating margin beginning in 2016, when Formula One was acquired by Liberty Media in December 2016, was driven primarily by amortization expense related to intangible assets recognized in the acquisition. From 2013 to 2015, prior to the Liberty Media transaction, depreciation and amortization represented approximately 3% of revenue. Following the acquisition, depreciation and amortization increased materially, accounting for roughly 22% to 25% of revenue in the initial post-acquisition years, before gradually declining to approximately 9% by 2024.¹⁸⁵
2. The decline in 2020 was primarily attributable to a sharp reduction in revenue, which fell from over \$2 billion in 2019 to approximately \$1.1 billion in 2020. This decline was driven by the COVID-19 pandemic, which significantly disrupted global economic activity, including Formula One operations, resulting in a reduced race calendar and one-time revisions to promoter fee arrangements. Most events were held behind closed doors, materially altering the economic model for race promoters.¹⁸⁶

¹⁸² Liberty Media Annual Reports 2017 – 2024.

¹⁸³ Liberty Media Annual Report 2017.

¹⁸⁴ 2013 – 2015: Liberty Media Proxy Statement 12/09/2016. 2016 – 2024: Liberty Media Annual Reports 2017 – 2024.

¹⁸⁵ 2013 – 2015: Liberty Media Proxy Statement 12/09/2016. 2016 – 2024: Liberty Media Annual Reports 2017 – 2024. 2013 – 2015: Liberty Media Proxy Statement 12/09/2016. 2016 – 2024: Liberty Media Annual Reports 2017 – 2024.

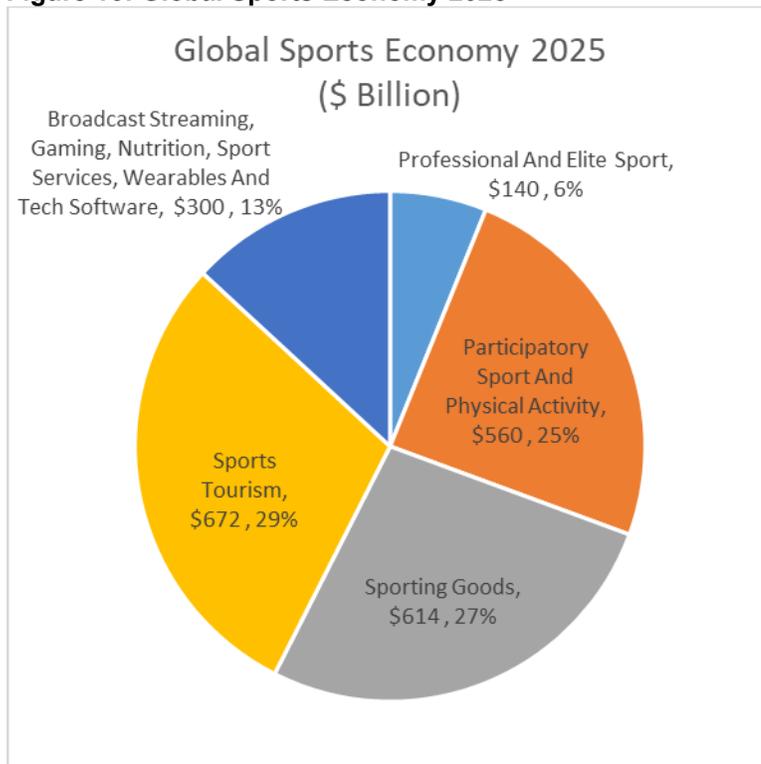
¹⁸⁶ Liberty Media Annual Report 2020.

An Overview of Sports

Sport, in its many forms, has captivated humanity throughout history. For centuries, sports have been viewed as a force that transcends borders, cultures, and ethnicities, bringing people together under a common pursuit of excellence.¹⁸⁷ (For those interested in the subject, please see our study on sports broadly and the Indian Premier League at <https://worldlypartners.com/businesshistory/> or the link below in the footnote¹⁸⁸) In recent years, sports have increasingly been recognized as an asset class with a sizable total addressable market, attracting substantial capital from media companies, advertisers, sponsors, and investors alike.

Quantifying the size of the global sports economy remains challenging, as estimates vary depending on how broadly the category is defined. According to a 2026 World Economic Forum report, the global sports economy was estimated at approximately \$2.3 trillion in 2025.¹⁸⁹ **Of this total, roughly \$2.0 trillion was generated by professional and elite sports – including leagues, clubs, and governing bodies, with income driven by sponsorships, media rights, and event revenues – participatory sports and physical activities, sporting goods, and sports tourism.** The remaining \$300 billion is attributed to connected segments such as broadcast and streaming services – including television and online sport broadcasting, advertising, and subscriptions – gaming, sports nutrition, sport services, and wearable and software. Television and online broadcasting revenues largely reflect what broadcasters earn from subscriptions and advertising, whereas media rights represent the fees broadcasters pay to rights holders, such as Formula One or the NBA, for the right to air their sporting events. Within this framework, professional and elite sports represent a large addressable market. Using Formula One Group's 2024 revenue of \$3.4 billion as a reference point, Formula One accounts for less than 3% of the estimated \$140 billion global professional and elite sports revenue pool, underscoring both its scale and the breadth of the overall market.

Figure 16: Global Sports Economy 2025¹⁹⁰



Sports' economic power is underpinned by its immense global audience. A 2018 survey by Nielsen, conducted across 18 countries, including Australia, Canada, China, India, Russia, the U.A.E., and the U.S., highlights the global appeal of sports. The findings suggest that sports capture widespread interest in major population centers, with anywhere from 10%

¹⁸⁷ What Is The Philosophy Behind The Olympics. <https://www.forbes.com/sites/teddymcdarrah/2021/07/23/olympism-what-is-the-philosophy-behind-the-olympics/>

¹⁸⁸ Indian Premier League Multi-Decade Study. Worldly Partners. <https://worldlypartners.com/wp-content/uploads/2025/03/Indian-Premier-League.pdf>

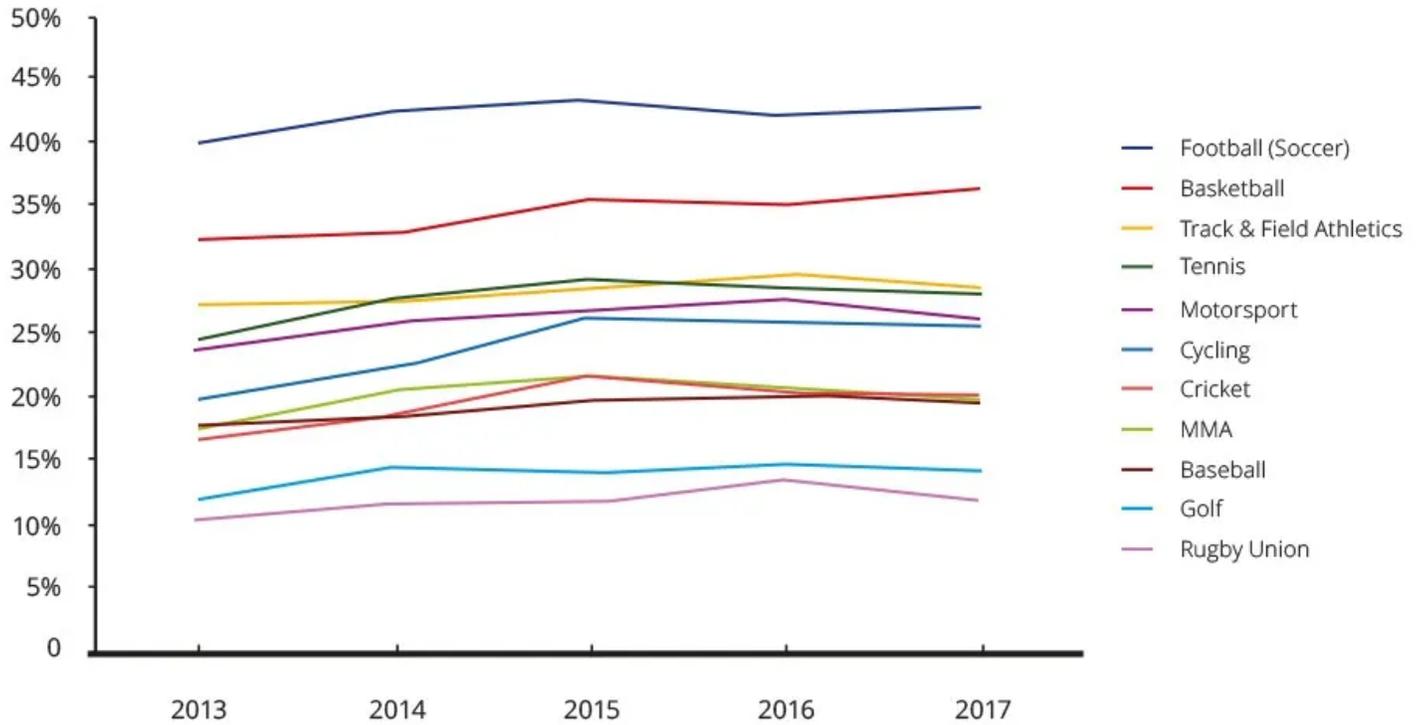
¹⁸⁹ Sports for People and Planet – Insight Report. January 2026. World Economic Forum.

¹⁹⁰ Sports for People and Planet – Insight Report. January 2026. World Economic Forum.

to over 40% among individuals aged 16 and older interested in some form of sports activity,¹⁹¹ with the trend being stable for most sports over time, depending on the sport. The survey reveals that soccer emerged as the most popular sport, attracting interest from more than 40% of the population, followed by basketball, track and field, tennis, motorsports, and others. Approximately 25% of the surveyed population reported interest in motorsports over time. When extrapolated to a global population exceeding 8 billion,¹⁹² this suggests a potential motorsports audience over 2 billion people worldwide.

This vast and persistent fan base creates substantial opportunities for broadcasters of live sports content and makes sports an especially attractive platform for marketers seeking to enhance brand visibility and engage large, highly attentive audiences through sponsorships. We will explore further in the next section.

Figure 17: Percentage “Interested” or “Very Interested” in Major Sports¹⁹³



Despite limited long-term consistency in fanbase data, Nielsen Sports estimates that Formula One’s global fanbase reached approximately 827 million in 2025,¹⁹⁴ representing 12% year-over-year growth and a 63% increase since 2018, implying a CAGR over 7%. **This figure accounts for nearly 40% of the estimated global motorsports fanbase of over 2 billion people we estimated earlier.** Most importantly, Nielsen Sports positions Formula One as the world’s most

¹⁹¹ The Global Popularity of Football is Rising. <https://www.nielsen.com/insights/2018/fan-favorite-the-global-popularity-of-football-is-rising/>

¹⁹² Population. World Bank. <https://data.worldbank.org/indicator/SP.POP.TOTL>

¹⁹³ The Global Popularity of Football is Rising. <https://www.nielsen.com/insights/2018/fan-favorite-the-global-popularity-of-football-is-rising/>

¹⁹⁴ Data From Nielsen Sports Shows F1 Fandom Surging As 2025 Season Gets Underway. Forbes. <https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-shows-f1-fandom-surging-as-2025-season-gets-underway/>; Records, Growth and Unforgettable Moments – The 2025 Formula 1 Season So Far. <https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq>; Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

popular annual sporting series,¹⁹⁵ with a fanbase exceeding that of the NBA, the second-largest global sports league, by more than 11%.¹⁹⁶

Reported viewership figures, based on available data in the public channel, however, tell a more complex story. Formula One's unique global TV and digital audience peaked at around 600 million in 2008, before declining to approximately 445 million by 2021.¹⁹⁷ Importantly, this apparent decline does not necessarily reflect waning interest. **Industry analysis, including a 2018 Forbes article, attributes much of the reported decrease to structural changes in broadcasting strategy and audience measurement methodologies. A key factor was Formula One's increasing shift to Pay TV broadcasters, which offer higher rights fees but smaller audiences than free-to-air channels.** As Forbes noted, the shift to pay TV reduced reach even as it increased revenue. As Forbes noted, while pay TV operators are often willing to outbid free-to-air competitors for Formula One rights, "they tend to have smaller audiences than broadcasters which don't charge to watch."¹⁹⁸

At the same time, Formula One's audience reporting methodologies evolved. Earlier figures were extrapolated from limited markets (i.e., 10 markets), while later data was based on broader and more accurate coverage (i.e., 63 markets). When adjusted for methodology, reported declines appear far less severe. This is partially supported by Formula One's own disclosures in 2018. While reported unique viewers were approximately 490 million that year,¹⁹⁹ the figure represented 10% growth year over year, implying roughly 445 million unique viewers in 2017, rather than the 352 million previously reported.²⁰⁰ This discrepancy highlights inconsistencies in annual reporting driven by methodological changes rather than actual audience loss.

Notably, Formula One has not publicly disclosed official global unique viewership figures since 2021. While this absence may reflect a shift in reporting priorities, it could also be a sign of long term decline trend.

¹⁹⁵ Data From Nielsen Sports Shows F1 Fandom Surging As 2025 Season Gets Underway. Forbes.

<https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-shows-f1-fandom-surging-as-2025-season-gets-underway/>; Records, Growth and Unforgettable Moments – The 2025 Formula 1 Season So Far. <https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq>; Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

¹⁹⁶ Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

¹⁹⁷ 2008 – 2017: F1 TV Audience Reverses By 40 Million Under New Measurement System.

<https://www.forbes.com/sites/csylt/2018/01/06/f1-tv-audience-reverses-by-40-million-under-revised-measurement-system/>; 2021: Formula 1 Announces TV, Race Attendance And Digital Audience Figures for 2021. Formula 1® <https://www.formula1.com/en/latest/article/formula-1-announces-tv-race-attendance-and-digital-audience-figures-for-2021.1YDpVJIOHGnuok907sWcKW>.

¹⁹⁸ F1 TV Audience Reverses By 40 Million Under New Measurement System. Forbes.

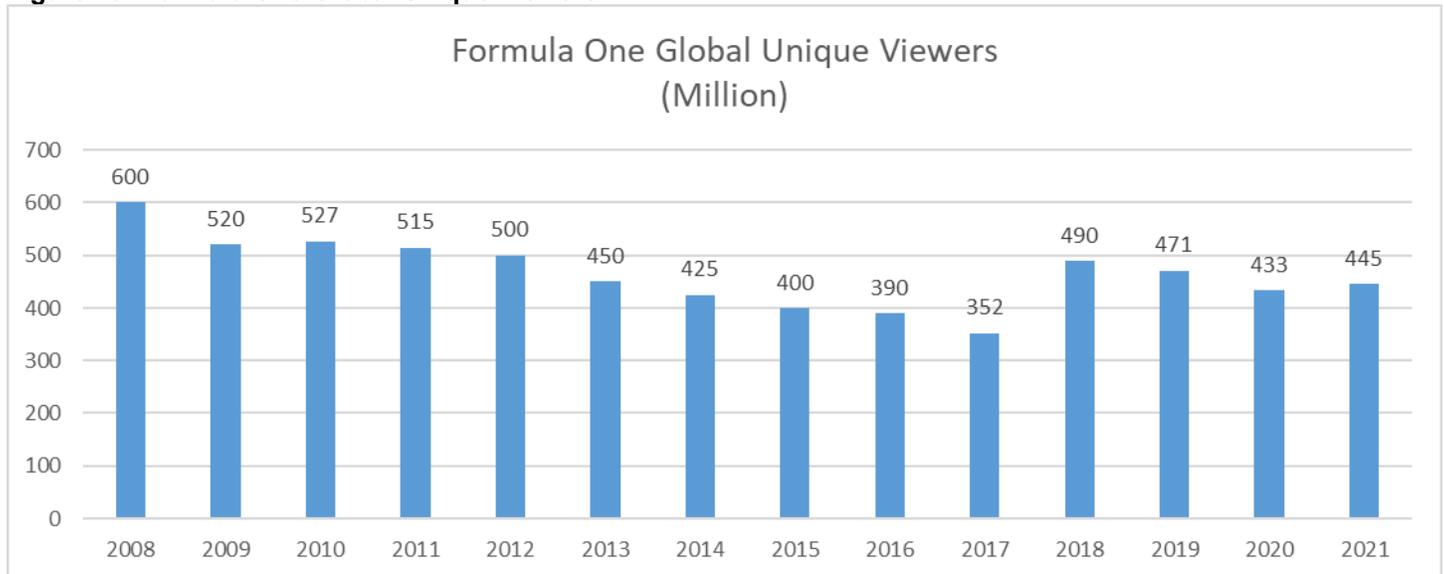
<https://www.forbes.com/sites/csylt/2018/01/06/f1-tv-audience-reverses-by-40-million-under-revised-measurement-system/>

¹⁹⁹ Formula 1's TV and Digital Audiences Grow for The Second Year Running. Formula 1®.

<https://www.formula1.com/en/latest/article/formula-1s-tv-and-digital-audiences-grow-for-the-second-year-running.OqTPVNtthtZKFbKqBaimKf>

²⁰⁰ Strong Growth for F1's TV And Digital Audiences in 2017. Formula 1®. <https://www.formula1.com/en/latest/article/strong-growth-for-f1s-tv-and-digital-audiences-in-2017.6Cted4V292gQ420AeoSO2e>

Figure 18: Formula One Global Unique Viewers²⁰¹



Formula One Viewer Demographics

Formula One's global fan base continues to expand in both scale and diversity, reinforcing its position as one of the world's most valuable sports properties. **Limited data shows that Formula One had already become the most watched annual sports series in the world in 2015, with 425 million television viewers, surpassed only by the Olympic Games and the FIFA World Cup, both of which are held only every four years.**²⁰² This positioning was echoed in a 2023 interview with CNBC, in which Formula One participants also described the championship as the most viewed sport in the world outside of the Olympics and the World Cup.²⁰³ Unlike the Olympic Games and the World Cup, however, Formula One operates annually, thus potentially providing advertisers with a year-round global media platform rather than a single-event exposure. As of 2024, with nearly 827 million fans globally,²⁰⁴ the Formula One World Championship is the pinnacle of motorsports and one of the most watched annual sports series in the world, with approximately 1.6 billion cumulative TV audience, 66 million average race viewership on linear platforms (i.e., traditional networks), 20 million average digital and F1 TV viewership, and 97 million social media followers (up 38% year-over-year).²⁰⁵

This growth has been accompanied by a meaningful demographic shift. A 2023 report by Salesforce, one of Formula One's global sponsors, highlights that the sport now attracts a younger and more gender-balanced audience than at any point in its history. **Female fans account for approximately 42% of the global fan base, up from 32% in 2018,**

²⁰¹ 2008 – 2017: F1 TV Audience Reverses By 40 Million Under New Measurement System.

<https://www.forbes.com/sites/csylv/2018/01/06/f1-tv-audience-reverses-by-40-million-under-revised-measurement-system/>; 2018:

Formula 1's TV and Digital Audiences Grow for The Second Year Running. Formula 1®.

[https://www.formula1.com/en/latest/article/formula-1s-tv-and-digital-audiences-grow-for-the-second-year-](https://www.formula1.com/en/latest/article/formula-1s-tv-and-digital-audiences-grow-for-the-second-year-running.OqTPVNthtZKFbKqBaimKf)

[running.OqTPVNthtZKFbKqBaimKf](https://www.formula1.com/en/latest/article/formula-1s-tv-and-digital-audiences-grow-for-the-second-year-running.OqTPVNthtZKFbKqBaimKf); 2019: Formula 1 Viewing Figures 2019_ F1 broadcast to 1.9 billion total audience in 2019.

Formula 1®. <https://www.formula1.com/en/latest/article/f1-broadcast-to-1-9-billion-fans-in-2019.4leYkWSOexxSleJyuTrk22>; 2020:

Formula 1 Announces TV And Digital Audience Figures for 2020. Formula 1®. [https://www.formula1.com/en/latest/article/formula-1-](https://www.formula1.com/en/latest/article/formula-1-announces-tv-and-digital-audience-figures-for-2020.3sbRmZm4u5Jf8pagvPoPUQ)

[announces-tv-and-digital-audience-figures-for-2020.3sbRmZm4u5Jf8pagvPoPUQ](https://www.formula1.com/en/latest/article/formula-1-announces-tv-and-digital-audience-figures-for-2020.3sbRmZm4u5Jf8pagvPoPUQ); 2021: Formula 1 Announces TV, Race Attendance

And Digital Audience Figures for 2021. Formula 1® [https://www.formula1.com/en/latest/article/formula-1-announces-tv-race-](https://www.formula1.com/en/latest/article/formula-1-announces-tv-race-attendance-and-digital-audience-figures-for-2021.1YDpVJIHOGNuok907sWcKW)

[attendance-and-digital-audience-figures-for-2021.1YDpVJIHOGNuok907sWcKW](https://www.formula1.com/en/latest/article/formula-1-announces-tv-race-attendance-and-digital-audience-figures-for-2021.1YDpVJIHOGNuok907sWcKW).

²⁰² Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

²⁰³ How Formula 1 Teams Make Money – CNBC. YouTube. <https://www.youtube.com/watch?v=fobNXSOQ5s&t=32s>

²⁰⁴ Data From Nielsen Sports Shows F1 Fandom Surging As 2025 Season Gets Underway. Forbes.

[https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-](https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-shows-f1-fandom-surging-as-2025-season-gets-underway/)

[shows-f1-fandom-surging-as-2025-season-gets-underway/](https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-shows-f1-fandom-surging-as-2025-season-gets-underway/); Records, Growth and Unforgettable Moments – The 2025 Formula 1

Season So Far. [https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-](https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq)

[season-so-far.1usXKBpUsYIndrYz22GQTq](https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq); Formula 1 2025 Season – A Half Year Review. [https://corp.formula1.com/formula-1-2025-](https://corp.formula1.com/formula-1-2025-season-a-half-year-review/)

[season-a-half-year-review/](https://corp.formula1.com/formula-1-2025-season-a-half-year-review/)

²⁰⁵ Liberty Media Q4 2024 Earnings Call. 2/27/2025.

while roughly one-third of fans are under the age of 35.²⁰⁶ This evolution is strategically significant, as it aligns Formula One more closely with advertisers and sponsors, including LVMH, adidas, WhatsApp, Zoom, eBay, and LEGO,²⁰⁷ seeking long-term relevance among younger, digitally savvy consumers.

Digital engagement has been a central driver of this transformation. **By 2024, Formula One had become one of the fastest-growing sports properties on social media, with more than 96 million followers across platforms.²⁰⁸** These digital channels, together with streaming services such as F1 TV, video games, and e-commerce, have enabled the sport to deepen fan engagement well beyond traditional race broadcasts.

Despite its global reach, it is estimated that fewer than 1% of Formula One fans will ever attend a Grand Prix in person,²⁰⁹ not only underscoring the importance of remote engagement and but also highlighting a substantial addressable market for both the championship and race promoters. Out of an estimated 827 million global fans in 2025, generating more than one billion cumulative views annually (approximately 1.6 billion in 2024²¹⁰), only around 6.7 million attended races in person.²¹¹ Attendance has been constrained by capacity, with 19 of the 24 events on the calendar completely sold out. As a result, the overwhelming majority of fans experience the sport through broadcast coverage, digital platforms, merchandise, and gaming.²¹² This structural reality points to substantial opportunities for scalable monetization – revenue growth is increasingly decoupled from physical attendance and instead driven by media consumption, digital ecosystems, and global fan engagement at scale.

Humans appear to be psychologically wired to enjoy the thrill from speed.²¹³ Part of this attraction is biochemical – high speed experiences such as driving fast cars and riding roller a roller coaster can nevertheless trigger the release of hormones associated with risk and excitement. Adrenaline, the body’s fight-or-flight hormone, elevates heart rate and blood pressure, priming the body for rapid response. Endorphins simultaneously enhance mood. These processes also stimulate dopamine production, the hormone linked to reward, reinforcing feelings of pleasure and encouraging repetition of the experience. Together, this neurochemical cascade produces the distinctive “rush” of speed with heightened awareness, exhilaration, a sharpened sense of aliveness, and a powerful desire to relive the moment despite any lingering fear.

Richard Stephens, a psychology scholar at Keele University, suggests that the phenomenon has an additional psychological dimension.²¹⁴ The most profound version of this thrill often emerges when individuals feel a sense of control, such as skiing down a steep slope and driving a fast car. In such settings, the combination of perceived mastery and risk intensifies emotional payoff, helping explain why driving fast can be uniquely gratifying for those who believe they command the machine beneath them.

Scientists also suggest that the appeal of high-performance sport extends beyond direct participation. Mirror neurons, which are specialized brain cells that activate both when we perform an action and when we observe others doing so, allow spectators to experience moments of athletic intensity. As one psychologist from McMaster University explains: “When you catch a ball, you get a rush of adrenaline. When you see an expert athlete also catch the ball, the mirror-neurons system proffers up this representation of catching the ball, and if you have some emotional attachment to that action, you will get an emotional response.”²¹⁵

²⁰⁶ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

²⁰⁷ F1 2025 – List of Partners and Sponsors for Each of 10 Teams. <https://formularapida.net/en/f1-2025-list-of-partners-sponsors-for-each-of-10-teams/>

²⁰⁸ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

²⁰⁹ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

²¹⁰ Liberty Media Q4 2024 Earnings Call. 2/27/2025.

²¹¹ Formula 1 2025 Season Review. Formula One World Championship Limited. <https://corp.formula1.com/formula-1-2025-season-review/>

²¹² Salesforce and Formula 1 Announce Innovative 5-year Partnership to Boost Fan Engagement And Sustainability. Formula 1®. <https://www.formula1.com/en/latest/article/salesforce-and-formula-1-announce-innovative-5-year-partnership-to-boost-fan.6fj0otzmwaZcKtRxp7uMb8>

²¹³ The World's Fastest Human and Experts on Our Need for Speed. <https://robbreport.com/lifestyle/sports-leisure/human-speed-commander-andy-green-1236474930/>

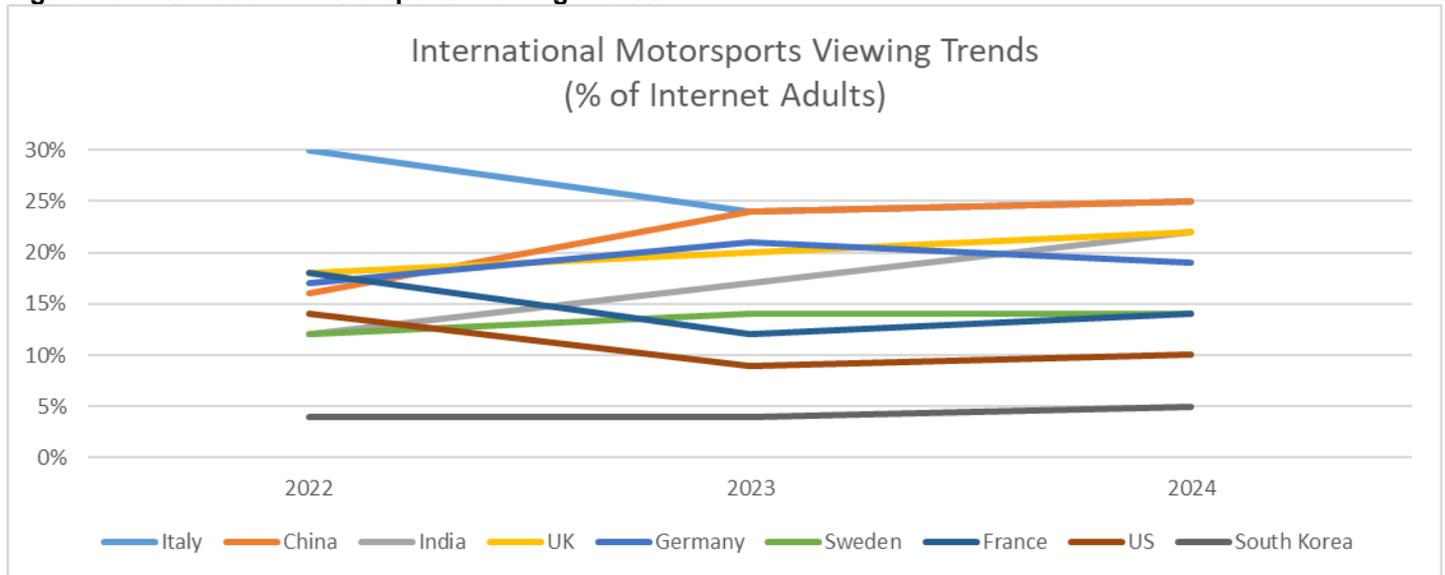
²¹⁴ The World's Fastest Human and Experts on Our Need for Speed. <https://robbreport.com/lifestyle/sports-leisure/human-speed-commander-andy-green-1236474930/>

²¹⁵ Getting into The Game. CBC News. <https://www.cbc.ca/news/science/getting-into-the-game-1.971516>

We believe this innate attraction to speed and the ability for viewers to experience races almost as if they were in the driver’s seat help contextualize the enduring global appeal of motorsports. As the 2018 Nielsen report states above, motorsports, alongside other sports, enjoy strong global popularity,²¹⁶ yet with significant regional variation. 2025 S&P Global Market Intelligence Kagan Consumer Insights surveys indicate that Italy and China lead in motorsports viewership, with 25% of surveyed adults on the internet watching events such as Formula One, NASCAR, or MotoGP.²¹⁷ High engagement is also observed in India at 22%, the UK at 22%, and Germany at 19%, while participation is lower in the United States at 10% and South Korea at 5%.

Notably, Formula One dominates motorsports viewership across Europe, where approximately 90% of motorsports fans in countries such as the UK, France, Germany, and Italy watch Formula One races. NASCAR remains largely US-centric, while MotoGP enjoys strong followings in Italy, India, France, and China.

Figure 19: International Motorsports Viewing Trends²¹⁸



²¹⁶ The Global Popularity of Football is Rising. <https://www.nielsen.com/insights/2018/fan-favorite-the-global-popularity-of-football-is-rising/>

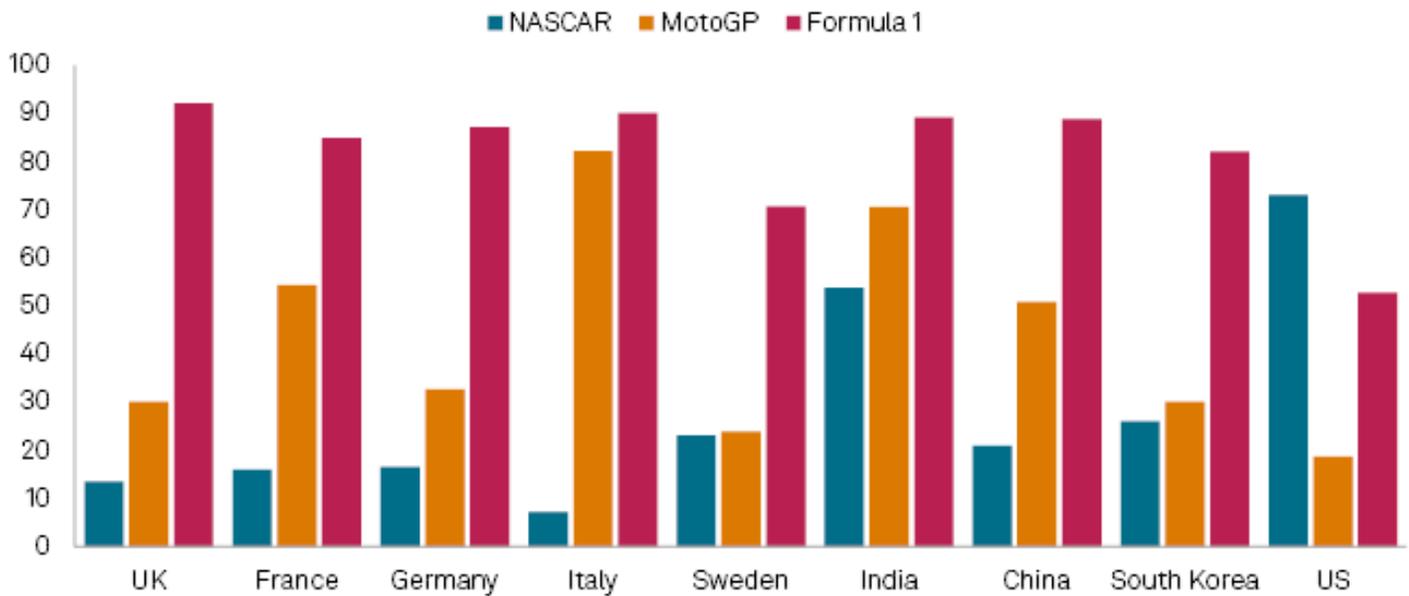
²¹⁷ In America Motorsports is NASCAR, Elsewhere It’s Formula One. S&P Global. <https://www.spglobal.com/market-intelligence/en/news-insights/research/in-america-motorsports-is-nascar-elsewhere-its-formula-one>

²¹⁸ In America Motorsports is NASCAR, Elsewhere It’s Formula One. S&P Global. <https://www.spglobal.com/market-intelligence/en/news-insights/research/in-america-motorsports-is-nascar-elsewhere-its-formula-one>

Furthermore, across surveyed markets in Europe, Asia, and the Americas, Formula One emerged as the most widely followed motorsport. **In most countries, 70% to 90% of motorsports viewers reported that they regularly watch or intend to watch Formula One races.**²¹⁹ The only exception is the United States, where just over 50% of respondents indicated interest in Formula One, compared with nearly 80% who follow NASCAR, which is the local motorsport to Americans.

Figure 20: Consumer Survey 2024 – Motorsport Event TV Viewership by Market²²⁰

Motorsports viewers by event type, 2024/2025 (%)



Q. Please indicate which of the following major motorsports events you or someone in your household typically watch or plan to watch.

Base: UK - 216, France - 138, Germany - 187, Italy - 251, Sweden - 143, India - 220, China - 248, South Korea - 50, US - 241.

Source: S&P Global Market Intelligence Kagan 2024 European and Asia-Pacific Consumer Insights surveys, Kagan first-quarter 2025 US Consumer Insights survey.

© 2025 S&P Global.

Major sporting events, such as the Olympic Games, FIFA World Cup, NBA, NFL, and Formula One, regularly attract audiences in the hundreds of millions or even billions. For example, **approximately 5 billion people followed the 2024 Paris Olympic Games,**²²¹ **while the 2022 FIFA World Cup final alone drew 1.5 billion viewers.**²²² **In comparison, Formula One attracted approximately 1.6 billion cumulative TV viewers in 2024,**²²³ **firmly positioning it among the world’s most popular global sports series.** Notably, while the Olympic Games and the FIFA World Cup occur once every four years, Formula One operates on an annual calendar, providing sustained global engagement year after year. **The immense audience appeal makes these sports events highly attractive to advertisers looking to expand their brand visibility by leveraging the dedicated fan base of specific sporting events.**

As the world becomes increasingly digital, live sports continue to be a major draw for advertisers. According to The Hollywood Reporter in 2023, executives from traditional media networks, including Warner Bros., Discovery, NBCUniversal, and Paramount, indicated that live sports continue to attract advertisers and remain a key driver of

²¹⁹ In America Motorsports is NASCAR, Elsewhere It’s Formula One. S&P Global. <https://www.spglobal.com/market-intelligence/en/news-insights/research/in-america-motorsports-is-nascar-elsewhere-its-formula-one>

²²⁰ In America Motorsports is NASCAR, Elsewhere It’s Formula One. S&P Global. <https://www.spglobal.com/market-intelligence/en/news-insights/research/in-america-motorsports-is-nascar-elsewhere-its-formula-one>

²²¹ Around 5 Billion People - 84 Per Cent of The Potential Global Audience. <https://www.olympics.com/ioc/news/around-5-billion-people-84-per-cent-of-the-potential-global-audience-followed-the-olympic-games-paris-2024>

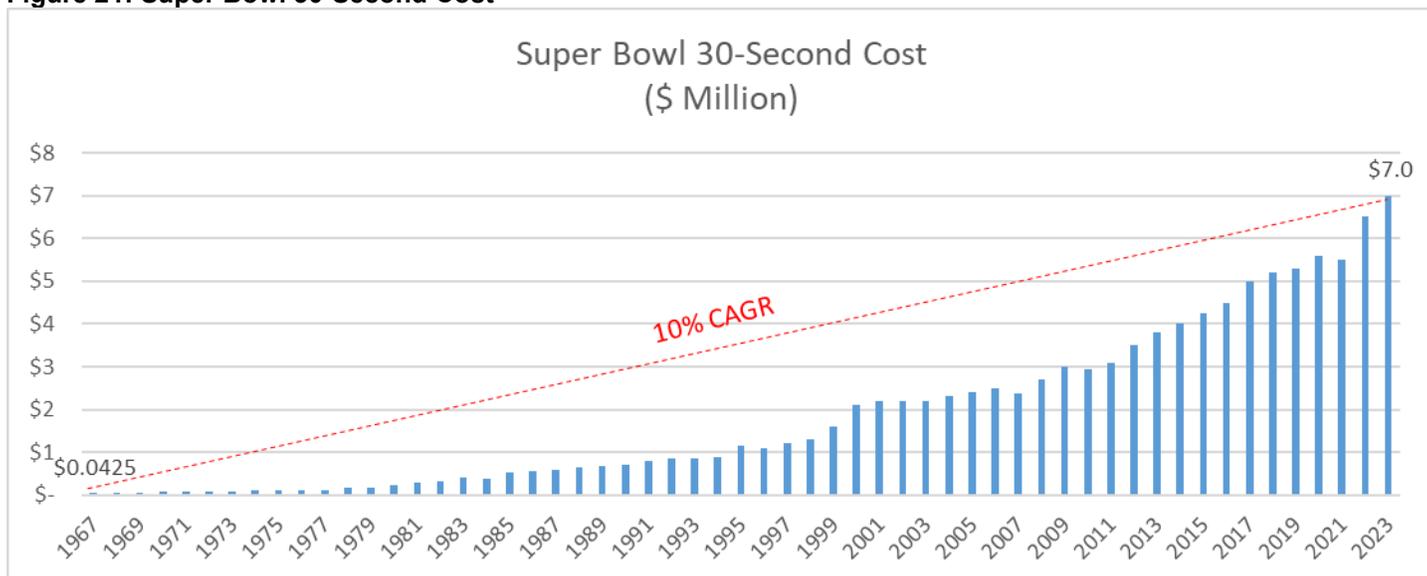
²²² Super Bowl vs. World Cup. <https://www.nytimes.com/athletic/4198045/2023/02/15/super-bowl-world-cup-tv-ratings/>

²²³ Liberty Media Q4 2024 Earnings Call. 2/27/2025.

advertising demand.²²⁴ More importantly, sports advertising is uniquely effective at building brand exposure and consumer trust. Unlike many digital formats, sponsorship and advertising embedded within live sporting events benefit from high engagement, emotional resonance (a chance for brands to be associated with moments that represent the pinnacle of human performance, watching athletes break records), and a perception of authenticity. According to the 2026 World Economic Forum report, sport remains one of the most trusted advertising channels, with 81% of consumers viewing sport sponsorship as credible.²²⁵

Unlike scripted content, live sports captivate audiences in real time. Viewers are highly engaged, reluctant to step away for fear of missing key moments, unlike recorded content, which they can pause or rewind at their convenience. This heightened engagement makes live sports audiences particularly valuable to advertisers. This trend is evident across multiple leagues such as the NBA, NHL, and MLB, and even extends to traditionally overlooked events such as the women’s NCAA basketball tournament, which has seen ad inventory sell out.²²⁶ With live sports being one of the few remaining TV properties that consistently attract strong viewership, ad slots during broadcasts have become even more valuable. **For example, the cost of a 30-second Super Bowl ad has increased from \$42,500 in 1967 (equivalent to \$388,000 in 2023 dollars²²⁷) to \$7 million in 2023, a 10% CAGR.²²⁸**

Figure 21: Super Bowl 30-Second Cost²²⁹



While lacking comprehensive historical pricing data for Formula One’s sponsorship deal, we believe it follows a similar upward trajectory. For example, in 2013, when Rolex became one of Formula One’s major sponsors, it was estimated that the deal was around \$20 million (€15 million) a year.²³⁰ In 2024, as the 10-year sponsorship agreement between Rolex and Formula One expired, LVMH succeeded and become Formula One’s sponsor with a new 10-year contract, estimated at over \$100 million a year, effective in 2025.²³¹ This represents an approximately 14% CAGR, demonstrating a significant

²²⁴ Why Sports Advertising Is Booming While Rest of the Ad Market Isn't. <https://www.hollywoodreporter.com/business/business-news/sports-advertising-boom-march-madness-1235358336/>

²²⁵ Sports for People and Planet – Insight Report. January 2026. World Economic Forum.

²²⁶ Why Sports Advertising Is Booming While Rest of the Ad Market Isn't. <https://www.hollywoodreporter.com/business/business-news/sports-advertising-boom-march-madness-1235358336/>

²²⁷ Inflation Calculator. Federal Reserve Bank of Minneapolis. <https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator>

²²⁸ Super Bowl Commercial Cost in 2022. <https://www.sportingnews.com/us/nfl/news/super-bowl-commercials-cost-2022/v9ytfqzx74pjrcdvxyhevlzd>; Super Bowl Commercial Cost in 2024. <https://www.sportingnews.com/ca/nfl/news/super-bowl-commercial-cost-2024-money-ad-super-bowl-58/d2c2d62f58c7f83da1cefa77>

²²⁹ Super Bowl Commercial Cost in 2022. <https://www.sportingnews.com/us/nfl/news/super-bowl-commercials-cost-2022/v9ytfqzx74pjrcdvxyhevlzd>; Super Bowl Commercial Cost in 2024. <https://www.sportingnews.com/ca/nfl/news/super-bowl-commercial-cost-2024-money-ad-super-bowl-58/d2c2d62f58c7f83da1cefa77>

²³⁰ Rolex Joins F1 Partner Roster as Official Timekeeper from 2013. <https://www.motorsport.com/f1/news/rolex-joins-f1-partner-roster-as-official-timekeeper-from-2013/3219337/>

²³¹ LVMH Clinches 10-year Sponsorship Deal with Formula 1. Reuters. <https://www.reuters.com/business/lvmh-strikes-sponsorship-deal-with-formula-1-2024-10-02/>

pricing power of Formula One as it become more and more popular. However, it is also important to note that Formula One has dozens of sponsors globally,²³² not including sponsorships from individual teams, thus the increasing in deal size might not represent the overall profile as the organization does not disclose in details of its terms with sponsors.

The massive global fan bases of live sporting events continue to draw broadcasters. This, in turn, attracts advertisers willing to pay a premium for ad placements and sponsorships due to their effectiveness. Psychological studies suggest that ads shown during live sports events are more effective than those displayed during scripted or pre-recorded programs. A study by scholars from Oregon State University and the University of Oregon found that suspense in sports programming significantly enhances viewer responses to advertisements, supporting the excitation transfer theory.²³³ Ads shown immediately after a suspenseful game triggered stronger emotional reactions and more favorable attitudes toward both the ad and the brand, regardless of whether the team won or lost. The first ad shown after a game's conclusion generated the highest level of emotional response including joyful, pleased, excited, etc. (For those interested in the subject, please see our study on sports broadly and the Indian Premier League at <https://worldlypartners.com/businesshistory/> or the link below in the footnote²³⁴)

It was not until 1968 that Formula One started to commercialize by accepting sponsorship, pioneered by privateers (typically independent teams not owned or operated by a car manufacturer) and individual teams.²³⁵ However, such data, or broader industry data, if ever in existence, are not found at the time of writing. **From 2013, the global sports sponsorship market is estimated to have grown from \$30 billion to \$105 billion in 2023,²³⁶ reflecting a 9% CAGR. The market is expected to continue expanding at a CAGR of 8.7% through 2030,²³⁷ reaching an estimated \$190 billion by then.**

This indicates that, with an estimated \$634 million sponsorship sales from Formula One Group,²³⁸ and an estimated \$2.04 billion sponsorship revenue by teams collectively,²³⁹ Formula One together has somewhere around 3% share of global sports sponsorship in 2024. The market is estimated to grow another 8.7%, to nearly \$114 billion, through 2030,²⁴⁰ according to WARC (World Advertising Research Center), indicating a significantly long runway for potential growth. Yet, some industry reports, including Forbes, indicate that Formula One as of 2024 accounts for approximately 6.6% of all total global sports sponsorship revenue.²⁴¹

²³² Formula 1 Partners – Global Partners, Official Sponsors and Suppliers. Formula 1®.

<https://www.formula1.com/en/information/formula-1-partners.2shz7bIVhGgS3ovP69N3Rs>

²³³ It's Not Whether You Win or Lose, It's How The Game is Played: The Influence of Suspenseful Sports Programming on Advertising. Colleen Bee. Oregon State University; Robert Madrigal. University of Oregon.

²³⁴ Indian Premier League Multi-Decade Study. Worldly Partners. <https://worldlypartners.com/wp-content/uploads/2025/03/Indian-Premier-League.pdf>

²³⁵ The First Sponsor in Formula One – A History of Sponsorship in Formula 1. F1 History. <https://www.formulaonehistory.com/the-first-sponsor-in-formula-one/>

²³⁶ Since these statistics originate from different sources published at various times, their scope may differ. As of the time of writing, no consistent dataset from a single provider with a uniform scope covering the entire period from 2008 to 2023 has been found.

2008: Stressed Advertisers Blow the Whistle on Sports Sponsorship Deals. WSJ.

<https://www.wsj.com/articles/SB122890850076094477>; 2011 – 2019: Global Ad Trends. World Advertising Research Center.

<https://www.warc.com/newsandopinion/news/global-ad-trends-tokyo-olympics-drives-sports-sponsorship-new-record/en-gb/43161>; 2020: Sponsorship Spend to Fall \$17.2bn. <https://twocircles.com/gb/articles/projections-sponsorship-spend-to-fall-17-2bn/>; 2023: Getting Measurement Right to Understand Sponsorship Impact. <https://www.warc.com/content/paywall/article/warc-exclusive/getting-measurement-right-to-understand-sponsorship-impact/en-GB/156708>

²³⁷ Getting Measurement Right to Understand Sponsorship Impact. <https://www.warc.com/content/paywall/article/warc-exclusive/getting-measurement-right-to-understand-sponsorship-impact/en-GB/156708>

²³⁸ Liberty Media Annual Report 2024.

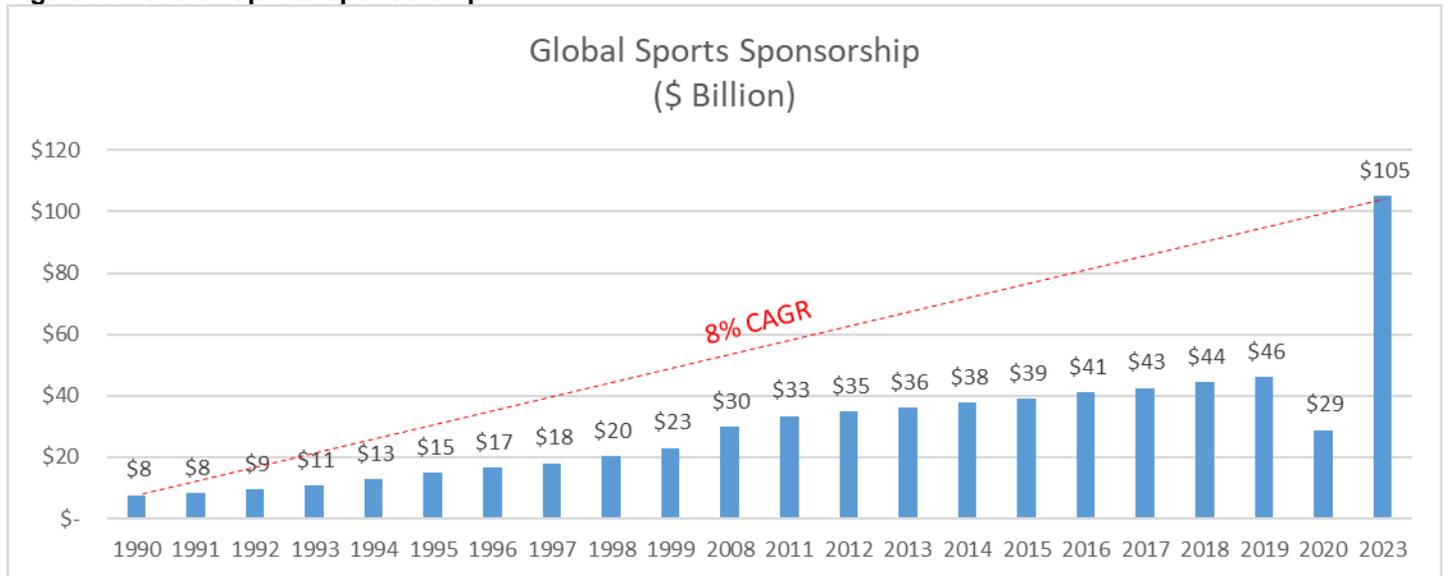
²³⁹ Formula 1 Report 2024 & 2025 – SponsorUnited; F1 Sponsorship Spend Projected to Hit US\$2.9bn for 2025. BlackBook Motorsport. <https://www.blackbookmotorsport.com/news/f1-sponsorship-spend-revenue-liberty-media-ampere-analysis-viagogo-march-2025>

²⁴⁰ Getting Measurement Right to Understand Sponsorship Impact. <https://www.warc.com/content/paywall/article/warc-exclusive/getting-measurement-right-to-understand-sponsorship-impact/en-GB/156708>

²⁴¹ Formula 1 Now Sees 750 Million Fans Due To Growth With Women And Middle East. Forbes.

<https://web.archive.org/web/20250321050512/https://www.forbes.com/sites/maurybrown/2024/12/03/formula-1-now-sees-750-million-fans-due-to-growth-with-women-and-middle-east-demo/>; Inside The Race for Brand Visibility in F1 Sponsorship. BlackBook Motorsport. <https://www.blackbookmotorsport.com/features/brand-visibility-f1-sponsorship-relo-metrics/>

Figure 22: Global Sports Sponsorship²⁴²



Notes:

1. Data for the periods 2000–2007, 2001–2022, and from 2024 onward were not found at the time of writing.
2. COVID-19 Pandemic in 2020.
3. Because these statistics are drawn from different sources published at different times, their scope may vary. As a result, the calculated CAGR may not accurately reflect the underlying growth of the market segment. At the time of writing, no consistent, single-provider dataset with a uniform scope covering the entire period has been found.

We believe that luxury brands are increasingly drawn to sports sponsorships, particularly those associated with excellence, achievement, and a prestigious lifestyle. Sports such as Formula One and professional golf represent the pinnacle of their respective categories and offer luxury brands a powerful platform to expand global reach and appeal to broader, aspirational audiences. The connection between luxury and sports is not new. Rolex, for example, has built a strong association for decades with elite sports such as golf, swimming, racing, tennis, and equestrian events, activities often linked to wealth, success, and prestige. (For those interested in the subject, please see our multi-decade study of Rolex at <https://worldlypartners.com/businesshistory/> or the link below in the footnote²⁴³) Reflecting this alignment, Rolex served as a global partner of Formula One from 2013 to 2024, following Hublot, another Swiss luxury watchmaker that held the sponsorship from 2010 to 2012.²⁴⁴ These partnerships underscore the natural fit between Formula One’s positioning as an elite global sport and the branding objectives of high-end luxury companies. By aligning with premier sporting platforms, luxury brands reinforce their image of exclusivity and aspiration²⁴⁵ while simultaneously accessing vast, highly engaged global audiences.

²⁴² 1990 – 1999: STUDY SHOWS \$15B SPENT ON SPORTS SPONSORSHIP IN '99. [https://www.sportsbusinessjournal.com/Daily/Issues/2000/05/05/Sponsorships-Advertising-Marketing/STUDY-SHOWS-\\$15B-SPENT-ON-SPORTS-SPONSORSHIP-IN-99/](https://www.sportsbusinessjournal.com/Daily/Issues/2000/05/05/Sponsorships-Advertising-Marketing/STUDY-SHOWS-$15B-SPENT-ON-SPORTS-SPONSORSHIP-IN-99/); 2008: Stressed Advertisers Blow the Whistle on Sports Sponsorship Deals. WSJ. <https://www.wsj.com/articles/SB122890850076094477>; 2011 – 2019: Global Ad Trends. World Advertising Research Center. <https://www.warc.com/newsandopinion/news/global-ad-trends-tokyo-olympics-drives-sports-sponsorship-new-record/en-gb/43161>; 2020: Sponsorship Spend to Fall \$17.2bn. <https://twocircles.com/gb/articles/projections-sponsorship-spend-to-fall-17-2bn/>; 2023: Getting Measurement Right to Understand Sponsorship Impact. <https://www.warc.com/content/paywall/article/warc-exclusive/getting-measurement-right-to-understand-sponsorship-impact/en-GB/156708>

²⁴³ Rolex Multi-Decade Study. Worldly Partners. <https://worldlypartners.com/wp-content/uploads/2025/02/Rolex.pdf>

²⁴⁴ Rolex Official Formula 1 Racing Timekeeper, Replacing Hublot. <https://www.ablogtowatch.com/rolex-replaces-hublot-as-official-formula-1-racing-timekeeper>

²⁴⁵ Rolex Multi-Decade Study. Worldly Partners. <https://worldlypartners.com/wp-content/uploads/2025/02/Rolex.pdf>

Figure 23: Rolex and Formula One²⁴⁶



More recently, LVMH has also demonstrated a strong conviction in the marketing power of global sporting events. With an estimated 2 billion viewers for the 2023 Women's World Cup and a projected 5 billion global audience for the 2024 Paris Olympics, alongside 9.7 million tickets sold,²⁴⁷ LVMH recognizes the immense power of sports to drive visibility and engagement. The company reportedly sponsored over \$160 million in the Paris Olympic and Paralympic Games, marking the largest sponsorship commitment of any company for the event.²⁴⁸

Beginning in 2025, LVMH, together with its brands, including Moët Hennessy, its wines and spirits division, and TAG Heuer, its Swiss luxury watchmaking brand, will become a global partner of Formula One under a 10-year sponsorship agreement estimated at more than \$100 million annually.²⁴⁹ This partnership underscores the growing strategic importance of elite sports as a core pillar of luxury brand marketing.

While traditional athletic giants like Nike and Adidas have long dominated the sports market, luxury brands are taking a different approach, focusing on lifestyle and aspirational appeal rather than performance-driven apparel. As one retail consultant noted, "I don't see the luxury brands competing for the performance side of it... they are absolutely going to compete for the mindshare side of it."²⁵⁰ Participants in the luxury industry further highlighted the synergy between athletes and luxury brands, noting that both share a deep commitment to quality and excellence.

²⁴⁶ Three of Rolex's Most Successful Marketing Efforts. <https://www.everestbands.com/blogs/bezel-barrel/examining-three-of-rolex-s-marketing-efforts?srltid=AfmBOor9Ykio10m-mRFM70bNxvXGPWJvQ3-liKDB04K9GX6n7QYJel7r>

²⁴⁷ Why Luxury Brands Like Prada and Burberry Are Stepping into The Sports Arena. <https://digiday.com/marketing/why-luxury-brands-like-prada-and-burberry-are-stepping-into-the-sports-arena/>; Around 5 Billion People - 84 Per Cent of The Potential Global Audience. <https://www.olympics.com/ioc/news/around-5-billion-people-84-per-cent-of-the-potential-global-audience-followed-the-olympic-games-paris-2024>; Paris Olympics Sells A Record 9.7 Million Tickets. <https://apnews.com/article/olympics-2024-paris-ticket-sales-6b877e17bc19524a0f580615cef05e63>

²⁴⁸ Bernard Arnault's LVMH to Sponsor 2024 Paris Olympics. <https://web.archive.org/web/20231222094759/https://fortune.com/europe/2023/07/25/bernard-arnaults-lvmh-166-million-sponsor-2024-summer-olympics-paris-chaumet-medals-moet-hennessy-wine/>

²⁴⁹ LVMH Signs Major Sponsorship Deal with F1, Replacing Rolex. Fortune. <https://fortune.com/2024/10/02/lvmh-rolex-f1-formula-one-sponsorship/>

²⁵⁰ Why Luxury Brands Like Prada and Burberry Are Stepping into The Sports Arena. <https://digiday.com/marketing/why-luxury-brands-like-prada-and-burberry-are-stepping-into-the-sports-arena/>

Bernie Ecclestone and Formula One

In the early years since the founding of Formula One, approximately the 1950s to the 1960s, we believe the commercial activities of Formula One and its teams were minimal and differed significantly from what they look like today. During such early years, teams were assigned a specific color for the country they were representing. **This is how Ferrari became synonymous with red – the color designated to Italy – having been in Formula One since that very first season in 1950.** Other Italian teams like Alfa Romeo and Maserati also raced in red because of this rule. British outfits used racing green, German teams raced in white or silver, and American manufacturers were decked out in blue. This all changed when the International Automobile Federation (FIA) revised the rules around sponsorship. Early commercial partners in Formula One were oil companies like BP and Shell but, when these brands dropped their support for the series, and Firestone decided to charge for tires, many teams began to struggle financially.²⁵¹ In response, the FIA decided to relax its sponsorship rules on teams in 1968 in order to boost teams' income and get back their partners, marking the beginning of the sponsorship era for Formula One teams. Cars in 1968 carried advertising for the first time.²⁵²

Around this period, an important figure to the evolution of the modern Formula One emerged – Bernie Ecclestone, widely considered as the architect of the modern Formula One. As Flavio Briatore, a veteran team principal who served on multiple Formula One teams, once remarked, “Without Bernie, F1 doesn’t exist. It’s as simple as that.”²⁵³

Born in 1930 in England to a fisherman father and a homemaker mother, Ecclestone did not inherit wealth or influence. Instead, he inherited thrift, discipline, and a sharp eye for opportunity. From trading goods in the schoolyard to bargaining with American GIs “in return for chewing gum,” Ecclestone learned early how to negotiate and extract value. **This instinct, combined with an unusual emotional detachment from money and power, would define his career.** As Eddie Jordan, a Formula One legend, later put it, Ecclestone was someone who “sold [Formula One] four times, has never brought it back, has never lost its control, and still owns it is pretty special. And do you know the most important thing? He never [expletive] owned it in the first place.”²⁵⁴

Tracking how much of Formula One Ecclestone actually sold over the decades is difficult, in part because the business remained largely private for most of its history. Prior to its sale to Liberty Media in 2017, estimates suggested that Ecclestone personally held just over 3% of the equity (with some sources citing figures closer to 5%²⁵⁵), while his family trust controlled more than 8% of Delta Topco, Formula One’s holding company at the time.²⁵⁶ The remaining ownership was split among investors such as CVC (a private equity firm), Waddell & Reed (a U.S.-based asset manager), Norge (the Norwegian sovereign wealth fund), and other shareholders. Yet despite being only a minority owner at the time of acquisition, Ecclestone had served as Formula One’s chief executive for more than four decades, and had enormous influence on Formula One’s multi-decade success.

²⁵¹ 75 Years of F1 – The Key Commercial Milestones That Shaped The Sport. <https://www.sportspro.com/analysis/stadiums-and-venues/f1-commercial-milestones-75th-anniversary-liberty-bernie-ecclestone-drive-to-survive>; How Ecclestone turned Formula One into the World's Most Watched Series. <https://www.autoweek.com/racing/formula-1/a1933936/how-ecclestone-turned-formula-one-worlds-most-watched-series/>

²⁵² About Formula 1. ESPN. https://www.espn.com/f1/story/_/id/13715980/about-formula-1

²⁵³ F1 Is The Empire Bernie Ecclestone Built But Can It Thrive Without Him. The Guardian. <https://www.theguardian.com/sport/2017/jan/24/f1-bernie-ecclestone-liberty-media-chief-executive>

²⁵⁴ Bernie Ecclestone – How One Man Came to Own A Sport. <https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>

²⁵⁵ Liberty Media Agrees to Buy F1. ESPN. https://www.espn.com/f1/story/_/id/17489677/liberty-media-agrees-buy-f1

²⁵⁶ Formula One Takeover Leaves Bernie Ecclestone in Driver's Seat. ABC News. <https://www.abc.net.au/news/2016-09-08/formula-one-takeover-bernie-ecclestone-stays-in-drivers-seat/7827078>

Figure 24: Bernie Ecclestone in 2015²⁵⁷



Before Formula One, Ecclestone was already an established businessman. Leaving school at sixteen, he built profitable motorcycle and car dealerships in Bexleyheath, England, earning a reputation as “a shrewd business man” with “the most immaculate showroom in the area.”²⁵⁸ Racing itself was initially secondary. His first involvement in motorsport, Formula Three racing in the early 1950s, ended after a serious crash, reinforcing his belief that racing was useful not as a passion, but “because it would be good for business.”²⁵⁹

Ecclestone’s first major foothold in Formula One came in 1972, when he bought the Brabham team, one of nine Formula One teams at the time.²⁶⁰ While results were modest initially, his promotion of Gordon Murray as chief designer and later recruitment of Niki Lauda in 1977,²⁶¹ an Austrian world champion, and Nelson Piquet in 1978,²⁶² who later also won Drivers’ Championship, demonstrated his long-term vision. **Ultimately, he sold Brabham in 1988 for reportedly \$5 million, significantly more than \$120,000 he paid.**²⁶³

Yet, Ecclestone’s defining contribution to Formula One came not as a team owner, but as a power broker. As chief executive of the Formula One Constructors Association (FOCA) from 1978, which had been originally formed to

²⁵⁷ 85 up – Exclusive Q&A with Bernie Ecclestone. <https://www.formula1.com/en/latest/article/85-up-exclusive-q-a-with-bernie-ecclestone.hSgYtTxI5sYDqxolC6Zry>

²⁵⁸ Bernie Ecclestone – How One Man Came to Own A Sport. <https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>

²⁵⁹ Bernie Ecclestone – How One Man Came to Own A Sport. <https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>

²⁶⁰ 1972 TEAMS' STANDINGS. <https://www.formula1.com/en/results/1972/team>

²⁶¹ Niki Lauda. Formula 1®. <https://www.formula1.com/en/information/drivers-hall-of-fame-niki-lauda.2Ye7VYWdXwhb97ZqLyxvX>

²⁶² Nelson Piquet. Formula 1®. <https://www.formula1.com/en/information/drivers-hall-of-fame-nelson-piquet.7EkDuZAxJN03b0kgFksCzf>

²⁶³ Bernie Ecclestone – How One Man Came to Own A Sport. <https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>; Bernie Ecclestone – A Short History of F1's Billion-Dollar Brain. <https://bleacherreport.com/articles/542560-f1s-billion-dollar-brain-a-short-history-of-bernie-ecclestone>

represent the British teams as only when together they could compete with the bargaining power of the likes of Ferrari, **he recognized before anyone else that television rights, not race winnings, were the sport's real value.**²⁶⁴

At the time, Formula One was still run in an ad-hoc, almost amateur fashion. Teams negotiated individually with race organizers, television coverage was inconsistent, and races could be canceled at short notice if too few cars entered.²⁶⁵ Ecclestone fundamentally changed this model. He bundled the television rights and sold Formula One as a single championship package, requiring broadcasters to carry every race. This guaranteed exposure, attracted global sponsorship, and provided the organization and teams with stable income. What had once been a niche pursuit for enthusiasts was transformed into a prime-time global spectacle.²⁶⁶ By persuading teams to negotiate collectively, Ecclestone wrested control away from circuit owners.²⁶⁷ laid the foundation for Formula One's modern commercial structure. By centralizing negotiations, he transformed Formula One from a loosely organized championship into a unified commercial product. This shift laid the foundation for Formula One's modern revenue model and global reach.

Furthermore, Ecclestone extended this logic to race promotion. **Organizers were required to surrender income from trackside advertising and corporate hospitality to Formula One–owned entities, leaving ticket sales as their primary source of revenue.** Hosting contracts included escalator clauses that increased fees by up to 10% annually, (potentially) insulating Formula One from economic downturns. According to industry monitor Formula Money, between 2003 and 2011 the sport's revenues grew at an average annual rate of 9.6%.²⁶⁸ **The burden of these rising costs fell on promoters, who were forced to raise ticket prices and aggressively market their events simply to break even, effectively outsourcing Formula One's promotional efforts at no cost to the central organization.**

Ecclestone's confrontation with Fédération Internationale de l'Automobile (FISA) then president defined an era (late 1970s to early 1980s). The so-called FISA–FOCA war (FISA was the subsidiary arm of FIA and governed Formula One;²⁶⁹ FOCA was the constructors' association that represented individual teams) was a ruthless struggle over money, rules, and authority. Ecclestone's approach was blunt and effective. He used boycotts, bluffs, personal relationships with governments, and relentless psychological pressure. The war ended with the 1981 Concorde Agreement, a settlement that reshaped Formula One permanently and became the cornerstone agreement between Formula One and its teams. **Under the agreement, teams committed to competing in every race, revenues were distributed more equally, and, crucially, Ecclestone gained control over most, if not all, commercial aspects of the sport while the FIA retained regulatory authority.**²⁷⁰

The newly formed company headed by Ecclestone was first named Formula One Promotions and Administration (FOPA), but that changed to the FOM (Formula One Management, or Formula One Group after Liberty Media's acquisition in 2017) today.²⁷¹ This division of power allowed Formula One to scale rapidly through the 1980s and beyond. **Under the new terms, it was reported that 47% of the TV revenue was shared among teams, 30% went to the FIA, and 23% went to FOM, mainly to Ecclestone.**²⁷² In addition, FOM also received the large fees paid by promoters to stage F1 events.

²⁶⁴ Bernie Ecclestone – How One Man Came to Own A Sport. <https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>

²⁶⁵ How Ecclestone turned Formula One into the World's Most Watched Series. <https://www.autoweek.com/racing/formula-1/a1933936/how-ecclestone-turned-formula-one-worlds-most-watched-series/>

²⁶⁶ F1 Is The Empire Bernie Ecclestone Built But Can It Thrive Without Him. The Guardian.

<https://www.theguardian.com/sport/2017/jan/24/f1-bernie-ecclestone-liberty-media-chief-executive>

²⁶⁷ About Formula 1. ESPN. https://www.espn.com/f1/story/_/id/13715980/about-formula-1

²⁶⁸ How Ecclestone turned Formula One into the World's Most Watched Series. <https://www.autoweek.com/racing/formula-1/a1933936/how-ecclestone-turned-formula-one-worlds-most-watched-series/>

²⁶⁹ Bernie Ecclestone – A Short History of F1's Billion-Dollar Brain. <https://bleacherreport.com/articles/542560-f1s-billion-dollar-brain-a-short-history-of-bernie-ecclestone>

²⁷⁰ Bernie Ecclestone – How One Man Came to Own A Sport. <https://www.thegentlemansjournal.com/article/bernie-ecclestone-how-one-man-came-to-own-a-sport/>

²⁷¹ Bernie Ecclestone – A Short History of F1's Billion-Dollar Brain. <https://bleacherreport.com/articles/542560-f1s-billion-dollar-brain-a-short-history-of-bernie-ecclestone>

²⁷² Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>; Bernie Ecclestone – A Short History of F1's Billion-Dollar Brain.

<https://bleacherreport.com/articles/542560-f1s-billion-dollar-brain-a-short-history-of-bernie-ecclestone>; What is the F1 Concorde Agreement. <https://www.motorsport.com/f1/news/what-is-the-f1-concorde-agreement-all-to-know-about-the-contract/10703778/>

In general, Ecclestone gained control of Formula One's commercial rights through three gradual steps rather than a single transaction, consolidating authority across multiple agreements and entities he influenced or controlled.²⁷³ First, the original Concorde framework granted management of Formula One's commercial rights to the Formula One Constructors Association (FOCA), an organization Ecclestone effectively administered. Although the FIA formally owned the rights, FOCA negotiated commercial arrangements and delegated operational responsibility to Ecclestone-linked companies. This positioned him at the center of revenue collection and distribution. Second, under the 1992 Concorde Agreement, FOCA signed a commercial annex with Motor Racing Developments (later Formula One Promotions and Administration, FOPA), an Ecclestone company. This entity administered key revenue streams, including race sanction fees, television income, prize funds, travel funds, and bonus payments, giving Ecclestone practical control over the sport's cash flows even before he formally held the rights. Finally, the 1997 Concorde Agreement marked the decisive transfer of authority with the FIA granted the commercial rights to FOCA Administration Limited, another Ecclestone-controlled company, instead of leaving them with the teams' organization. By securing recognition as the "Commercial Rights Holder," Ecclestone converted operational influence into contractual control, effectively centralizing Formula One's commercial governance under his corporate structure.

In 2001, Ecclestone bought the commercial rights for 100 years from the FIA for \$360 million, a price widely regarded, even at the time, as dramatically undervaluing the sport's future earnings.²⁷⁴ The structure of the financing was not disclosed, as the transaction was conducted in secrecy and without a competitive bidding.²⁷⁵ According to *The Economist*, much of the consideration was not paid upfront but deferred for many years.²⁷⁶ (The economics of the underlying business, if existed publicly, was not found at the time of writing.)

Despite his achievements, Ecclestone's dominance was accompanied by persistent concerns over governance and transparency. Over time, he accumulated overlapping roles as team representative, FIA vice-president, commercial rights holder, and race promoter, creating profound conflicts of interest. A 2000 investigation by *The Economist* highlighted a civil lawsuit that raised serious questions about accountability,²⁷⁷ citing opaque offshore structures, unusual revenue transfers, particularly involving the Allsopp, Parker & Marsh companies, and judicial criticism of Ecclestone's credibility and business practices.

It was reported that there have been few clues about Formula One's financial structure. For decades Ecclestone was "the person best-placed to know how much money was flowing where and to whom."²⁷⁸ Much of Formula One's business operated under secrecy – not only were contractual terms deemed commercially confidential, but in some cases, even the existence of certain agreements remained unknown. Among the most troubling governance issues were the Allsopp, Parker & Marsh (APM) companies, offshore companies that received substantial revenue streams during a Ecclestone's tenure at Formula One. Under both the 1987 and 1992 Concorde Agreements, the FIA relinquished roughly 30% of television income, estimated at approximately \$120 million, to these entities.²⁷⁹ Beyond broadcast revenue, two additional sources of Formula One income appear to have flowed through the APM structure – the Paddock Club hospitality business and trackside advertising, which together generated tens of millions of dollars annually throughout the 1990s.

The ownership of the Allsopp, Parker & Marsh (APM) companies was deliberately difficult to trace. Linked through trustees, offshore trusts, and legal advisers associated with Ecclestone's family interests, the structure offered limited transparency and even less accountability. In the mid-1990s, the FIA further deepened this arrangement by granting

²⁷³ The 1997 Concorde Agreement – Bringing Transparency to Formula 1. https://www.formula1-dictionary.net/Big/full_1997_concorde_racefax.pdf

²⁷⁴ F1 Is The Empire Bernie Ecclestone Built But Can It Thrive Without Him. The Guardian.

<https://www.theguardian.com/sport/2017/jan/24/f1-bernie-ecclestone-liberty-media-chief-executive>

²⁷⁵ Ecclestone's Billion-Dollar Grip – How One Man Owned Formula 1. <https://www.grandprix247.com/formula-1-news/ecclestones-billion-dollar-grip-how-one-man-owned-formula-1>

²⁷⁶ Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>

²⁷⁷ Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>

²⁷⁸ Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>

²⁷⁹ Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>

Ecclestone's Formula One Management (FOM) a 14-year lease on the sport's commercial rights for just \$8 to \$9 million per year, replacing the earlier revenue-sharing framework that had benefited the APM companies.²⁸⁰

As Formula One grew more lucrative, teams, promoters, and broadcasters steadily lost bargaining power, while dissent was muted through financial pressure and confidential contracts. **By the late 1990s, Ecclestone's position had become effectively unchallengeable.**²⁸¹ Race promoters had surrendered media and commercial rights, teams had ceded control over image rights, and the FIA had committed itself to a century-long commercial agreement. The outcome is a sport generating billions in revenue, yet governed by a reportedly small, tightly interconnected circle, with minimal oversight and almost no internal mechanisms for accountability.

²⁸⁰ Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>

²⁸¹ Grand Prix, Grand Prizes. The Economist. <https://web.archive.org/web/20200809202956/https://www.economist.com/business-special/2000/07/13/grand-prix-grand-prizes>

Concorde Agreement 1997

The information presented below is derived either directly from, or reasonably inferred based on, the 1997 Concorde Agreement, which appeared to be the only version available in the public channels that we could locate at the time of this writing. It is important to note that the Concorde Agreement is periodically revised and executed by its stakeholders; accordingly, the provisions discussed herein may not fully reflect those contained in earlier or subsequent versions. The information presented in this section is provided solely for illustrative purposes.

The Concorde Agreement is widely regarded as the foundational contract governing Formula One. It binds the Formula One teams, the Fédération Internationale de l'Automobile (FIA), and the sport's commercial rights holder, formalizing the relationship among the governing body, competitors, and the entity responsible for monetizing the championship. In doing so, it establishes the framework through which the series is organized, regulated, and commercially managed, while affirming the FIA's exclusive ownership of the championship and its authority over titles, regulations, and sporting oversight.

Beyond governance, the agreement defines the allocation of commercial and media rights, broadly encompassing global exploitation across television, multimedia, advertising, and merchandising, and requires the commercial rights holder to enter into contractual arrangements with each competitor. Collectively, these provisions create the structural backbone of Formula One, aligning sporting control with team participation and the sport's economic model.

More broadly, the Concorde Agreement addresses several core principles, including the FIA's perpetual ownership of the championship, non-compete obligations that bind participants, centralized contracting, and the confidential nature of the sport's financial arrangements.

The following section highlights selected clauses from the agreement; for a comprehensive understanding, please refer directly to the original document linked in the footnote.²⁸²

(A) The FIA is the sole international body governing motor sport. As such it governs the organization of the FIA Formula One World Championship (the "FIA F1 Championship") which is its exclusive property.

(B) At the date hereof, FOCA and the Manufacturers have constructed racing cars and are participating in the FIA F1 Championship.

(C) The FIA has entered into an agreement with FOCA Administration Limited (the "Commercial Rights Holder") with respect to the FIA F1 Championship.

CHAMPIONSHIP RIGHTS

1.1 FOCA and the Manufacturers expressly recognize that the FIA alone has the exclusive property in the FIA F1 Championship and is responsible for the organization thereof, including in particular the right to the title thereof (and without limitation the expression "Formula One"), the copyright in the rules and regulations thereof, the right to supervise the sporting organization of all events therein, and generally all rights relating thereto without limitation in time. Accordingly neither FOCA nor the Manufacturers shall do anything at any time which may in any way prejudice or diminish such rights.

GRANT OF RIGHTS

4.1 For the purposes of this Agreement, "Rights" shall mean all rights whatsoever, whether now known or hereafter invented or developed, including but not limited to all rights of exploitation worldwide in, and all sound, visual, audio visual, interactive media, electronic media, multimedia, telephonic media, computer (or similar devices) hardware and software, advertising, merchandising and other rights in any and all media, sound recordings, information or anything else, originated, recorded or otherwise held or retained by any means whatsoever, whether now known or hereafter invented or developed, and stored in any retrieval system, transmitted, broadcast, exhibited and/or exploited by any means whatsoever, whether now known or hereafter invented or developed, in so far as such rights are capable of being lawfully vested in and held by the FIA, subject to and in accordance with the terms of this Agreement and agreements entered into by the FIA, including those entered into pursuant to this Agreement with Promoters and Organisers of Events.

²⁸² The 1997 Concorde Agreement – Bringing Transparency to Formula 1. https://www.formula1-dictionary.net/Big/full_1997_concorde_racefax.pdf

4.2 In relation to all FIA F1 Championships and all Events (and any aspect thereof), FOCA and the Manufacturers hereby irrevocably grant to the FIA on an exclusive basis the Rights:

(a) in and ancillary to their performance, the performance of all persons connected to them and the performance of all machines and equipment both on and off the track at Events or otherwise (including testing); and

(b) in, of or pertaining to each Event and/or the FIA F1 Championship (or any aspect thereof).

UNDERTAKINGS

5. FOCA and the Manufacturers each undertake that:

(a) they will do nothing which may be prejudicial to the image and dignity of Formula One racing as a high class sport; and

(b) they will not, without the prior written approval of the FIA, participate directly or indirectly in any form of racing which is or purports to be Formula One, and/or in any way exploits or uses the name and fame of the FIA F1 Championship.

PAYMENTS TO COMPETITORS

2.1 The Commercial Rights Holder agrees to make the payments...to the Competitor (if it is so entitled) and with respect to each Event in the FIA F1 Championship which is held during the term of this Agreement provided that:

(a) the Competitor has participated in that Event; and

(b) the Competitor has not been excluded from the Event by the FIA.

2.5 Payments will be made on the basis of official results.

THE PRIZE FUND

3.1 The Commercial Rights Holder shall divide the Prize Fund into three (3) parts and pay the share due to the Competitor in accordance with the provisions of this Clause 3, as follows:

(a) twenty per cent (20%) according to final qualifying results;

(b) forty-five per cent (45%) according to race results;

(c) thirty-five per cent (35%) by way of fixed compensation.

Subject to Clause 6, the payments referred to in Clause 3.1 shall be distributed according to the following scale:

(a) Final Qualifying results (20%)

1st	2.00%	6th	1.30%	11th	0.85%	16th	0.60%
2nd	1.75%	7th	1.20%	12th	0.80%	17th	0.55%
3rd	1.60%	8th	1.10%	13th	0.75%	18th	0.50%
4th	1.50%	9th	1.00%	14th	0.70%	19th	0.45%
5th	1.40%	10th	0.90%	15th	0.65%	20th	0.40%

(b) Race Results (45%)

	<u>1/4 Distance</u>	<u>1/2 Distance</u>	<u>3/4 Distance</u>	<u>Finish</u>
1st	1.02%	1.02%	1.02%	5.44%
2nd	0.78%	0.78%	0.78%	4.16%
3rd	0.63%	0.63%	0.63%	3.36%
4th	0.51%	0.51%	0.51%	2.72%
5th	0.39%	0.39%	0.39%	2.08%
6th	0.30%	0.30%	0.30%	1.60%
7th	0.24%	0.24%	0.24%	1.28%
8th	0.22%	0.22%	0.22%	1.15%
9th	0.19%	0.19%	0.19%	1.02%
10th	0.17%	0.17%	0.17%	0.90%
11th	0.15%	0.15%	0.15%	0.80%
12th	0.14%	0.14%	0.14%	0.74%
13th	0.13%	0.13%	0.13%	0.67%
14th	0.11%	0.11%	0.11%	0.61%
15th	0.10%	0.10%	0.10%	0.54%
16th	0.09%	0.09%	0.09%	0.48%
17th	0.08%	0.08%	0.08%	0.42%
18th	0.07%	0.07%	0.07%	0.35%
19th	0.05%	0.05%	0.05%	0.29%
20th	0.04%	0.04%	0.04%	0.19%

(c) Fixed Compensation (35%): shall be divided into two equal parts of 17.5% each:

(i) one such part shall be distributed to the competitors in proportion to the number of FIA F1 Championship points scored by each competitor in the previous two half seasons; and

(ii) the other such part shall be distributed equally among the top ten competitors in the FIA F1 Championship for the previous two half seasons and if the top ten competitors represents less than twenty cars to the next highest competitor and so on until compensation has been distributed to twenty cars provided that no competitor shall be entitled to such distribution in respect of a number of cars other than that which it entered for the whole of the previous FIA F1 championship and in any event shall not be so entitled in respect of more than two cars.

PAYMENTS IN RESPECT OF TELEVISION RIGHTS

5.1 Subject to Clauses 2.1, 5.2 and 5.3, the Commercial Rights Holder agrees to pay the share due to the Competitor of the "Television Payment". The Television Payment shall be the amount which equals:

(a) forty-seven per cent (47%) of the revenue received by the Commercial Rights Holder from the sale and licensing of the "television rights" (as such expression is defined in Clause 4 of The 1997 Concorde Agreement) in, of or pertaining to the FIA F1 Championship or any part thereof; and

(b) subject to Clause 5.2, forty-seven per cent (47%) of the revenue received by the Commercial Rights Holder from the licensing of sound recordings and moving picture footage in, of or pertaining to the FIA F1 Championship or any part thereof for use in television commercials, television programmes, feature films, videograms, CD Roms and computer games less all related costs including costs relating to the production of moving picture images from on board cameras, costs relating to enhancements and services provided to broadcasters and the amount of any Loss in accordance with Clause 5.2;

5.2 If in any year the costs referred to in Clause 5.1(b) exceed the amount of any revenue received under that Clause 5.1(b) (the amount of such excess being referred to as a "Shortfall"), then:

(a) no payment shall be made in respect of the rights referred to in Clause 5.1(b) for that year; and

(b) the amount of the Shortfall shall be set against the revenue received in respect of those rights for the following year as if such amount were a cost incurred in that year, provided that the amount of a Shortfall may only be carried forward for a maximum of two years.

We believe Formula One is a high-performance competition defined by technological innovation, precise team coordination, strict regulatory and resource constraints, and real-time strategic decision-making. Hundreds of engineers, strategists, and operations staff support two drivers within a highly structured, data-driven environment, where performance is shaped by engineering trade-offs, regulatory compliance, and split-second decisions made both trackside and behind the scenes. Together, these elements create on-track suspense and unpredictability that captivate hundreds of millions of viewers worldwide, whether at the circuit or watching behind screens, often right up to the final moments of a race.

As previously discussed, the term “Formula” refers to a comprehensive regulatory framework that governs nearly every aspect of the competition, including car design, engine configuration, component usage, and, more recently, financial expenditure. As of the 2026 season, this framework comprises regulations across six categories—general provisions, sporting regulations, technical regulations, financial regulations applicable to Formula One teams, financial regulations applicable to power unit manufacturers, and operational rules, together spanning nearly 700 pages and revised on an annual basis.²⁸³ The designation “1” simply denotes that it is the highest and most prestigious category within this system. We believe while these rules could (theoretically) cap performance potential (e.g. sometimes reduce speed due to regulations²⁸⁴) through limits on horsepower, aerodynamics, drivetrain architecture, and team budgets, they do not eliminate competition. Instead, they intensify it. Teams must allocate their finite technical and financial resources toward areas that yield the highest marginal returns, typically measured in lap times and ultimately reflected in championship points. In some cases, this requires exploiting regulatory gray areas while remaining firmly within the letter of the rules.²⁸⁵ One of the most notable historical examples of this dynamic was the brief era of six-wheeled Formula One cars.

In the mid-1970s, Tyrrell Racing introduced the Tyrrell P34, a radical design featuring six wheels, four small wheels at the front and two at the rear. Conceived to reduce aerodynamic drag while maintaining front-end grip, the P34 was one of the most unconventional cars ever to compete successfully in Formula One. It won races, scored podiums, and quickly became one of the most recognizable designs in the history of world motorsport.²⁸⁶ Its success was such that other teams began exploring six-wheeled concepts of their own. The experiment was short-lived. By the early 1980s, cars with six driven wheels were banned, and in 1983 the rules were clarified to stipulate that Formula One cars must have exactly four wheels.²⁸⁷ While this brought the six-wheeled era to an end, it did not diminish innovation. Instead, it reinforced a recurring pattern in Formula One’s history such that when one creative pathway is closed, teams rapidly redirect their ingenuity elsewhere.

²⁸³ Regulations. Federation Internationale de l'Automobile. <https://www.fia.com/regulation/category/110>

²⁸⁴ Chapter 4. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

²⁸⁵ Chapter 4. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

²⁸⁶ Wild Six-Wheel Tyrrell P34 Formula 1 Race Car up for Auction. <https://www.caranddriver.com/news/a60747759/tyrrell-p34-formula-1-racecar-auction/>

²⁸⁷ Tyrrell P34: The Only Six-Wheeler to Win a Grand Prix. <https://www.goodwood.com/grr/f1/tyrrell-p34-the-only-six-wheeler-to-win-a-grand-prix/>

Figure 25: Tyrrell P34²⁸⁸



In Formula One, every millisecond matters – differences measured in thousandths of a second can determine grid positions, race outcomes, and ultimately a team’s standing in the championship.²⁸⁹ It is because of this series of actions happened within split seconds on the race track that attract hundreds of millions of viewers worldwide. As Toto Wolff, the team principal of Mercedes F1, has observed:

“The closer the racing, the better the racing, the more competitive the platform, the more interesting it is for the fans and the spectators, that’s clear. If you win it, the more value your win has.”²⁹⁰

These constraints also fundamentally shape how teams think about performance. Success in Formula One is not about achieving an absolute level of speed, but about securing a relative advantage. A team may deliver a significant technical upgrade, only to discover that rivals have progressed even further, rendering their improvements insufficient. As Pat Symonds, former Chief Technical Officer at Williams, explains:

“One of the interesting things with Formula One is that everything is relative. So, if you ask, ‘how fast do I need my car to be?’ the answer is ‘quicker than anyone else’s’ it’s not an absolute number. I always say you should win a race as slowly as you can possibly can.”²⁹¹

Together, these dynamics highlight Formula One not merely as a contest of engineering excellence, but as a finely balanced exercise in resource efficiency, coordination, and strategic execution, where relentless competition unfolds at extraordinary speed, and where intensity on track is inseparable from the constraints that define the sport itself.

Historically, this dynamic has driven relentless innovation within regulatory constraints. For example, in 1954, with 2.5-liter naturally aspirated engines, leading manufacturers such as Mercedes and Ferrari were able to produce engines

²⁸⁸ Tyrrell P34: The Only Six-Wheeler to Win a Grand Prix. <https://www.goodwood.com/grr/f1/tyrrell-p34-the-only-six-wheeler-to-win-a-grand-prix/>

²⁸⁹ The Beginner’s Guide to the F1 Weekend. Formula 1®. <https://www.formula1.com/en/latest/article/the-beginners-guide-to-the-formula-1-weekend.5RFZzGXNhEi9AEuMXwo987>

²⁹⁰ Toto Wolff Exclusive: Behind the Mercedes Dominance. <https://f1i.com/magazine/29314-toto-wolff-exclusive-behind-the-mercedes-dominance.html>

²⁹¹ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

generating approximately 260+ horsepower,²⁹² remarkable for the era, compared to today a 1.6-liter turbocharged engine with electric motors can provide over 1,000 horsepower.²⁹³ Aerodynamics, however, was not yet the main focus. Car bodies were shaped primarily for mechanical packaging rather than airflow optimization, and it was not until the late 1960s that wings and other aerodynamic devices became common following early experimental efforts by engineers.²⁹⁴

Decades later, aerodynamics has become one of the most critical and sophisticated areas of performance development. **Today, much of a Formula One car's aerodynamic design is track-specific, with teams producing tailored configurations optimized for individual circuits. As a result, development is continuous, incremental, and highly targeted, reflecting the sport's enduring pattern of innovation driven not by unlimited freedom, but by the creative exploitation of constraints.**²⁹⁵

Figure 26-1: Ferrari 553 F1 in 1954²⁹⁶



²⁹² Ferrari 553 F1 – 1954 F1 single-seater. Ferrari. <https://www.ferrari.com/en-EN/formula1/553-f1>; Fangio's Mercedes-Benz W196 Could Fetch £10 Million at Goodwood. <https://gtspirit.com/2013/07/11/fangios-mercedes-benz-w196-could-fetch-10-million-at-goodwood/>

²⁹³ 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62lTx6LIY3qgzTctXgz1j>

²⁹⁴ The Evolution of F1 Aerodynamics. <https://www.grandprix247.com/formula-1-news/the-evolution-of-f1-aerodynamics>

²⁹⁵ Chapter 4. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

²⁹⁶ Ferrari 553 F1 – 1954 F1 single-seater. Ferrari. <https://www.ferrari.com/en-EN/formula1/553-f1>

Figure 26-2: Mercedes W196R in 1954²⁹⁷



Figure 26-3: Lotus 1969²⁹⁸



²⁹⁷ Most Valuable Grand Prix Racing Car Ever Sold. Mercedes. <https://www.mercedes-benz.com/en/vehicles/mercedes-benz-classic/mercedes-benz-w196r/>

²⁹⁸ Formula 1 Aerodynamics. <https://www.f1technical.net/features/21555>

Modern Formula One machinery represents the pinnacle of automotive technology and potentially helps shape the future of motorsports and consumer vehicles. Under the forthcoming 2026 regulations, engine displacement remains capped at 1.6 liters, but turbocharging and advanced hybrid systems enable power outputs exceeding 1,000 horsepower. This performance is achieved alongside dramatically improved efficiency, with fuel loads having fallen from approximately 160 kilograms in earlier eras to around 100 kilograms today, with a target of 70 kilograms under future rules.²⁹⁹ These constraints incentivize innovation not through brute force, but through optimization, extracting maximum performance from limited energy inputs.

Formula One has also played a pioneering role in materials science and vehicle construction, with innovations frequently diffusing into the broader automotive industry into mass production vehicles.³⁰⁰ One notable example is the monocoque (unibody, “single shell” construction) chassis structure. Originally developed for aerospace applications due to its favorable characteristics such as lightweight and being strong,³⁰¹ the monocoque was first introduced to Formula One by Lotus in 1962.³⁰² In fact, it is common for Formula One teams to recruit from the aircraft industry.³⁰³ The monocoque design offered superior rigidity, reduced weight, and improved aerodynamic efficiency. **Decades later, monocoque construction has become the most popular architecture in mass-market passenger vehicles.**³⁰⁴

Another notable innovation was the adoption of carbon fiber composites. In 1981, McLaren introduced the first carbon fiber monocoque in Formula One, replacing traditional steel and aluminum structures.³⁰⁵ Carbon fiber, which had also been used by the aviation industry, provides a unique combination of light weight and strength, enhancing both performance and driver safety. Lightweight construction improves acceleration, handling, and fuel efficiency, while this advanced material offers greater protection in high-speed impacts.³⁰⁶ Since its introduction, carbon fiber has become the dominant material in Formula One cars. By 2020, estimates suggested that between 60% and 70% of an F1 car’s structural weight consisted of carbon fiber components.³⁰⁷ Today, this technology is increasingly adopted in high-performance and luxury consumer vehicles,³⁰⁸ reflecting Formula One’s role as a testing ground for advanced engineering solutions.

Many features now that seem ubiquitous in modern road vehicles also trace their origins to Formula One. A prominent example is the paddle-shift gearbox. The 1989 Ferrari 640 was the first Formula One car to feature paddle shifters. Prior to paddle shifters, drivers needed to remove one hand from the steering wheel to operate a traditional gear lever, an action that could potentially compromise both control and concentration at racing speeds. Paddle shifters repositioned the gear controls behind the steering wheel, enabling drivers to upshift or downshift with their fingers while keeping both hands on the steering wheel, allowing them to maintain focus on the optimal racing line.³⁰⁹ The concept was quickly adopted by other teams across the grid. Eight years later, Ferrari successfully transferred the technology to a production vehicle with the F355 F1 in 1997, arguably one of the most influential cases of motorsport innovation migrating to consumer cars. Today, paddle shifters are ubiquitous across many road vehicles.³¹⁰

Another example is the kinetic energy recovery system (KERS). Originally developed for Formula One, KERS captures energy generated during braking and redeploys it during acceleration, improving overall efficiency and performance. By 2020, Volvo was among the first mass-market manufacturers to adopt a similar system, promising fuel economy improvements of up to 15%.³¹¹ Previously, such technology had been confined to Formula One and a handful of high-

²⁹⁹ F1’s 2026 Engine Changes Mean Less Fuel And More Horsepower. The Athletic.

<https://www.nytimes.com/athletic/5270710/2024/02/16/f1-engine-changes-rules-fuel-electric-2026/>

³⁰⁰ Evolution of F1 Cars. Red Bull. <https://www.redbull.com/us-en/evolution-of-f1-cars>

³⁰¹ Monomail Broke the Monotony. <https://generalaviationnews.com/2021/02/28/monomail-broke-the-monotony/>

³⁰² How Have Formula 1 Chassis Evolved. <https://thesportsrush.com/f1-news-timeline-how-have-formula-1-chassis-evolved/>

³⁰³ Chapter 6. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

³⁰⁴ Monocoque Vs. Unibody Construction – The Modern Way To Build Cars. <https://carbuzz.com/car-advice/monocoque-vs-unibody-construction-the-modern-way-to-build-cars/>

³⁰⁵ How Have Formula 1 Chassis Evolved. <https://thesportsrush.com/f1-news-timeline-how-have-formula-1-chassis-evolved/>

³⁰⁶ How Have Formula 1 Chassis Evolved. <https://thesportsrush.com/f1-news-timeline-how-have-formula-1-chassis-evolved/>

³⁰⁷ F1’s 70th Anniversary – How Have F1 Cars Changed Since 1950. <https://www.autosport.com/f1/news/f1s-70th-anniversary-how-have-f1-cars-changed-since-1950-4980423/4980423/>

³⁰⁸ Carbon Fiber’s Journey from Racetrack to Hatchback. BBC News. <https://www.bbc.com/news/technology-12691062>

³⁰⁹ Great Ferrari Innovations: The F1 Semi-Automatic Gearbox. <https://www.ferrari.com/en-EN/magazine/articles/great-ferrari-innovations-the-f1-semi-automatic-gearbox>

³¹⁰ How F1 Technology Has Supercharged the World. Formula 1®. <https://www.formula1.com/en/latest/article/how-f1-technology-has-supercharged-the-world.6GtK3hBxGyUGbNH0q8vDQK>

³¹¹ Volvo Adding KERS to Production Cars in 2020. <https://thebrakereport.com/volvo-using-kers-on-production-cars-in-2020/>

performance hybrid supercars. This evolution illustrates how Formula One continues to function as a proving ground, where extreme performance demands accelerate the development of technologies that eventually reshape everyday mobility.

Figure 27-1: 1989 Ferrari 640 Steering Wheel³¹²



³¹² Groundbreaking F1 Gearbox: 1989 Ferrari 640. <https://rossoautomobili.com/blogs/magazine/groundbreaking-f1-gearbox-1989-ferrari-640>

Figure 27-2: Paddle Shifters on Consumer Vehicle Today³¹³



As discussed at the beginning of this document, operational practices at Formula One circuits have evolved just as dramatically as the cars themselves. While it may appear that each team has only two drivers battle competitors on the racetrack for a championship, the reality is far more complex. Each team relies on hundreds of people working in coordination while their drivers hurtle down the track at over 200 miles per hour.³¹⁴ Formula One is not simply a contest of driving skills, just as any other team sport, it is a real-time, high-pressure exercise in communication, precision, and teamwork. Success requires individuals to think independently and creatively while functioning seamlessly within the team, from pit crews executing sub-two-seconds tire changes, to engineers designing aerodynamic components, to commercial teams securing sponsorships that fund competition at the highest level. As Pat Symonds, former Chief Technical Officer at Williams, summarized:

“We want people to be individualistic in their thinking, but they’ve got to be team players in their actions.”³¹⁵

Given the speed and intensity of Formula One, accountability and leadership are not confined to senior management. At every level of the organization, individuals must be prepared to take responsibility and lead when circumstances demand it, often under extreme time pressure.³¹⁶

For anyone who has watched a Formula One race on television, one detail that is immediately noticeable is that drivers are often talking on the radio. Radio communication is a critical component of modern F1 racing. Drivers activate the radio using a button on their steering wheel, allowing them to speak with their team through a microphone and earpiece built into their helmet. The race engineer serves as the driver’s primary, and often only, direct link to the pit wall. Through this channel, engineers relay real-time information on car performance such as tire condition, lap times, fuel usage, traffic, and strategic decisions such as when to pit.³¹⁷ Once the car is on the track, radio communication becomes the primary means of interaction between the driver and the team. Formula One regulations require every car to be equipped with a voice

³¹³ What You Need to Know About Paddle Shifters. <https://www.consumerreports.org/cars/buying-a-car/what-to-know-about-paddle-shifters-a2928429910/>

³¹⁴ How Fast Do F1 Cars Go. <https://www.redbull.com/us-en/how-fast-do-f1-cars-go>

³¹⁵ Chapter 2. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

³¹⁶ Chapter 3. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

³¹⁷ Bulls’ Guide To – Team Radio. <https://www.redbullracing.com/int-en/bulls-guide-to-team-radio>

radio system, and all communication between the car and the pit must be open and accessible to the FIA and the broadcaster.³¹⁸

Each driver is assigned a dedicated race engineer, but that individual represents the work of many. During a race, as many as 80 people (or whoever needed to be) may be connected to a team's radio network, including strategists making race-defining calls, engineers monitoring car systems, and pit crews preparing for stops. The race engineer's job is to filter this flood of data and deliver only what the driver needs to hear, precisely when they need to hear it.³¹⁹

Figure 28-1: McLaren Team Pit Wall³²⁰



³¹⁸ C8.8.2. FIA 2026 F1 Regulations - Section C [Technical] - Iss 15 - 2025-12-10

³¹⁹ What's on the Radio: In Formula 1 Racing, It's the Engineer. The New York Times.

<https://web.archive.org/web/20221110103132/https://www.nytimes.com/2022/11/10/sports/autoracing/formula1-engineer-radio.html>

³²⁰ Strategy Corner – What to Look Out for in F1's 2025 Chinese GP. <https://www.motorsport.com/f1/news/strategy-corner-2025-chinese-grand-prix/10706156/>

Figure 28-2: Formula One Team Radio Communication³²¹



Before radio communication became standard, which was around the mid-1980s,³²² teams relied on pit boards, handwritten letters and numbers displayed over the pit wall as drivers flashed past at full speed. While radios are now the norm, pit boards remain a backup when radio systems fail. Drivers vary in how much communication they prefer. Some welcome constant updates, while others prefer minimal interference, depending on factors such as race conditions and the driver's mood. One of the most famous radio exchanges occurred in 2012, when Kimi Räikkönen, then driving for Lotus, snapped back at his engineer during the Abu Dhabi Grand Prix: "Leave me alone, I know what I'm doing."³²³ The line became iconic, capturing both the intensity and personality that make Formula One so compelling, and some fans even print it onto T-shirts.

³²¹ Everything You Wanted to Know about F1 Radios But Were Afraid to Ask. <https://motorsport.tech/formula-1/everything-you-wanted-to-know-about-f1-radios>

³²² From Pit Boards to Broadcasted Drama: The Evolution of Team Radio in Formula 1. <https://thefastestsector.com/2025/07/19/from-pit-boards-to-broadcasted-drama-the-evolution-of-team-radio-in-formula-1/>

³²³ What's on the Radio: In Formula 1 Racing, It's the Engineer. The New York Times. <https://web.archive.org/web/20221110103132/https://www.nytimes.com/2022/11/10/sports/autoracing/formula1-engineer-radio.html>

Figure 29: McLaren Formula One Pit Board³²⁴



What makes Formula One radio communication especially unique is that it is broadcast live. Fans watching on television can listen in, adding another layer of drama and transparency to the sport. At the same time, teams are also listening to one another, attempting to extract clues about rival strategies. As a result, engineers often use coded language, such as “Plan A” or “Plan B”, to communicate strategies. As one race engineer put it, the challenge lies in “finding the right balance of getting the right information without giving everything away.”³²⁵ More detailed discussions remain internal through private channels, which do not include the drivers on the racetrack, with teams finalizing plans before passing instructions to the driver.

These radio exchanges also reveal the emotional side of racing. Audience can hear engineers calming frustrated drivers, managing team orders, or instructing a faster driver not to overtake a teammate for strategic reasons, even when the driver strongly disagrees. Such moments potentially heighten the drama of a race. A notable example occurred at the 2015 Monaco Grand Prix, when Lewis Hamilton, then driving for Mercedes, built a commanding 25-second lead, an enormous margin in Formula One, given average speeds approaching 200 miles per hour. Expecting a comfortable victory, Hamilton instead finished third after a strategic miscalculation by the team during a late safety-car period.³²⁶ Years later, at the Dutch Grand Prix in September 2022, a strategic error by Mercedes denied Lewis Hamilton (who in 2025 signed with Ferrari) a chance to fight for the win when the team chose not to pit him for fresh tires. **Over the radio, Hamilton said “I can’t believe you guys [expletive] me. I can’t tell you how pissed I am right now.”**³²⁷ After the race, Hamilton apologized for what he said over the radio, explaining that was out of passion for the sport.³²⁸

Another of the most iconic and visually recognizable elements of Formula One is the pit stop. As discussed previously, in the 1950s, pit stops for refueling and tire changes often exceeded 20 to 30 seconds and could sometimes last more than a minute.³²⁹ Refueling during races was banned in 2010 due to safety concerns,³³⁰ requiring teams to design cars capable

³²⁴ The Year in Numbers. <https://www.mclaren.com/racing/latest-news/mclarenracing/article/our-2022-formula-1-season-numbers/>

³²⁵ What’s on the Radio: In Formula 1 Racing, It’s the Engineer. The New York Times. <https://web.archive.org/web/20221110103132/https://www.nytimes.com/2022/11/10/sports/autoracing/formula1-engineer-radio.html>

³²⁶ Chapter 3. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

³²⁷ Hamilton Angry at His Team. YouTube. <https://www.youtube.com/watch?v=DLjAbUGE88Q>; 2022 Heineken Dutch Grand Prix Race Recap. ESPN. <https://www.espn.co.uk/f1/report?id=600014141>

³²⁸ Lewis Hamilton Apologizes to Mercedes for Profane Radio Messages during Dutch Grand Prix. ESPN. https://www.espn.com/f1/story/_/id/34523985/lewis-hamilton-apologises-mercedes-sweary-radio-messages-dutch-grand-prix

³²⁹ Pit Stops, 1950 vs. Now. <https://www.thedrive.com/vintage/1828/pit-stops-1950-vs-now>; 1950 vs 2020: Cars, Drivers, Safety and Pit Stops - How F1 Has Changed in 70 Years. Formula 1®. <https://www.formula1.com/en/latest/article/1950-vs-2020-cars-drivers-safety-and-pitstops-how-f1-has-changed-in-70-years.62ITx6LIY3qgzTctXgz1j>

³³⁰ Before the ban was introduced, multiple incidents involving fuel spillages resulted in cars catching fire, in some cases causing injuries to drivers. Why Do F1 Cars Not Refuel During a Race. <https://www.motorsport.com/f1/news/why-was-refuelling-banned-in-f1/10555079/>

of completing races with full fuel loads³³¹ while balancing the car's performance with added weight. Modern pit stops now focus exclusively on tire changes and are considered slow if they exceed three seconds. The current record was set by McLaren, which executed a four-tire change in just 1.8 seconds at the Qatar Grand Prix.³³² Pit crews have expanded from around four mechanics in the early years to approximately 20 today, reducing pit stop times by nearly 96%.³³³

The constant communication between drivers and teams, the need to adapt strategy in real time as race conditions change, and the split-second execution required during pit stops all demand relentless coordination across the entire team. In Formula One, every detail matters. When cars travel at over 200 miles per hour on average, milliseconds can determine victory or defeat. This philosophy is best captured in Apple's *F1 The Movie*, released in 2025, in which Brad Pitt's character Sonny Hayes delivers a rallying speech to his team:

"They've docked us to the back of the grid 'cause don't like the way we drive. Fine. [Profanity]. 'Cause if we can pick up a tenth of a second from you...from you...and you...and me... If everyone in this room can make one critical contribution, that's a second every lap. And after 72 laps, that's the difference between last and first... Plan C's for combat."³³⁴

This continuous pursuit of marginal gains, across human performance, machine optimization, and strategic coordination, defines Formula One's competitive essence. Success depends not on isolated brilliance but on tightly integrated teamwork, where drivers, engineers, strategists, and data analysts operate within a shared framework to extract performance advantages measured in fractions of a second. These moments of extreme intensity and precision, often decided in milliseconds, form the core of Formula One's global appeal.

As a result, Formula One has evolved into a powerful commercial platform with diversified revenue streams. Global media rights, prestigious brand sponsorships, race-hosting fees, and premium hospitality offerings, most notably the exclusive Paddock Club,³³⁵ form the core of Formula One's revenue structure. In this way, Formula One exemplifies how rule-bounded competition, when paired with relentless innovation and strategic resource allocation, can produce not only sporting excellence but also a globally scalable entertainment business.

As of 2024, the most recent financial data available at the time of writing, Formula One generated total revenues of approximately \$3.4 billion. Revenue was distributed across four primary streams – Broadcasting 33%, followed by Race Promotion at 29%, Sponsorship at 19%, and Other at 19%.³³⁶ Broadcasting revenue is generated by licensing race, practice, and qualifying broadcast rights to free-to-air, pay-TV, and digital platforms worldwide, as well as from direct-to-consumer subscriptions to F1 TV. Race Promotion revenue comes primarily from fees paid by race promoters under multi-year hosting contracts. Sponsorship revenue consists of payments from event-based trackside advertising, race title sponsorships, and longer-term global partner and official supplier agreements. Other revenue include Paddock Club ticket sales, logistics services for transporting cars and equipment for teams, and other ancillary commercial activities operated by Formula One.

³³¹ Why Do F1 Cars Not Refuel During a Race. <https://www.motorsport.com/f1/news/why-was-refuelling-banned-in-f1/10555079/>

³³² McLaren Set New F1 Pit Stop Record with Spectacularly Quick Tyre Change in Qatar. <https://www.formula1.com/en/latest/article/watch-mclaren-set-new-f1-pit-stop-record-with-spectacularly-quick-tyre.5ZBn7RJxE9iTVmSGfeeVHm>

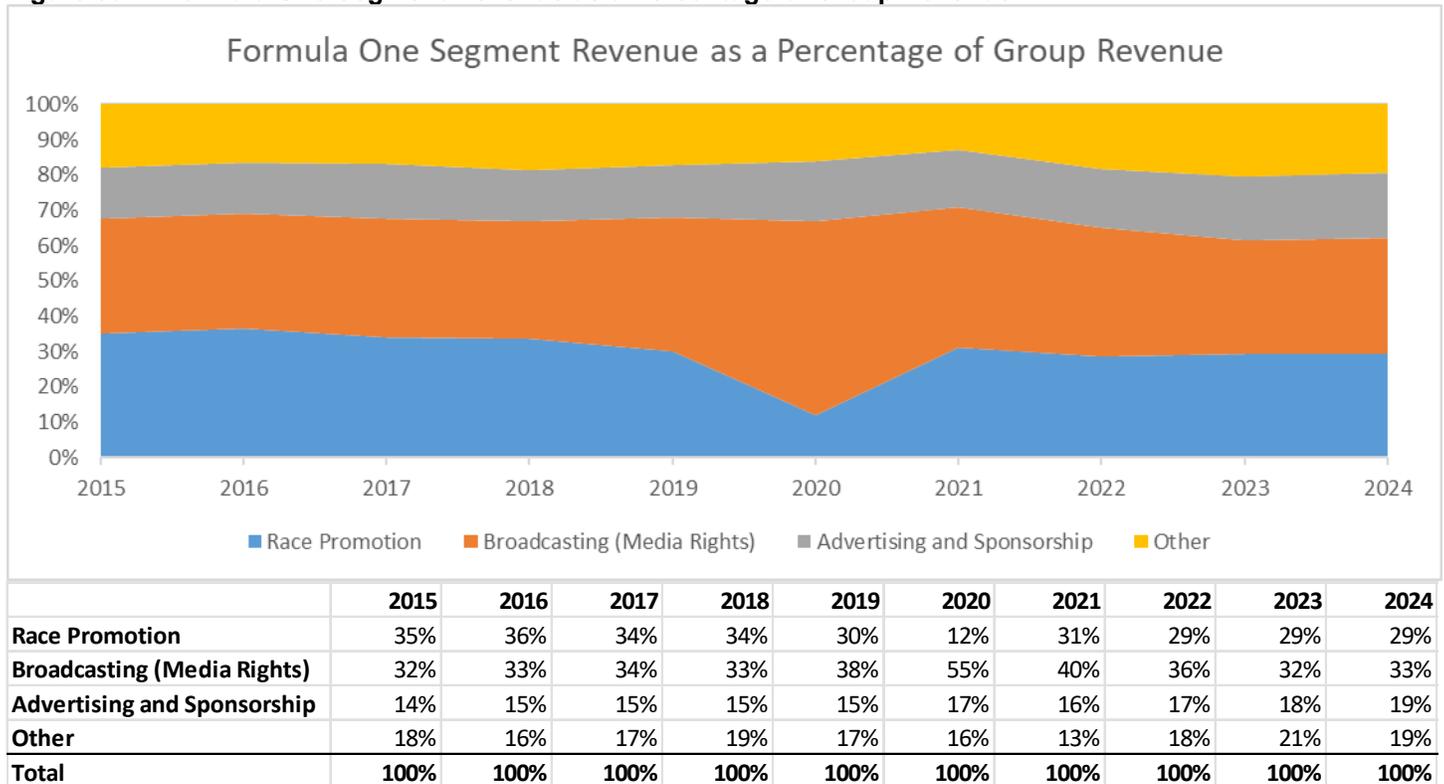
³³³ A Thorough Analysis of the Pit Stop Strategy in Formula 1. <https://statathlon.com/about/>

³³⁴ *F1: The Movie* (2025). IMDb. <https://www.imdb.com/title/tt16311594/quotes/>

³³⁵ A Paddock Club in Formula One is the sport's top-tier VIP hospitality experience, usually located above the team garages on the pit straight. Guests get prime views of the race, luxury dining and drinks, pit-lane walks, and access to insiders such as drivers or team principals, as well as celebrity audience.

³³⁶ Liberty Media Annual Report 2024.

Figure 30-1: Formula One Segment Revenue as a Percentage of Group Revenue³³⁷



Notes:

1. In 2016 and January 2017, Liberty Media Corporation acquired 100% of the fully diluted equity interests in Delta Topco Limited, the private parent company of Formula One, and has consolidated Formula One’s revenues since 2017.³³⁸
2. Race Promotion: “Formula 1 grants to race promoters the rights to host, stage and promote each Event pursuant to contracts that typically have an initial term of three to seven years. For established Events, the duration of subsequent renewals is more variable according to local market conditions. These contracts may allow for flat fees over the term, but more typically they include annual fee escalators over the life of the contract, which are typically based on annual movement in a selected consumer price index or fixed percentages of up to 5% per year. Race promoters are generally circuit owners, local and national automobile clubs, special event organizers or governmental bodies. Race promoters generate revenue from ticket sales and sometimes from concessions, secondary hospitality offerings (other than the Paddock Club), local sponsorship opportunities and on-site activations. Tickets are sold by the promoters for the entire Event weekend or individual days.”³³⁹
3. Broadcasting (Media Rights): “Formula 1 licenses rights to broadcast Events on television and other media platforms in specified countries or regions and in specified languages. These may also include rights to broadcast the race, practice and qualifying sessions, interactive television/digital services, repeat broadcasts and highlights. Contracts with broadcasters, which we refer to as television rights agreements (“TRAs”), typically have a term of three to five years. While annual fees from broadcasters may stay constant, they often increase each year during the term of the TRA by varying amounts. Formula 1’s media rights revenue is primarily generated from: (a) free-to-air television broadcasts, which are received by the end user without charge (other than any television license fee), and non-premium cable, satellite and other broadcasts, which are received as part of a subscriber’s basic package (together, “free-to-air television”); (b) premium and pay-per-view cable and satellite broadcasts, where the subscriber pays a premium fee to receive programming on a package or per-event basis (“pay television”) and (c) subscription revenue from Formula 1’s own direct-to-consumer over-the-top broadcast product F1 TV (since 2021).”³⁴⁰
4. Advertising and Sponsorship: “Formula 1 sells Event-based advertising and sponsorship in the form of trackside advertising and race title sponsorship packages. In addition, advertisers can acquire status as a Global Partner of Formula 1 and/or Official Supplier to Formula 1. These advertiser and sponsor contracts typically have a term of three to five years (but may on occasion be of longer duration). Payments often increase each year based on a fixed

³³⁷ Liberty Media Annual Report 2017 – 2024.

³³⁸ Liberty Media Annual Report 2017 – 2017.

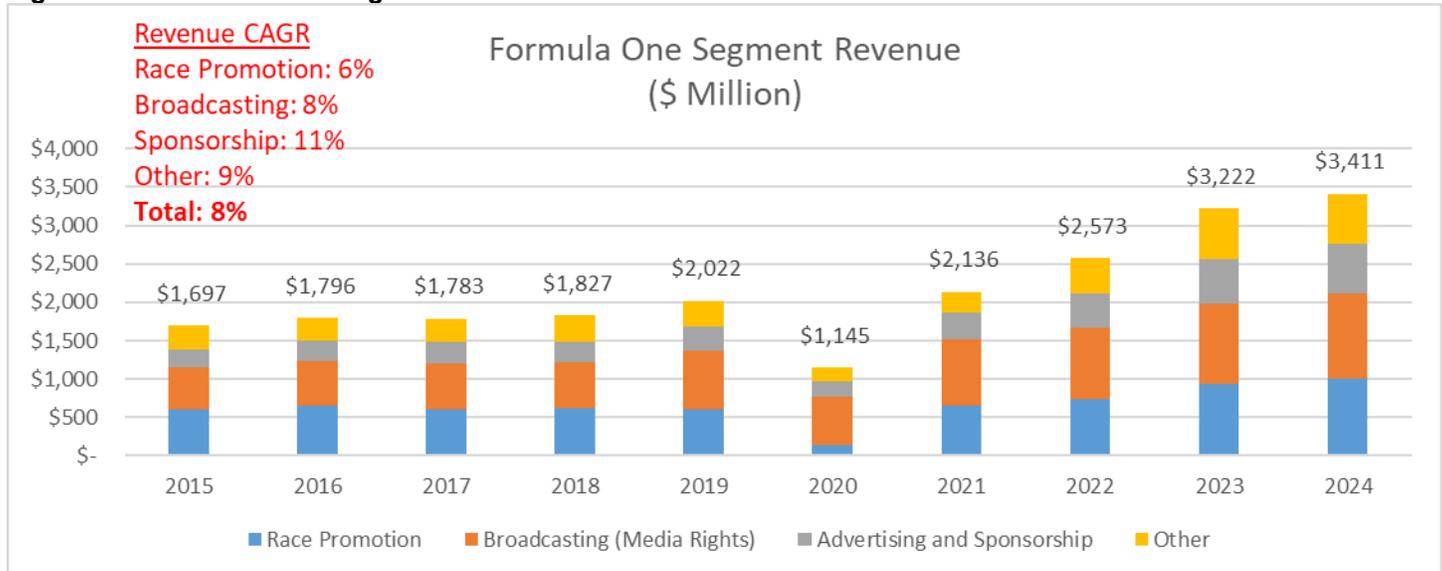
³³⁹ Liberty Media Annual Report 2017 – 2024.

³⁴⁰ Liberty Media Annual Report 2017 – 2024.

amount, a fixed percentage or in accordance with the United States or European consumer price index or another agreed metric.”³⁴¹

- Other: “The remainder of Formula 1’s revenue is typically generated from a variety of other sources including facilitating the shipment of cars and equipment to and from events outside of Europe, revenue from the sale of tickets to the Paddock Club at most Events, support races at Events, various television production activities and other ancillary operations.”³⁴²

Figure 30-2: Formula One Segment Revenue³⁴³



\$ Million	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Race Promotion	\$ 599	\$ 654	\$ 608	\$ 618	\$ 607	\$ 137	\$ 662	\$ 736	\$ 944	\$ 999
Broadcasting (Media Rights)	\$ 548	\$ 587	\$ 601	\$ 605	\$ 768	\$ 630	\$ 854	\$ 937	\$ 1,037	\$ 1,119
Advertising and Sponsorship	\$ 244	\$ 262	\$ 273	\$ 267	\$ 303	\$ 195	\$ 342	\$ 435	\$ 580	\$ 634
Other	\$ 305	\$ 293	\$ 301	\$ 338	\$ 344	\$ 183	\$ 278	\$ 466	\$ 661	\$ 658
Total	\$ 1,697	\$ 1,796	\$ 1,783	\$ 1,827	\$ 2,022	\$ 1,145	\$ 2,136	\$ 2,573	\$ 3,222	\$ 3,411

Note:

- We estimated Formula One’s segment revenue using the percentage of each revenue category relative to total revenue, as disclosed in Liberty Media’s annual reports and proxy statements.

Media Rights

Media rights constitute one of the largest revenue sources of Formula One, accounting for approximately one-third of total revenue. Broadcasting agreements are negotiated centrally by Formula One and sold to major networks across the globe, significantly extending Formula One’s reach and reinforcing its position as a premium international motorsports property.

In 2024, Formula One maintained a broad and diversified broadcast footprint, comprising 11 free-to-air agreements, 13 pay-television agreements, and 27 combined or multi-territory agreements, spanning nearly every major media market worldwide.³⁴⁴ By comparison, at the time of Liberty Midea’s 2017 acquisition, the sport operated under 12 free-to-air agreements, nine pay-per-view cable and satellite broadcasts, 27 combined agreements, and four other arrangements.³⁴⁵ According to Formula One, fans in more than 60 countries and territories across Africa, Asia, the Middle East, North America, and Latin America can watch races through local broadcasting partners.³⁴⁶

³⁴¹ Liberty Media Annual Report 2017 – 2024.

³⁴² Liberty Media Annual Report 2024.

³⁴³ Liberty Media Annual Report 2017 – 2024; Liberty Media Proxy Statement 12/09/2016.

³⁴⁴ Liberty Media Annual Report 2024.

³⁴⁵ Liberty Media Proxy Statement 12/09/2016.

³⁴⁶ F1 Broadcast Information. Formula 1®. <https://www.formula1.com/en/information/f1-broadcast-information.45y3LNt1D6VoK0ZmX8ciJ>

Alongside traditional television, Formula One has increasingly leveraged digital platforms to engage younger and more technologically oriented audiences. **A pivotal moment in this strategy was the launch of the Netflix documentary series *Formula 1: Drive to Survive* in 2019.**³⁴⁷ The series significantly expanded Formula One's cultural footprint, particularly in the United States, and is widely regarded as a breakthrough in penetrating the American market. Now in its eighth season as of 2026,³⁴⁸ the series has helped broaden the sport's appeal beyond traditional superfans. **An early 2025 report indicates that, of the roughly 45 million American fans of Formula One, around half began following the sport within the past five years, coinciding with the show's release.**³⁴⁹

Formula One's chief executive, Stefano Domenicali, has described the Netflix partnership as "Netflix was the first step in completely changing our communication approach... We wanted to shift communication from pure sport to a big entertainment platform."³⁵⁰ Evidence suggests this approach has been effective. Nielsen viewership data further underscores the growing popularity of the docuseries. **Its 2022 analysis shows that during the premiere week of each season from Season One through Season Four, viewership rose from 288,779 viewers in 2019 to 407,678 viewers in Season Four, representing a CAGR of approximately 12%, excluding an additional 68,000 viewers who continued watching earlier seasons. The same report indicates that 34% of respondents became fans after watching the series, 30% reported a better understanding of the sport, and 29% felt more engaged with Formula One overall.**³⁵¹

A 2024 Forbes report citing Nielsen Sports, although we did not locate the original source at the time of writing, further suggested the growing popularity of Formula One in the United States. **According to this report, approximately 35% of Drive to Survive viewers said the series encouraged them to watch more races, while 25% stated that they became Formula One fans as a direct result of watching the show.**³⁵² **Reflecting this momentum, the estimated number of American Formula One fans increased from approximately 34.6 million, according to Formula One, the year of the series' launch in 2019, to around 52 million by late 2025.**³⁵³

Complementing these efforts, Formula One launched its direct-to-consumer streaming service in 2018, F1 TV, although the company has not publicly disclosed its subscriber figures. The platform offers live race coverage, onboard cameras, team radio communications, and real-time data overlays through a subscription model.³⁵⁴ Together, these digital initiatives have given Formula One greater control over content distribution, audience data, and fan engagement, while enhancing its appeal among younger, tech-savvy viewers. Notably, however, Liberty Media, the parent company of Formula One, stated in 2019, shortly after the service's debut, that it might never achieve subscriber levels comparable to other service providers, largely because F1 TV does not have exclusive content, as many broadcasters continue to air the same events throughout the season.³⁵⁵

³⁴⁷ Formula 1 and Netflix Announce 'Drive to Survive'. Formula 1®. <https://www.formula1.com/en/latest/article/formula-1-and-netflix-put-drive-to-survive-on-pole-position.7MyqMggwrYJ5qUxj1igeB>

³⁴⁸ Netflix confirm release date for Drive to Survive Season 8. Formula 1®. <https://www.formula1.com/en/latest/article/netflix-confirm-release-date-for-drive-to-survive-season-8.6ULJefRBR2n4UPWR6nc9aN>

³⁴⁹ Drive to Survive: F1 Boom Sparked by Unlikely Stars and Stretching Truth. The Times. <https://www.thetimes.com/sport/formula-one/article/drive-to-survive-netflix-formula-one-bl0nwkqkg>

³⁵⁰ Louis Vuitton Chief on F1 Tie-up – 'Sport is Part of The Culture, The Life of Young People'. <https://www.ft.com/content/80a4eaff-1ccf-4c0f-9104-655060cb0f69>

³⁵¹ Driven to Watch – How A Sports Docuseries Drove U.S. Fans to Formula 1. Nielsen.

<https://www.nielsen.com/insights/2022/driven-to-watch-how-a-sports-docuseries-drove-u-s-fans-to-formula-1/>

³⁵² Formula 1 Now Sees 750 Million Fans Due To Growth With Women And Middle East. Forbes.

<https://www.forbes.com/sites/maurybrown/2024/12/03/formula-1-now-sees-750-million-fans-due-to-growth-with-women-and-middle-east-demo/>

³⁵³ The discrepancy in fan counts (52 million vs. 45 million above) likely reflects differences in reporting periods, as this figure was cited in August 2025, whereas the earlier number was reported in February 2025. Formula 1 Viewing Figures 2019 – F1 Broadcast to 1.9 Billion Total Audience in 2019. Formula 1®. <https://www.formula1.com/en/latest/article/f1-broadcast-to-1-9-billion-fans-in-2019.4leYkWSOexxSleJyuTrk22>; Records, Growth and Unforgettable Moments – The 2025 Formula 1 Season So Far.

<https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq>

³⁵⁴ Formula 1 to Launch F1 TV, A Live Grand Prix Subscription Service. Formula 1®.

<https://www.formula1.com/en/latest/article/formula-1-to-launch-f1-tv-a-live-grand-prix-subscription-service.5BmnYwhbaM86yeAe22sOmW>

³⁵⁵ Liberty Media Says F1 May 'Never' Have As Many Subscribers As Some Of Its Rivals.

<https://www.forbes.com/sites/csylt/2019/03/12/liberty-media-says-f1-may-never-have-as-many-subscribers-as-some-of-its-rivals/>

Figure 31: Netflix Drive to Survive³⁵⁶



A notable example in media rights growth is the United States market. Since acquiring Formula One's U.S. broadcasting rights in 2018 for approximately \$90 million annually, ESPN, a subsidiary of The Walt Disney Company, has played a central role in expanding the sport's visibility domestically.³⁵⁷ **During ESPN's eight year tenure from 2018, average U.S. race viewership increased by approximately 135%, rising from around 538,000 viewers in 2017 to nearly 1.3 million by the end of 2025 season.**³⁵⁸ Despite this growth, U.S. media rights represent only about 8% of Formula One's total media revenue, according to an estimate by S&P Global in 2024,³⁵⁹ with Europe remaining the dominant market, without detailed breakdown. However, the planned entry of a Cadillac-backed Formula One team in 2026 may further accelerate American fan engagement.

In 2025, Apple announced that it had secured Formula One's exclusive U.S. broadcast rights for the next five years,³⁶⁰ replacing ESPN. While no official financial terms were disclosed, third-party estimates suggest the deal is worth approximately \$140 million annually,³⁶¹ implying a CAGR around 7% relative to ESPN's 2019 agreement. A 2025 report estimates that Apple TV has around 45 million subscribers, which later Apple stated that it has significantly more than

³⁵⁶ Season 4 of Drive To Survive coming to Netflix in 2022. Formula 1®. <https://www.formula1.com/en/latest/article/season-4-of-drive-to-survive-coming-to-netflix-in-2022.3UHrV3mY3jjLXkBW4ziPB5>

³⁵⁷ Formula One Revenue up 5.9% in 2024 as Focus Shifts to US Rights Renewal. S&P Global. <https://www.spglobal.com/market-intelligence/en/news-insights/research/formula-one-revenue-up-in-2024-as-focus-shifts-to-us-rights-renewal>

³⁵⁸ ESPN's Final F1 Viewership Numbers Are In, And Apple TV Will Be Happy. Forbes. <https://web.archive.org/web/20251228093632/https://www.forbes.com/sites/maurybrown/2025/12/12/espns-final-f1-viewership-numbers-are-in-and-apple-tv-will-be-happy/>

³⁵⁹ Formula One Revenue up 5.9% in 2024 as Focus Shifts to US Rights Renewal. S&P Global. <https://www.spglobal.com/market-intelligence/en/news-insights/research/formula-one-revenue-up-in-2024-as-focus-shifts-to-us-rights-renewal>

³⁶⁰ Apple is The Exclusive New Broadcast Partner for Formula 1® in the U.S. Apple. <https://www.apple.com/newsroom/2025/10/apple-is-the-exclusive-new-broadcast-partner-for-formula-1-in-the-us/>

³⁶¹ Apple TV Wins F1's US Broadcast Rights with Landmark Five-Year Deal. <https://www.motorsport.com/f1/news/apple-tv-f1-us-broadcast-rights-landmark-five-year-deal/10768225/>

that.³⁶² However, it is unclear how much of those subscribers are from the U.S., potentially exposed to Formula One races in the coming years.

Apple also deepened its involvement with the sport through the production of *F1 The Movie* in 2025, starring Brad Pitt, Damson Idris, Javier Bardem, Kerry Condon, and Tobias Menzies. **The film became Apple's highest-grossing theatrical release to date,³⁶³ the highest-grossing film of Pitt's career,³⁶⁴ and the most commercially successful racing movie in history.** Liberty Media, Formula One's owner, disclosed that it recognized a one-time revenue contribution associated with the film's release,³⁶⁵ though the amount was not specified. **With an estimated production cost of \$200 to 300 million, the film generated over \$630 million in global box office revenue by the end of 2025,** surpassing other notable racing-themed films, including Pixar's *Cars 2* (2011) at over \$560 million, *Cars* (2006) at approximately \$462 million, *Ford v Ferrari* (2019) at around \$225 million, and *Talladega Nights: The Ballad of Ricky Bobby* (2006) at \$163.4 million.³⁶⁶

The growing popularity and viewership of Formula One in the United States has also likely contributed to broader commercial potentials. This includes LVMH's announcement of a 10-year global partnership beginning in 2025, which we discuss later. In explaining the decision, the company emphasized that Formula One is also "focusing on the U.S., and the U.S. is a very important market for us,"³⁶⁷ underscoring the strategic importance of Formula One's continued expansion in the American market and its ability to attract new, high-profile sponsors led by the expansion.

³⁶² Apple Says It Has 'Significantly More' Than 45 Million Apple TV Subscribers. <https://www.bgr.com/1997145/apple-tv-significantly-more-45-million-subscribers/>

³⁶³ 'F1' is Apple's Highest-Grossing Theatrical Film Ever. CNBC. <https://www.cnbc.com/2025/07/07/f1-apple-highest-grossing-theatrical-film.html>

³⁶⁴ Formula One Group, Liberty Media Corporation, Moto GP Limited. Analyst/Investor Day. 11/20/2025.

³⁶⁵ Liberty Media 10-Q Q3 2025.

³⁶⁶ Where Brad Pitt's F1 Movie Ranks Among The Biggest Racing Films at The US Box Office. <https://www.motorsport.com/f1/news/where-brad-pitts-f1-movie-ranks-among-the-biggest-racing-films-at-the-us-box-office/10784240/>

³⁶⁷ Louis Vuitton Chief on F1 Tie-up – 'Sport is Part of The Culture, The Life of Young People'. <https://www.ft.com/content/80a4eaff-1ccf-4c0f-9104-655060cb0f69>

Sponsorship

Sponsorship revenue is another important revenue source to Formula One, growing from 14% of the organization's revenue in 2013 to approximately 19% in 2024.³⁶⁸ Formula One's global exposure to its massive fan base, technological sophistication, and prestigious positioning make it an attractive platform for brands seeking premium marketing opportunities. Formula One sponsorships range from series-wide partnerships to race-specific and digital activations, offering extensive brand visibility both trackside and across broadcast and digital media.

As on-track competition has intensified over the sport's history, Formula One's appeal to sponsors has strengthened further.³⁶⁹ Closer racing, unpredictable outcomes, and heightened drama have driven sustained growth in television viewership and digital engagement, increasing the commercial value of sponsorship placements and reinforcing the sport's ability to command consistent global attention.

A prominent example is Formula One's long-standing relationship with Rolex, which served as the sport's official timekeeping partner from 2013 until the conclusion of its agreement in 2024. Beginning in 2025, Rolex was succeeded by LVMH, which entered into a new 10-year partnership reportedly valued at over \$1 billion, with annual sponsorship fees exceeding \$100 million.³⁷⁰ Under this agreement, TAG Heuer replaces Rolex as the official timekeeper, while Louis Vuitton provides bespoke trophy trunks presented to race winners and Moët & Chandon – formerly Formula One's official champagne partner from 1981 to 1997 – returns as the official champagne for podium celebrations,³⁷¹ replacing Ferrari Trento, which had held the designation since 2021³⁷² (previous sponsors also include G.H. Mumm, Chandon, and Carbon³⁷³). These visual elements ensure that LVMH brands are prominently featured during the most iconic moments of each Grand Prix, seen by tens of thousands of spectators at circuits and hundreds of millions of viewers worldwide. The partnership underscores Formula One's strong alignment with luxury brands and reinforces its positioning at the intersection of elite sport, prestige, and global lifestyle marketing. LVMH has described the partnership as a "particularly important" step in its evolution from a luxury brand group to a broader "cultural brand,"³⁷⁴ citing shared values with Formula One around innovation, international reach, and high-stakes competition.

³⁶⁸ Liberty Media Proxy Statement 12/09/2016; Liberty Media Annual Report 2017 – 2024.

³⁶⁹ How Ecclestone turned Formula One into the World's Most Watched Series. <https://www.autoweek.com/racing/formula-1/a1933936/how-ecclestone-turned-formula-one-worlds-most-watched-series/>

³⁷⁰ LVMH Signs Major Sponsorship Deal with F1, Replacing Rolex. Fortune. <https://fortune.com/2024/10/02/lvmh-rolex-f1-formula-one-sponsorship/>

³⁷¹ The F1 deal with Moët & Chandon; Strategy, Stats And Storytelling. Forbes.

<https://www.forbes.com/sites/stephaniehirschmiller/2025/07/30/the-strategy-stats-and-storytelling-behind-mot--chandons-f1-deal/>

³⁷² F1, Ferrari Trento Named the Official Sparkling Wine. <https://www.ferraritrento.com/en/ferrari-f1/>

³⁷³ Champagne – Formula 1 Wiki. <https://f1.fandom.com/wiki/Champagne>

³⁷⁴ Louis Vuitton Chief on F1 Tie-up – 'Sport is Part of The Culture, The Life of Young People'. <https://www.ft.com/content/80a4eaff-1ccf-4c0f-9104-655060cb0f69>

Figure 32-1: Louis Vuitton Trophy Box³⁷⁵



³⁷⁵ Louis Vuitton Chief on F1 Tie-up – ‘Sport is Part of The Culture, The Life of Young People’. <https://www.ft.com/content/80a4eaff-1ccf-4c0f-9104-655060cb0f69>

Figure 32-2: Formula One Title Sponsor – Louis Vuitton³⁷⁶



Figure 32-3: Tag Heuer Sponsorship³⁷⁷



³⁷⁶ Louis Vuitton Is In High Gear with 10 Year Formula 1 Partnership. <https://anneofcarversville.com/fashion/2025/6/23/louis-vuitton-formula-1-in-the-fast-lane>

³⁷⁷ TAG Heuer Returns to Formula 1 as Official Timekeeper from 2025 Season. Formula 1®. <https://www.formula1.com/en/latest/article/tag-heuer-returns-to-formula-1-as-official-timekeeper-from-2025-season.5IS9YMOFwnuaQXkRGQW11v>

Figure 32-4: Moët & Chandon Sponsorship³⁷⁸



Beyond luxury, Formula One and its teams have also proven effective for more traditional businesses seeking to reposition their brand image and reach globally mobile audiences. One notable example is MoneyGram, the U.S.-based money transfer company, which signed a three-year title sponsorship deal with Haas, one of Formula One's teams, in 2023. The agreement, estimated at approximately \$20 million per season,³⁷⁹ provided a significant financial boost to Haas, then the youngest team on the grid and operating with the smallest budget in Formula One. At the time, Haas was not reaching the cost cap limit of \$135 million as imposed by Formula One as of 2023,³⁸⁰ and the sponsorship was intended to support its ambition of becoming a consistent midfield team.³⁸¹ From MoneyGram's perspective, the partnership offered strategic brand alignment. Traditionally perceived as an 80-year-old retail cash business, MoneyGram was seeking to emphasize attributes such as innovation, technology, safety, and speed. Formula One's global calendar, spanning roughly 20 countries at the time, closely overlapped with approximately 70% of MoneyGram's international remittance revenue.³⁸² Although headquartered in the United States, the company generates more business outside the U.S. than within it, mirroring Formula One's global footprint. Moreover, Formula One's fan demographics overlap with MoneyGram's core customer base, particularly younger, internationally mobile populations who regularly send money across borders. The partnership thus connected MoneyGram's brand narrative with the sport's themes of global movement, speed, and connectivity.

³⁷⁸ On The Bubble – Moët & Chandon Returns as F1 Champagne Provider. <https://www.autosport.com/f1/news/on-the-bubble-moet-chandon-returns-as-f1-champagne-provider/10693686/>

³⁷⁹ Haas Trade MoneyGram for Toyota in New Title Sponsorship Deal. <https://www.sportspro.com/news/sponsorship-marketing/haas-f1-title-sponsor-toyota-moneygram-december-2025/>

³⁸⁰ Do F1 Teams Make Money – A Breakdown of Revenue and Costs. <https://www.sportsboom.com/motor-sports/do-f1-teams-make-money-a-breakdown-of-revenue-and-costs/>

³⁸¹ Haas Sign New Title Sponsor for 2023 in Multi-Year Deal. Formula 1®. <https://www.formula1.com/en/latest/article/haas-sign-new-title-sponsor-for-2023-in-multi-year-deal.4YFZ3bryxlowvBi64hvnTO>

³⁸² How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

Figure 33: MoneyGram Sponsorship³⁸³



³⁸³ Haas Present Their Livery for 2025 as Part of F1 75 Live in London. Formula 1®. <https://www.formula1.com/en/latest/article/watch-haas-present-their-livery-for-2025-as-part-of-f1-75-live-in-london.4XCAsJfIKSYyObcEvVF48q>

Formula One has also increasingly partnered with technology firms to enhance fan engagement and operational efficiency. In 2022, Salesforce entered into a five-year partnership with Formula One, deploying its customer relationship management and artificial intelligence tools to improve fan-facing services. Salesforce's technology enables automated support for common issues such as login and streaming access through natural-language interfaces, contributing to first-call resolution rates exceeding 95% and reducing average response times by approximately 80%.³⁸⁴ Beyond improving the fan experience, such partnerships also strengthen Formula One's data-driven commercial ecosystem and further enhance its value proposition to sponsors.

Figure 34: Formula One Sponsorship – Salesforce³⁸⁵



³⁸⁴ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

³⁸⁵ F1 Fans Left Dejected Over Loss of Iconic Race Track. <https://racingnews365.com/f1-fans-left-dejected-over-loss-of-iconic-race-track>

Formula One and Its Application of AI

Formula One has long stood at the cutting edge of automotive innovation, making it a natural early adopter of artificial intelligence within the world of sport.³⁸⁶ Artificial intelligence has become increasingly embedded in Formula One's operation, shaping both the sport's commercial strategy and the way it engages with its global audience. Today, with more than 800 million fans worldwide³⁸⁷ and fewer than 1% of fans attend races in person,³⁸⁸ the majority of fans experience the sport remotely. As a result, the quality of the digital ecosystem has become critical to sustaining engagement and long-term fan loyalty.

At the organizational level, Formula One leverages advanced data analytics through partnerships with technology providers such as Salesforce. By aggregating vast datasets that track its fans activities, the organization can chart behavioral trends, segment audiences, and deliver personalized experiences across many aspects. These insights not only strengthen fan relationships but also support the commercial sales team in identifying new corporate partnership opportunities by mapping sponsor propositions to highly targeted fan segments. For example, through the F1 digital portal, an intelligent self-service platform powered by AI uses natural language processing to resolve routine issues such as login or streaming difficulties. Fans can troubleshoot problems in real time without requiring human intervention, contributing to first-call resolution rates exceeding 95% and allowing viewers to have more time to focus on the racing itself.³⁸⁹

In addition, AI also enables Formula One a more personalized support experience. By consolidating over 100 data sources, including the F1 app, website activity, fantasy league, ticket purchases, and store activities, the organization constructs unified fan profiles that capture purchase history, marketing engagement, and prior interactions, helping the organization to deliver relevant content faster in a tailored way. The technology enables Formula One to tailor newsletters, push notifications, and editorial content around individual preferences, favorite teams, drivers, or sponsor affiliations. A Red Bull Racing supporter, for instance, might receive curated coverage of the team. Notably, AI-recommended content has increased Formula One's overall click-through rates by roughly 22% compared with human-selected material.³⁹⁰

Furthermore, AI also plays an important role in enhancing the value proposition for Formula One's commercial partners. With unique fan profiles, personalized content delivery allows the organization to connect sponsors with precisely targeted audience. For example, targeted campaigns can deepen engagement with female fans by highlighting Formula One's partnership with LVMH and its portfolio of luxury brands, including Louis Vuitton, Moët Hennessy, and TAG Heuer. Such alignment ensures that sponsorship messaging feels relevant rather than intrusive, strengthening both fan engagement and partnerships with advertisers.³⁹¹

At the team level, AI-driven data analytics has evolved from a support function into a direct contributor to on-track performance. Behind every car on the racetrack there is an interdisciplinary group of engineers, strategists, and data scientists working to extract marginal gains wherever possible. Formula One has always been a sport measured by extensive data such as lap times, top speeds, tire conditions, and engine behaviors.³⁹² Today, high-speed computing and AI enable teams to convert massive quantities of raw data into actionable insights within seconds. **McLaren provides vivid examples. The team has shifted away from maintaining vast archives of underutilized statistics in the past toward an AI-enabled framework that identifies relevant data, synthesizes it, and translates it into**

³⁸⁶ AI in Formula One - What Role Is The Technology Playing in Race Strategies, Broadcasts And Sustainability.

<https://www.blackbookmotorsport.com/features/f1-ai-machine-learning-race-strategy-broadcast-aws-sustainability-driverless-cars-oracle/>

³⁸⁷ Data From Nielsen Sports Shows F1 Fandom Surging As 2025 Season Gets Underway. Forbes.

<https://web.archive.org/web/20250826230152/https://www.forbes.com/sites/maurybrown/2025/03/22/data-from-nielsen-sports-shows-f1-fandom-surging-as-2025-season-gets-underway/>; Records, Growth and Unforgettable Moments – The 2025 Formula 1 Season So Far. <https://www.formula1.com/en/latest/article/records-growth-and-unforgettable-moments-the-2025-formula-1-season-so-far.1usXKBpUsYIndrYz22GQTq>; Formula 1 2025 Season – A Half Year Review. <https://corp.formula1.com/formula-1-2025-season-a-half-year-review/>

³⁸⁸ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

³⁸⁹ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

³⁹⁰ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

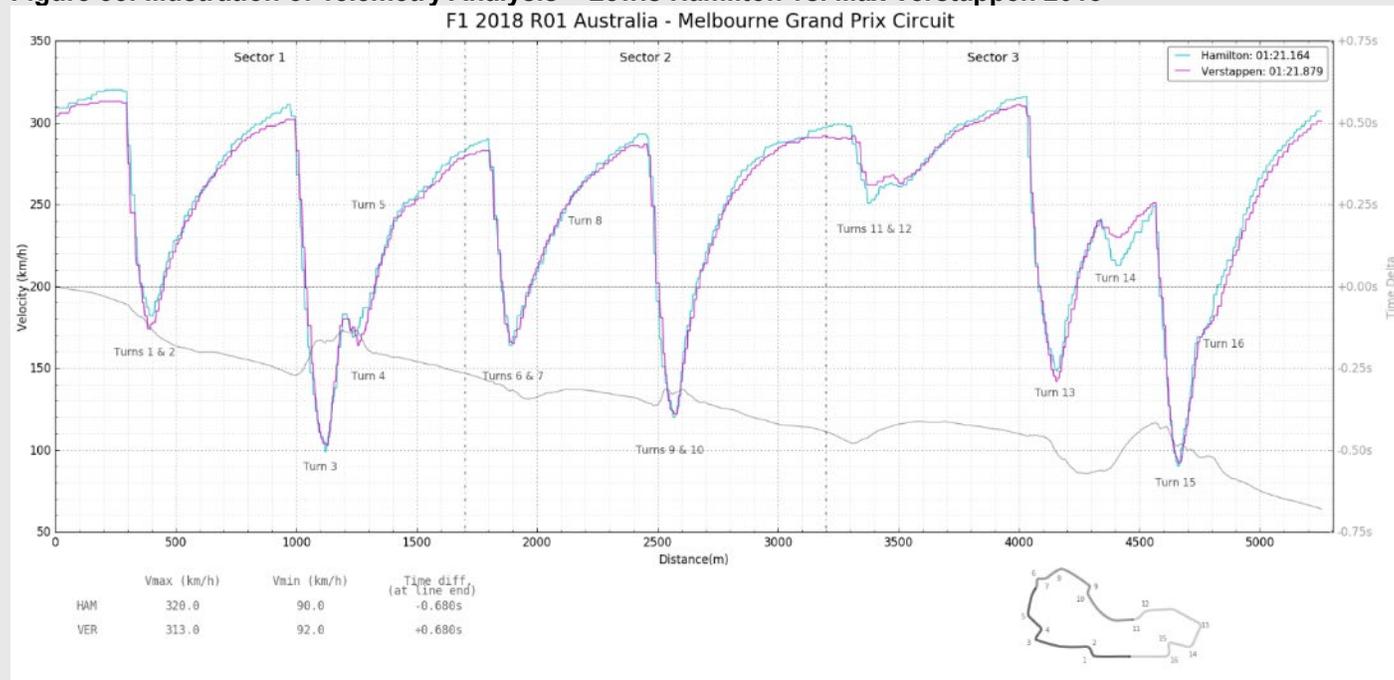
³⁹¹ Agentforce Will Help Formula 1 Speed up Service Response by 80%. <https://www.salesforce.com/customer-stories/formula-one/>

³⁹² How Is Artificial Intelligence Changing Formula 1. <https://www.autosport.com/f1/news/how-is-artificial-intelligence-changing-formula-1/10659532/>

strategic recommendations. The result is not merely incremental efficiency, providing analysis that would have been impractical, or impossible, without the technology, whereas in the past, much of the data was wasted.³⁹³

McLaren’s current utilization of AI-driven data analytics stands in stark contrast to earlier eras of the sport. During the time of Ayrton Senna and Alain Prost at McLaren, teams operated with minimal telemetry data, relying largely on stopwatches and handwritten notes. Performance analysis was constrained to basic metrics such as sectional speed. By comparison, modern AI systems allow teams to dissect competitors’ advantages with precision, examining braking patterns, throttle application, racing lines, and cornering techniques, to understand where and why rivals are faster and how they can improve.³⁹⁴

Figure 35: Illustration of Telemetry Analysis – Lewis Hamilton vs. Max Verstappen 2018³⁹⁵



This great utilization of AI is also acknowledged by other teams. **As Christian Horner, Team Principal of Red Bull Racing, has observed:**

“Data is in the team’s lifeblood. Every element of performance – how we run a race, how we develop a car, how we select and analyze drivers – it’s all driven by data.”³⁹⁶

Modern Formula One cars are now equipped with roughly 300 to 600 sensors, generating approximately 3GB of telemetry data per race.³⁹⁷ These sensors monitor everything from engine performance and tire temperature to airflow, and gear ratios. Among these datasets, aerodynamic information is arguably the most important and

³⁹³ How AI is Revolutionizing F1. McLaren. <https://www.mclaren.com/racing/partners/dell-technologies/how-ai-is-revolutionising-f1-presented-by-dell-technologies/>

³⁹⁴ How AI is Revolutionizing F1. McLaren. <https://www.mclaren.com/racing/partners/dell-technologies/how-ai-is-revolutionising-f1-presented-by-dell-technologies/>

³⁹⁵ 2018 Australian GP Qualifying Telemetry Analysis. <https://unendinginsight.wordpress.com/2018/04/03/2018-australian-gp-qualifying-telemetry-analysis/>

³⁹⁶ How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes. <https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

³⁹⁷ How AI is Revolutionizing F1. McLaren. <https://www.mclaren.com/racing/partners/dell-technologies/how-ai-is-revolutionising-f1-presented-by-dell-technologies/>; How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes. <https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

differential. Understanding how airflow interacts with a car traveling at extreme speeds falls within the domain of computational fluid dynamics (CFD), a discipline that has become central to car development today.³⁹⁸

Telemetry serves both immediate and long-term purposes. Some data is analyzed live to guide operational decisions, race strategy, tire management, or reliability interventions, while others might be transmitted back to the factory, where engineering teams incorporate the findings into future upgrades. Properly leveraged, data reveals both strengths to be amplified in the short term and structural weaknesses that must be engineered out in the long term.³⁹⁹

Figure 36: Data Analytics at Mercedes⁴⁰⁰



Speed of data interpretation is critical. Race strategy often unfolds within windows measured in seconds, and no human analyst can manually process such volumes of information quickly enough. AI closes this gap. Andrew McHutchon, Head of Data Science at McLaren Racing, explains:

“Previously, we’ve collected data that we didn’t know what to do with, but now, with AI and by working with Dell Technologies’ AI Factory, we can process the data in a much richer way to extract meaningful learnings from it...If it’s a decision related to pitting, you may only have a third of a lap before the car passes the pit lane, and after that, you’ve lost your opportunity, so you need to be fast. You could have terabytes and terabytes to

³⁹⁸ How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes.

<https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

³⁹⁹ How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes.

<https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

⁴⁰⁰ Explaining the Role of an F1 Sim Driver. <https://www.mercedesamgf1.com/news/feature-explaining-the-role-of-an-f1-sim-driver>

analyze, which could take half a day or more to answer just one question without AI... **But even when it comes to the team back at the factory working on the car's development, speed matters. You may have five questions, and if it takes you half a day to answer each, that slows everything down. AI speeds all of that up, and the faster we can answer these questions, the faster we can develop the car and the more likely we are to win championships.**"⁴⁰¹

Beyond real-time analytics, AI-powered simulations allow teams to model billions of potential race scenarios to identify variables most likely to produce favorable outcomes. Teams' technology partners such as AWS, Dell, and Oracle provide the computational infrastructure required to forecast the impact of weather patterns, competitor behavior, pit strategies, track evolution, collisions, and mechanical risk with increasing accuracy. Simulation capabilities also extend into the design process. Engineers can stress-test components virtually, identifying structural weaknesses before a car ever reaches the circuit, a significantly less costly outcome in an era defined by strict budget caps. As Williams Team Principal James Vowles notes:

"We're going with prototype cars that are changing nearly race-on-race ... different tracks, different tires ... the right way of doing that is to use modeling tools that will run millions of race scenarios."⁴⁰²

AI-driven modeling is further reshaping driver development. Advanced simulators allow drivers to learn circuits, refine skills, and experiment with strategy in a risk-free environment, reducing both physical danger and the financial consequences associated with on-track testing.

Figure 37: McLaren Simulator⁴⁰³



⁴⁰¹ How AI is Revolutionizing F1. McLaren. <https://www.mclaren.com/racing/partners/dell-technologies/how-ai-is-revolutionising-f1-presented-by-dell-technologies/>

⁴⁰² How Artificial Intelligence, Data And Analytics Are Transforming Formula One In 2023. Forbes. <https://www.forbes.com/sites/bernardmarr/2023/07/10/how-artificial-intelligence-data-and-analytics-are-transforming-formula-one-in-2023/>

⁴⁰³ The Secrets of The Sim. <https://www.mclaren.com/racing/latest-news/mclarenracing/article/secrets-formula-1-simulator/>

Taken together, we believe that the integration of AI at team level reflects that competitive advantage is no longer determined solely by mechanical sophistication; it increasingly depends on a team's ability to capture, interpret, and operate data faster than its rivals. In a sport defined by margins measured in thousandths of a second, AI has become not just a technological enhancement, but a decisive factor in the pursuit of championships.

Race Promotion

Race promotion fees represent another cornerstone of Formula One's revenue model, contributing approximately 29% of total revenue as of 2024, declining from 35% in 2015, driven primarily by the organization's efforts in expanding sponsorship. Formula One grants race promoters the rights to host, stage, and market individual Grand Prix events under contracts typically spanning three to seven years. Promoters are often circuit owners, local or national automobile clubs, private event organizers, or governmental entities seeking global visibility and tourism-related economic benefits.⁴⁰⁴ Race promoters generate revenue primarily from ticket sales, local sponsorships, concessions, and other on-site activities. While ticket pricing and attendance strategies vary by location, Formula One benefits from predictable, contractually flat fees (with escalators indexed to consumer price index or fixed percentage of up to 5% a year⁴⁰⁵), which potentially provide revenue stability and reduce exposure to event-level financial volatility.

Formula One does not publicly disclose hosting fees it charges promoters on a race-by-race basis. However, based on disclosures from Liberty Media, which acquired Formula One Group in 2017, average promoter revenue per event increased from approximately \$32 million in 2015 to around \$42 million in 2024,⁴⁰⁶ representing roughly a 3% CAGR. Annual fees collected remained relatively stable over the past decade, with the notable exception of 2020, when the COVID-19 pandemic disrupted global economic activity, shortened the race calendar, and prompted one-time fee renegotiations as most events were held without spectators.⁴⁰⁷

It is worth noting that hosting fees could vary widely by circuit. Traditional European venues, valued for their historic prestige, have generally paid lower fees, often in the \$20 to 30 million range, with select outliers reaching \$30 to 40 million. By contrast, newer races, particularly in oil-rich regions such as the Middle East or Azerbaijan, have reportedly paid \$50 to 60 million annually.⁴⁰⁸ This range is broadly consistent with our findings from various sources. For example, Shanghai and Bahrain reportedly paid Formula One approximately \$30 million and \$18 million, respectively, around 2011.⁴⁰⁹ By 2025, those figures had risen to roughly \$50 million and \$45 million,⁴¹⁰ implying an effective annual growth rate of about 5% over successive contract cycles.

⁴⁰⁴ Liberty Media Annual Report 2024.

⁴⁰⁵ Liberty Media Proxy Statement 12/09/2016; Liberty Media Annual Report 2017 – 2024.

⁴⁰⁶ Liberty Media Annual Report 2017 – 2024.

⁴⁰⁷ Liberty Media Annual Report 2020.

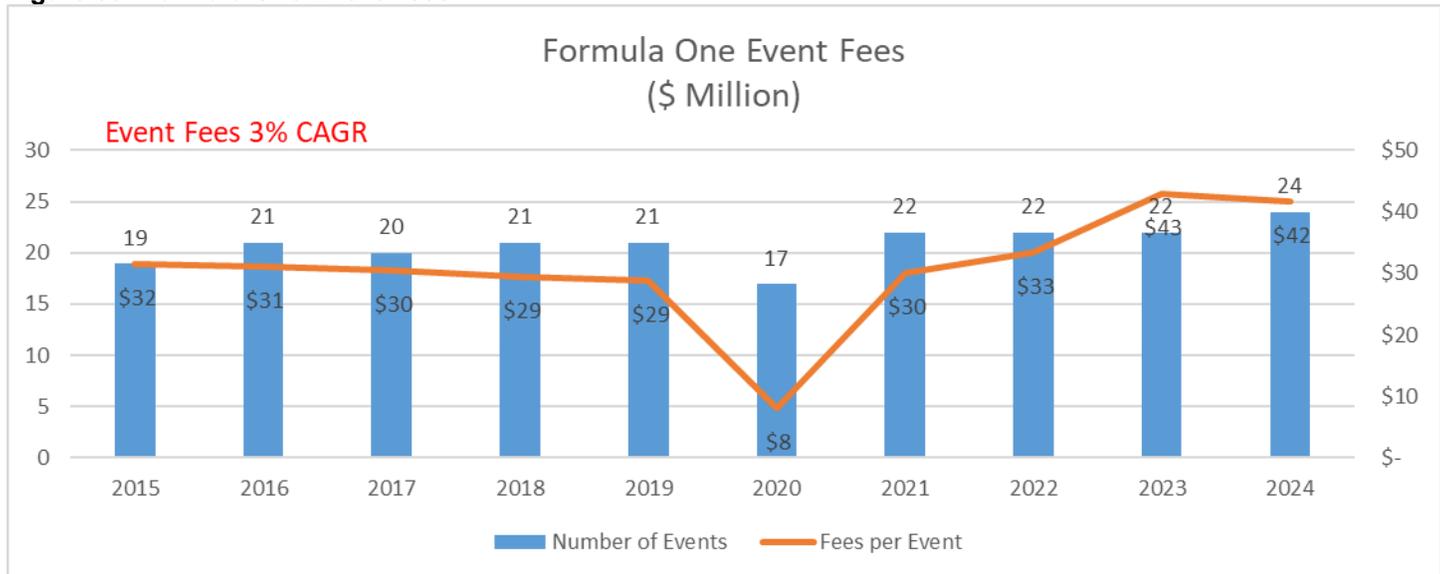
⁴⁰⁸ How Much Do Circuits Pay to Host F1 Race. <https://www.total-motorsport.com/cost-to-host-f1-race/>

⁴⁰⁹ Reports Say Shanghai F1 Event, Despite Years of Huge Losses, Will Renew for Another 7 Years.

<https://m.cj.sina.cn/page/aHR0cDovL2ZpbmFuY2Uuc2luYS5jb20uY24vcml9sbC8yMDEwMDQxNy8xMjM1Nzc3MTM4MS5zaHRtbA?from=redirect>

⁴¹⁰ How Much Do Circuits Pay to Host F1 Race. <https://www.total-motorsport.com/cost-to-host-f1-race/>

Figure 38: Formula One Event Fees⁴¹¹



Note:

1. Race promotion revenue was significantly lower in 2020 as a result of the reduced calendar and one-time revised fee arrangements, as most Events were closed to fans, which provided very different economics for the promoters.⁴¹²

Despite Formula One's commercial success, many race promoters struggle to achieve direct profitability. As a result, many promoters are government entities or government-backed organizations.⁴¹³ **In fact, 15 out of 19 races during the 2015 season were funded mainly by the governments of the hosting countries.**⁴¹⁴ The Shanghai Grand Prix illustrates this dynamic. By 2011, the event had reportedly incurred operating losses for seven consecutive years, yet the city opted to renew its contract. **While promoters retain revenue from ticket sales, limited advertising, and certain broadcast naming rights, the most lucrative commercial streams, including global broadcasting rights, trackside advertising, and race sponsorship, flow primarily to Formula One itself.**⁴¹⁵ For local authorities, however, the economic rationale extends well beyond promoter-level profitability. Officials involved in the Shanghai Grand Prix emphasized that the race's primary value lay in city branding and international exposure rather than direct financial returns. Each Formula One race reaches an estimated 500 to 600 million viewers globally,⁴¹⁶ effectively serving as a multi-day international advertisement. Over its first seven years, the Shanghai Grand Prix reportedly generated more than ¥10 billion (approximately \$1.5 billion at 2011 exchange rates) in direct and indirect economic impact, benefiting tourism, hospitality, and related industries.

Similar patterns are evident elsewhere. Las Vegas reportedly invested more than \$500 million to stage its inaugural Grand Prix in 2023, yet local authorities estimated a \$1.2 billion boost in tourism-related spending.⁴¹⁷ Singapore's night race, introduced in 2008, attracted approximately 450,000 additional visitors over its first decade, with cumulative visitor spending estimated at \$1.4 billion. These figures illustrate why governments often view Formula One hosting fees as a form of long-term investment rather than a simple event cost. Even when promoters incur losses, the broader regional economy frequently benefits from increased tourism, employment, and global exposure. This logic explains why governments are often willing to subsidize hosting fees. In Montreal, for example, the Canadian Grand Prix is funded through a combination of federal, provincial, and municipal tourism bodies. Officials have justified annual payments exceeding \$25 million, rising toward \$30 million in future contract periods, by citing estimated tourism impacts approaching \$1 billion. **In effect, the expected economic spillovers outweigh the hosting fees over time.**

⁴¹¹ 2015 RACE RESULTS. <https://www.formula1.com/en/results/2015/races>; Liberty Media Annual Report 2017 – 2024.

⁴¹² Liberty Media Annual Report 2020.

⁴¹³ How Much Do Circuits Pay to Host F1 Race. <https://www.total-motorsport.com/cost-to-host-f1-race/>

⁴¹⁴ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁴¹⁵ Reports Say Shanghai F1 Event, Despite Years of Huge Losses, Will Renew for Another 7 Years.

<https://m.cj.sina.cn/page/aHR0cDovL2ZpbmFuY2Uuc2luYSSjb20uY24vcm9sbC8yMDEwMDQxNy8xMjM1Nzc3MTM4MS5zaHRtbA?from=redirect>

⁴¹⁶ The F1 Race Loses Money Every Year, So Why Did Shanghai Sign A Seven-Year Contract.

<https://news.cntv.cn/map/20110417/102650.shtml>

⁴¹⁷ How Much Do Circuits Pay to Host F1 Race. <https://www.total-motorsport.com/cost-to-host-f1-race/>

Beyond measurable tourism effects, hosting a Formula One race confers significant soft power and marketing value. Broadcasts showcase host cities and countries to hundreds of millions of viewers worldwide, reinforcing national branding efforts. Cities such as Baku, Azerbaijan and countries such as Qatar have explicitly positioned Formula One as a tool to project modernity, improve their global image, and promote themselves as a desirable destination.⁴¹⁸ This logic closely parallels that underpinning other mega-events such as the Olympic Games or the FIFA World Cup, where prestige and international visibility justify substantial public investment. Formula One events may also catalyze longer-term infrastructure development, including transportation upgrades, hotel construction, and urban regeneration. The recurring presence of a global sporting event can encourage private investment, while local firms often leverage the race as a platform for networking, sponsorship, and international outreach.

How Do Teams Make Money?

Historically, Formula One teams were often owned and financed by wealthy individuals with a passion for racing, particularly through the late twentieth century and early 2000s. However, much like transformations seen across other capital-intensive industries, team ownership structures have evolved significantly in recent years. Today, Formula One teams increasingly resemble global investment platforms backed by sovereign wealth funds, multinational corporations, and private equity capital. Several prominent examples illustrate this shift. McLaren is majority owned by Bahrain Mumtalakat Holding Company, the sovereign fund of the Kingdom of Bahrain; Red Bull Racing is controlled by Thai billionaire Chalem Yoovidhya; Aston Martin has Public Investment Fund as a 20% shareholder, alongside a major title sponsorship from Aramco; and Alpine has Otro Capital, a private equity firm specialized in sports, entertainment, and media, a 24% stake since 2023.⁴¹⁹ These ownership structures reflect the growing institutionalization of Formula One teams and the increasing perception of teams as long-term strategic assets that potentially serve business purposes rather than standalone profit centers.

The Constructors' Championship plays a central role in team economics. Each team receives a base payment simply for participating in the championship, estimated at approximately \$36 million in 2023,⁴²⁰ as limited available data shows, while finishing position determines the remainder of its share of Formula One's central prize fund. This fund is derived from Formula One Group's commercial revenues, including media rights, race promotion fees, and centralized sponsorships. According to third-party estimates, teams collectively receive up to 50% of Formula One's commercial revenue below a defined threshold. Above that level, the distribution formula becomes more complex, reflecting investor payouts and other contractual arrangements,⁴²¹ which are not publicly disclosed. Between 2016 and 2024, total team distributions increased from roughly \$966 million to nearly \$1.3 billion,⁴²² implying a CAGR of just over 3%. Over the same period, however, these payments declined as a share of total Formula One revenue, from approximately 54% to 38%, highlighting the organization's success in expanding other commercial income streams, particularly sponsorship, as we discussed earlier.

While detailed team financials are generally not disclosed by individual teams – most Formula One teams are privately held, with Ferrari and Mercedes as notable exceptions through their publicly listed parent companies – neither provides separate, transparent financials for their racing operations. **Nevertheless, it is widely reported that prize money represents a core component of team revenues. Ferrari benefits from a unique contractual arrangement under which it receives a guaranteed minimum share of at least 5% of Formula One's prize fund, a figure that historically could rise to as much as 10% if the total pool exceeded approximately \$1.6 billion. Market speculation suggests that, beginning in 2025, Ferrari's bonus payment will be capped at 5% regardless of the overall size of the prize pool.**⁴²³ Beyond this fixed payment, Ferrari participates in the same performance-based distribution as the other teams, with the remaining prize money allocated according to Constructors' Championship finishing positions. **The championship-winning team is generally estimated to receive around 14% of the total fund, with payouts declining incrementally down the standings to approximately 6% for the tenth-placed team,**⁴²⁴ implying an estimated difference of roughly 0.9 percentage points between each position. These

⁴¹⁸ How Much Do Circuits Pay to Host F1 Race. <https://www.total-motorsport.com/cost-to-host-f1-race/>

⁴¹⁹ How Do Formula 1 Teams Make Money. <https://test.nss-sports.com/en/lifestyle/41254/revenue-formula-1-how-it-works>; Otro Capital Closes \$1.2B Debut Fund. <https://www.sportsbusinessjournal.com/Articles/2026/02/03/otro-capital-closes-12b-debut-fund/>

⁴²⁰ Do F1 Teams Make Money. <https://f1chronicle.com/do-f1-teams-make-money/>

⁴²¹ Decoding The F1 Prize Money Distribution. <https://www.augustman.com/sg/gear/motoring/f1-prize-money-distribution-explained/>

⁴²² Liberty Media Annual Report 2017 – 2024.

⁴²³ Ferrari Retains Historic Bonus Payment in New Concorde Agreement. <https://www.si.com/onsi/f1/rumours/f1-rumor-ferrari-retains-historic-bonus-payment-in-new-concorde-agreement-01hydcbb6b-lm22>

⁴²⁴ F1 Prize Money - How Much Do GP Teams And Drivers Really Make. Motor Sport Magazine.

<https://www.motorsportmagazine.com/articles/single-seaters/f1/f1-prize-money-how-much-do-gp-teams-and-drivers-really-make/>

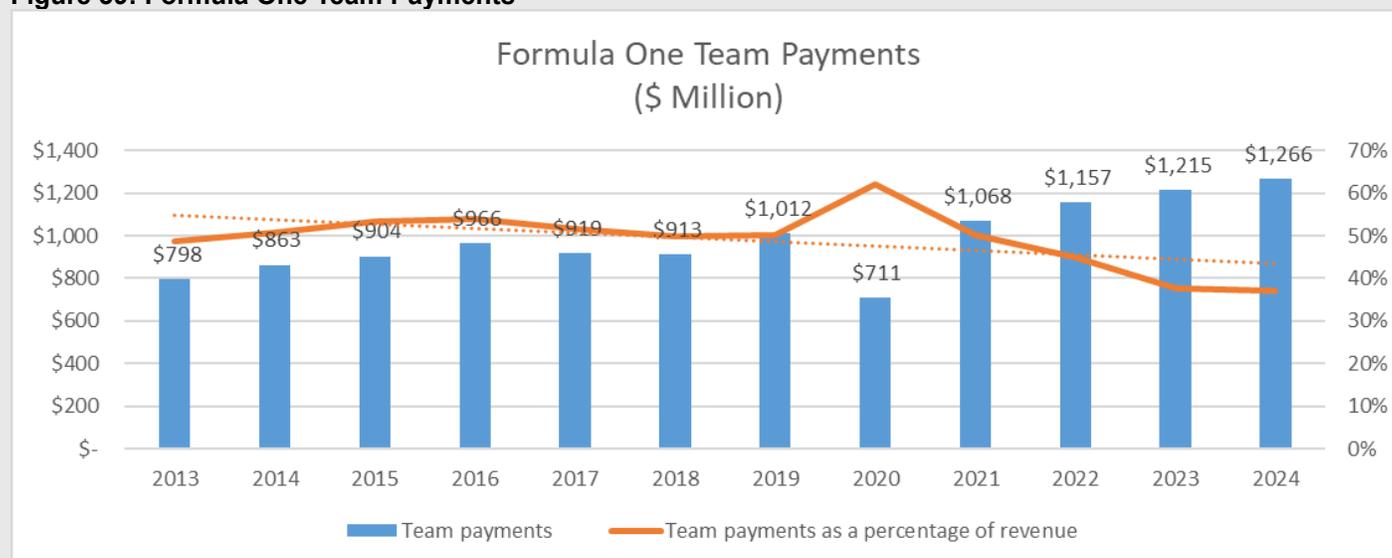
figures, however, are based on third-party estimates rather than official disclosures and may not fully reflect the underlying contractual reality. Moreover, the total number of Formula One teams can vary over time, further affecting the distribution dynamics.

In addition to teams, drivers also receive a bonus from the prize pool, on top of their salaries from respective teams, depending on their position on the grid. Without official disclosures from Formula One, it is estimated, according to a 2025 report, that drivers could be paid as much as \$10,000 for every point scored, meaning that driver could earn as much as \$250,000 for a race.⁴²⁵

Because neither Formula One Group nor individual teams publish prize-money disclosures, assessments of team economics rely heavily on third-party estimates. One such estimate suggests that the top-ranked team may receive around \$140 million in prize distributions in a strong season, while the lowest-ranked team may receive closer to \$60 million, with intermediate teams scaling down according to final standings.⁴²⁶

From 2013, the earliest year for which Formula One’s parent company, Liberty Media, has disclosed data, through 2024, aggregate payments to teams and drivers increased from approximately \$798 million to nearly \$1.3 billion, implying a CAGR of around 4%.⁴²⁷ Over the same period, however, these payments declined as a proportion of Formula One’s total revenue, falling from nearly 50% to approximately 37%.

Figure 39: Formula One Team Payments⁴²⁸



For most teams, it is estimated by many that individual sponsorship agreements represent the largest source of revenue, often accounting for 60% or more of total income. Formula One’s global reach, premium brand positioning, and technological intensity make it particularly attractive to multinational sponsors. Title sponsorships, such as Petronas with Mercedes-AMG Petronas F1 Team and Oracle with Red Bull Racing, can exceed \$50 million per season, encompassing car liveries, driver apparel, media exposure, and commercial appearances. Smaller sponsorships may range from several hundred thousand dollars to a few million per season for logo placement on specific car components or driver equipment such as the helmet and the racing suit.⁴²⁹

⁴²⁵ F1 Prize Money - How Much Do GP Teams And Drivers Really Make. Motor Sport Magazine.

<https://www.motorsportmagazine.com/articles/single-seaters/f1/f1-prize-money-how-much-do-gp-teams-and-drivers-really-make/>

⁴²⁶ F1 Prize Money - How Much Do GP Teams And Drivers Really Make. Motor Sport Magazine.

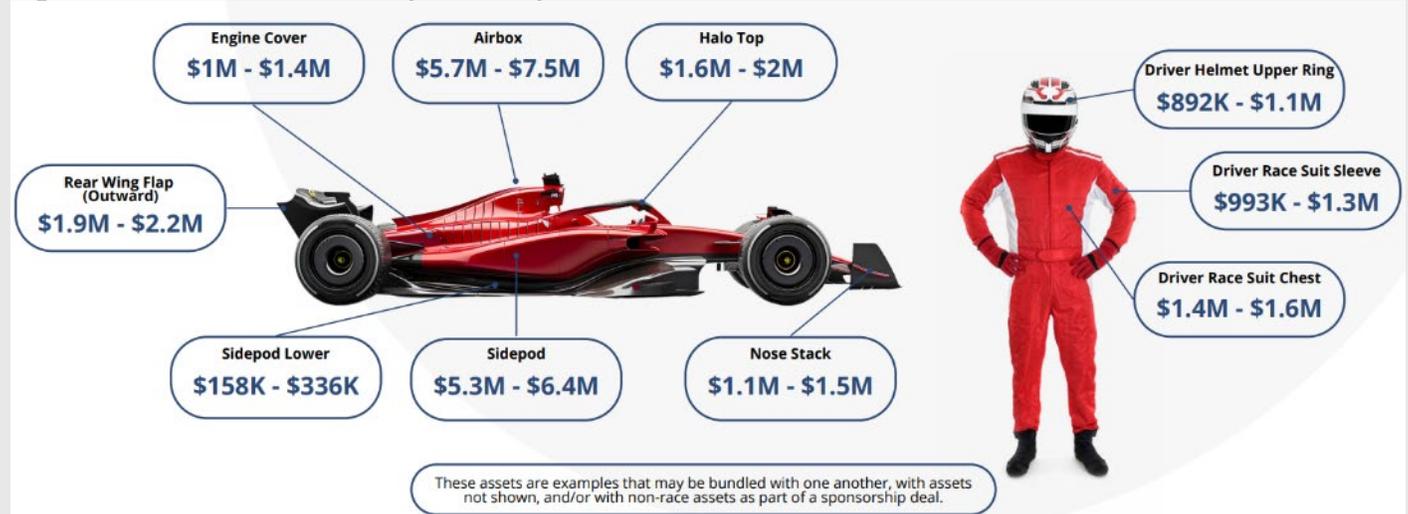
<https://www.motorsportmagazine.com/articles/single-seaters/f1/f1-prize-money-how-much-do-gp-teams-and-drivers-really-make/>

⁴²⁷ Liberty Media Annual Report 2017 – 2024; Liberty Media Proxy Statement 12/09/2016.

⁴²⁸ Liberty Media Annual Report 2017 – 2024.

⁴²⁹ The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

Figure 40: Formula One Team Sponsorship Breakdown⁴³⁰

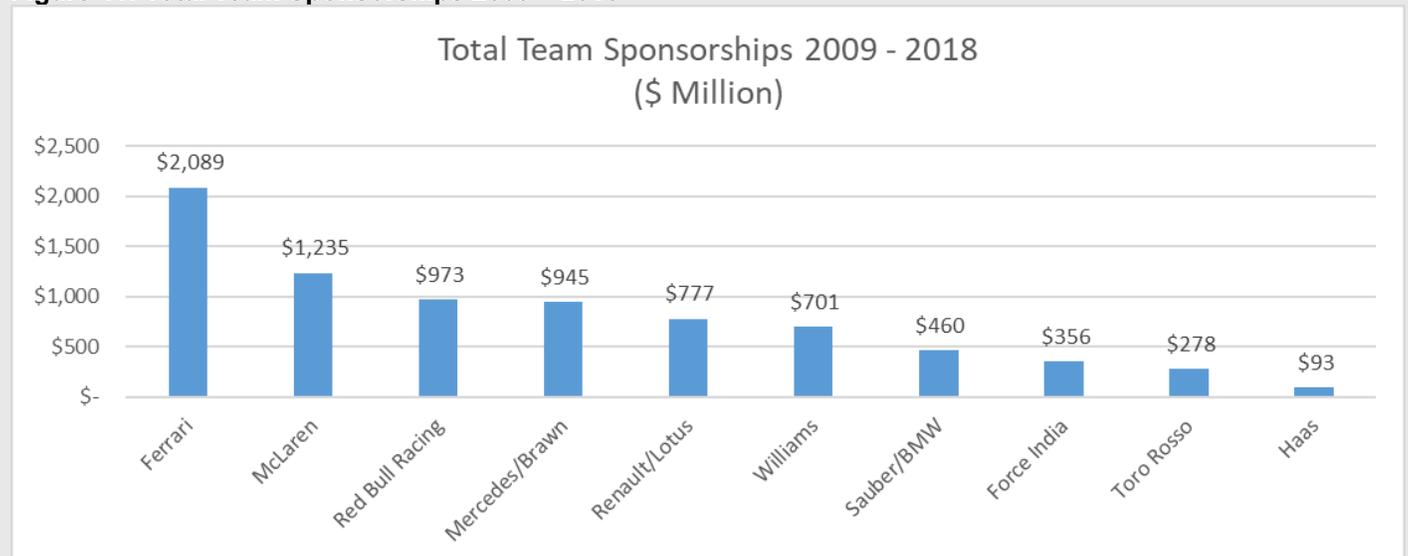


Note:

1. The above figures are third-party estimates and may differ from the reality.

While comprehensive sponsorship figures are not publicly disclosed, a 2019 Forbes analysis estimated that the ten Formula One teams generated nearly \$8 billion in sponsorship revenue over the preceding decade. Ferrari led with more than \$2 billion, followed by McLaren's \$1.2 billion, Red Bull Racing's \$973 million, and Mercedes' \$945 million, while Haas bottomed at \$93 million over the same period.⁴³¹ On an annual basis, this implied sponsorship revenue of \$100 to 200 million for leading teams, compared with less than \$10 million for teams at the back of the grid.

Figure 41: Total Team Sponsorships 2009 – 2018⁴³²



⁴³⁰ Formula 1 Report 2024 & 2025 – SponsorUnited

⁴³¹ Ferrari's \$2 Billion Sponsorship Haul. Forbes. <https://web.archive.org/web/20190819012203/https://www.forbes.com/>

⁴³² Ferrari's \$2 Billion Sponsorship Haul. Forbes. <https://web.archive.org/web/20190819012203/https://www.forbes.com/>

A 2025 third-party industry report estimated that Formula One teams collectively generated approximately \$2.04 billion in sponsorship revenue in 2024, placing the sport in the same range as major North American leagues such as the NFL's \$2.49 billion, MLB's \$1.9 billion, NBA's \$1.5 billion, and NHL's \$1.4 billion.⁴³³ Notably, Formula One is estimated to achieve this with far fewer teams and sponsorship deals. In 2024, Formula One averaged over \$6 million per sponsorship deal across 10 teams, compared with the NFL's average of approximately \$745,000 per deal across 32 teams, highlighting the premium value of Formula One sponsorship inventory.

Figure 42-1: Total Sponsorship Revenue 2024⁴³⁴



Figure 42-2: Average Sponsorship per Deal 2024⁴³⁵

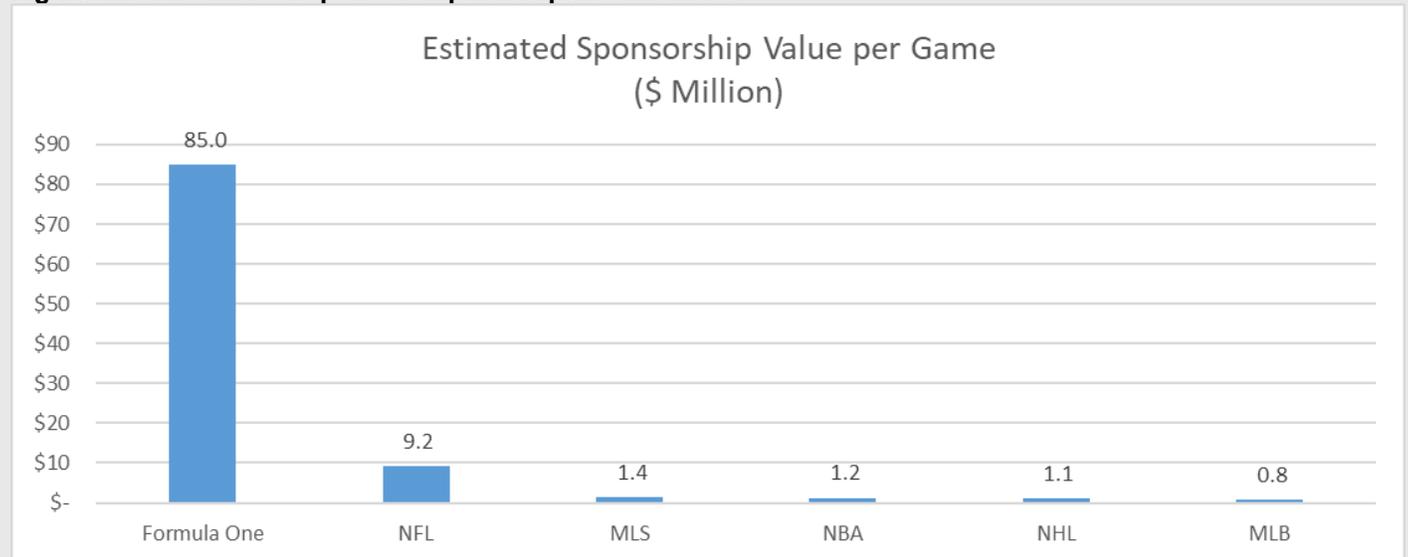


⁴³³ Formula 1 Report 2024 & 2025 – SponsorUnited

⁴³⁴ Formula 1 Report 2024 & 2025 – SponsorUnited

⁴³⁵ Formula 1 Report 2024 & 2025 – SponsorUnited

Figure 42-3: Estimated Sponsorship Value per Game/Race⁴³⁶



Similar to other sports, while the Formula One itself negotiates deals with brands for sponsorships and share part of the revenue with teams through a prize pool distributed to teams and drivers after the race, individual teams also need to negotiate with brands for sponsoring them on a team basis. However, because teams typically do not publicly disclose the team economics nor the terms of their sponsorships, we are not able to provide an in-depth analysis on this regard. Brands sponsor different teams for various reasons such as strategic alignment, team performance, and marketability of the team.

Shell's relationship with Ferrari is among the longest and most iconic partnerships in motorsport. The association dates back to the 1920s, when Shell partnered with Ferrari founder Enzo Ferrari during his early career as a racing driver.⁴³⁷ The collaboration later evolved into a formal technical partnership with Scuderia Ferrari, beginning in Formula One's inaugural season in 1950. Shell has supplied the team with fuel and lubricants, making it one of the longest running partnerships in the history of the sport. Today, Shell reportedly pays approximately \$40 million per season for branding and technical integration on Ferrari's cars and team uniforms.⁴³⁸

Explaining the rationale behind Shell's sponsorship of Scuderia Ferrari, the company's motorsport innovation manager emphasizes Formula One's role as an extreme testing environment, noting:

"Shell fuels and lubricants are developed and tested in the most extreme environments and being successful in motorsport is a very reliable proof point for our products...our insights, learnings and technical developments are transferred to our commercial products for the benefit of our customers around the world... As the world's most extreme automotive test bed, Formula 1 represents the ideal platform for Shell to develop the best products for the everyday motorist... Many of the components used

⁴³⁶ The average sponsorship value per game is calculated by dividing total estimated 2024 sponsorship revenue (as presented in the prior chart) by the estimated number of games played during the season. The underlying data are derived from third-party estimates and may differ from actual results. In 2024, Formula One held 24 events. By comparison, the NFL scheduled 272 regular-season games, MLS played approximately 493 matches, and the NHL held roughly 1,312 regular-season games. The NBA and MLB played approximately 1,230 and 2,430 regular-season games, respectively. Liberty Media Annual Report 2024; 2024 NFL Schedule Announced. <https://operations.nfl.com/updates/the-game/2024-nfl-schedule-announced>; MLS Unveils 2024 Regular Season Schedule. <https://www.mlssoccer.com/news/mls-unveils-2024-regular-season-schedule>; NHL 2024-25 Schedule Released, Begins with Global Series in Czechia on Oct. 4. <https://www.nhl.com/news/nhl-announces-2024-25-regular-season-schedule>; NBA Schedule Release. <https://www.nba.com/news/2025-26-schedule-team-by-team-index>; How Many Games in MLB Season. <https://www.olympics.com/en/news/major-league-baseball-games-per-mlb-season>

⁴³⁷ More Than Just A Sticker – How Shell Boosted Ferrari's F1 Performance By 25%.

<https://www.forbes.com/sites/csylt/2016/06/13/more-than-just-a-sticker-how-shell-boosted-ferraris-f1-performance-by-25/?sh=2b0962116523>

⁴³⁸ 10 Big Sponsorship Deals Generating Huge \$350m Fortune on F1 Grid. <https://www.planetf1.com/features/f1-sponsorship-deals-value-teams>

to power and protect the Scuderia Ferrari engine can be found in Shell Helix Ultra's road-going products. **This means Shell can develop superior lubricants that can keep pace with the changing demands of the modern engine and improve its performance and life; eventually passing these developments onto the everyday motorist.** In fact, the Shell V-Power race fuel used in the V6 Ferrari engine contains at least 99% of the same types of compounds normally used in the Shell V-Power Unleaded road fuels available to Shell customers around the world."⁴³⁹

Echoing this view, Shell's global sponsorship manager highlights the competitive and technological intensity of Formula One, stating:

"We like to be challenged and being part of the toughest competition in motorsport pushes us to the limit. Our products are developed, tested and used in the Ferrari Formula 1 power unit... All the learnings and improvements are transferred to the products which we are selling to our customers. It's not just about Scuderia Ferrari, it's also about access to Formula 1 and all its advanced technology because this is where the innovation sits. **The competition and the technical challenge push us to new levels of performance each year.**"⁴⁴⁰

With Shell's branding prominently displayed on Ferrari Formula One cars competing in front of hundreds of millions of viewers worldwide, the partnership reinforces the perception that the fuels and lubricants available at local Shell stations are directly connected to those powering one of the most technologically advanced racing machines in the world. Shell has stated that its Formula One sponsorship activities support its broader portfolio of businesses and brands, which operate across more than 60 countries globally.⁴⁴¹

Figure 43: Scuderia Ferrari F1 Car⁴⁴²



Beyond sponsorship and prize money, teams generate additional revenue through merchandise sales and licensing. Team-branded apparel, accessories, and driver-specific merchandise provide steady income streams, particularly for

⁴³⁹ More Than Just A Sticker – How Shell Boosted Ferrari's F1 Performance By 25%.

<https://www.forbes.com/sites/csylt/2016/06/13/more-than-just-a-sticker-how-shell-boosted-ferraris-f1-performance-by-25/?sh=2b0962116523>

⁴⁴⁰ More Than Just A Sticker – How Shell Boosted Ferrari's F1 Performance By 25%.

<https://www.forbes.com/sites/csylt/2016/06/13/more-than-just-a-sticker-how-shell-boosted-ferraris-f1-performance-by-25/?sh=2b0962116523>

⁴⁴¹ More Than Just A Sticker – How Shell Boosted Ferrari's F1 Performance By 25%.

<https://www.forbes.com/sites/csylt/2016/06/13/more-than-just-a-sticker-how-shell-boosted-ferraris-f1-performance-by-25/?sh=2b0962116523>

⁴⁴² Ferrari Unveil New 2025 Car after SF-25 Livery Reveal During F1 75 Live. Formula 1®.

<https://www.formula1.com/en/latest/article/first-look-ferrari-unveil-new-2025-car-after-sf-25-livery-reveal-during-f1.1lvOTzHsJr2KsZoPPJnJE>

top teams with global fan bases. Licensing agreements, covering video games, scale models, apparel collaborations, and digital content, can generate several million dollars annually for leading teams.⁴⁴³ The official Formula One video game franchise and scale model cars are notable contributors to this segment.

A few teams benefit from ownership structures that prioritize long-term brand value over short-term profitability. For example, Red Bull treats Formula One as a core pillar of its global marketing strategy rather than a standalone profit center. **Private equity firms and institutional investors have also entered the sport, attracted by rising franchise valuations, revenue stability, and the scarcity value of team slots.** These deep-pocketed owners often provide financial resilience during underperforming seasons, absorbing losses while positioning teams for future competitive or commercial gains.⁴⁴⁴ This logic was reflected in comments by Red Bull Racing's team principal Christian Horner during a 2023 CNBC interview. When asked whether the team was a profitable investment, Horner framed the question in terms of brand recognition rather than financial returns, arguing that, we believed based on his response, the global exposure delivered by Formula One would cost far more if replicated through traditional advertising.⁴⁴⁵ He further noted that sponsorship growth and Formula One's introduction of cost cap were driving a sharp increase in the intrinsic value of Formula One teams.⁴⁴⁶ Implicitly, we believe this suggests that many teams, viewed on a standalone basis, might either be marginally profitable or significantly less lucrative than public perceptions might suggest.

A similar logic has applied elsewhere on the grid. In 2014, Mercedes was estimated to have incurred losses of approximately \$117 million during the season. Toto Wolff, the team principal, later explained:

"We are on plan of what Daimler expects from the team. You must just not forget how much the marketing benefit and the branding benefit is of the Formula One exercise. **We had \$3 billion of marketing value compared to our spending.** One thing is clear, we are trying to be very efficient and the pressure from the Daimler mother company is always on and we are on a downward slope in terms of our costs... Nevertheless, the value we achieve in racing in Formula One makes sense economically to Mercedes and our partners."⁴⁴⁷

The annual reports of Mercedes Formula One Team filed with the U.K. register provide an instructive case study that closely reflects the dynamics Toto Wolff has described. However, it is worth noting that Mercedes has been one of the top teams in recent years and thus its financials might not reflect those of other teams, especially among the lower ranking competitors.

Mercedes re-entered Formula One as a works team in 2010 after acquiring Brawn GP, marking its return to the championship following its withdrawal as a constructor in 1955 and its later reappearance solely as an engine supplier from 1994. Available disclosures indicate that from 2010 through 2024, the team's revenue grew from approximately \$193 million to \$805 million, representing a CAGR of roughly 11%. While detailed segment disclosures, such as the evolution of sponsorship, prize money, and other income streams, are not publicly available, the overall financial trajectory is clear. The team operated at a loss from 2010 through 2015, but its operating performance began to improve meaningfully after competitive success on track. Following its first Constructors' Championship win in 2014, Mercedes' revenue rose sharply, increasing by around 35% from approximately \$242 million in 2014 to \$326 million in 2015, driven "higher sponsorship revenue and increased income."⁴⁴⁸ **As Mercedes won championship consecutively from 2014 to 2021, revenue continued to grow year over year, accompanied by a steady expansion in operating profitability.**

The team turned its operating margin positive in 2016, maintaining margins of roughly 5% between 2016 and 2019. Profitability accelerated meaningfully in the post-2020 period, with operating margins rising from approximately 18% in 2021 to around 25% by 2024. We attribute this inflection largely to the introduction of Formula One's cost cap that year, a structural reform that materially improved capital efficiency and profitability across the sport. Further discussion of the cost cap follows shortly in this section. Over the period from 2016 through 2024, Mercedes generated an estimated

⁴⁴³ The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

⁴⁴⁴ The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

⁴⁴⁵ Original response: "It depends how you view it in terms of the recognition for the brand globally, what that would cost to advertise. Absolutely. It's a huge success in the amount that it's promoting the Red Bull brand. And I think as the sponsorship and partnerships and the income improve and cost caps take effect, we're seeing the intrinsic value of Formula 1 teams just increase dramatically." How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

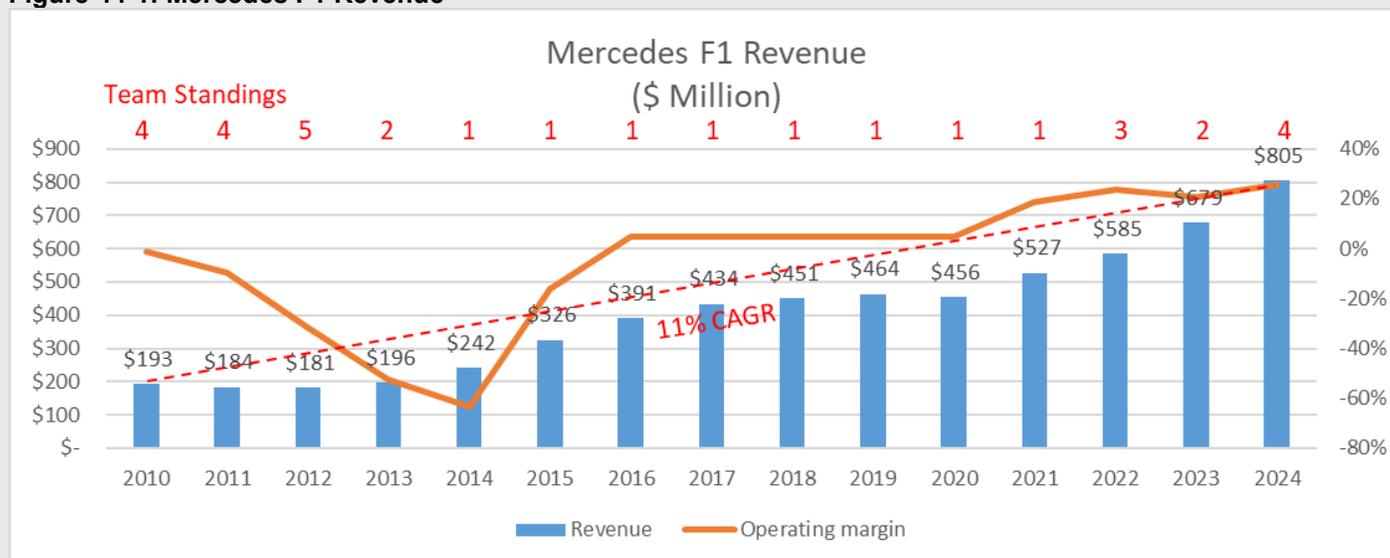
⁴⁴⁶ How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

⁴⁴⁷ Toto Wolff Exclusive: Behind the Mercedes Dominance. <https://f1i.com/magazine/29314-toto-wolff-exclusive-behind-the-mercedes-dominance.html>

⁴⁴⁸ Mercedes-Benz Grand Prix Limited Annual Report 2015.

median return on invested capital of roughly 15% and a return on total capital employed of approximately 19%, with both metrics exhibiting a clear upward trend beginning in 2021, coinciding with the introduction of cost cap.

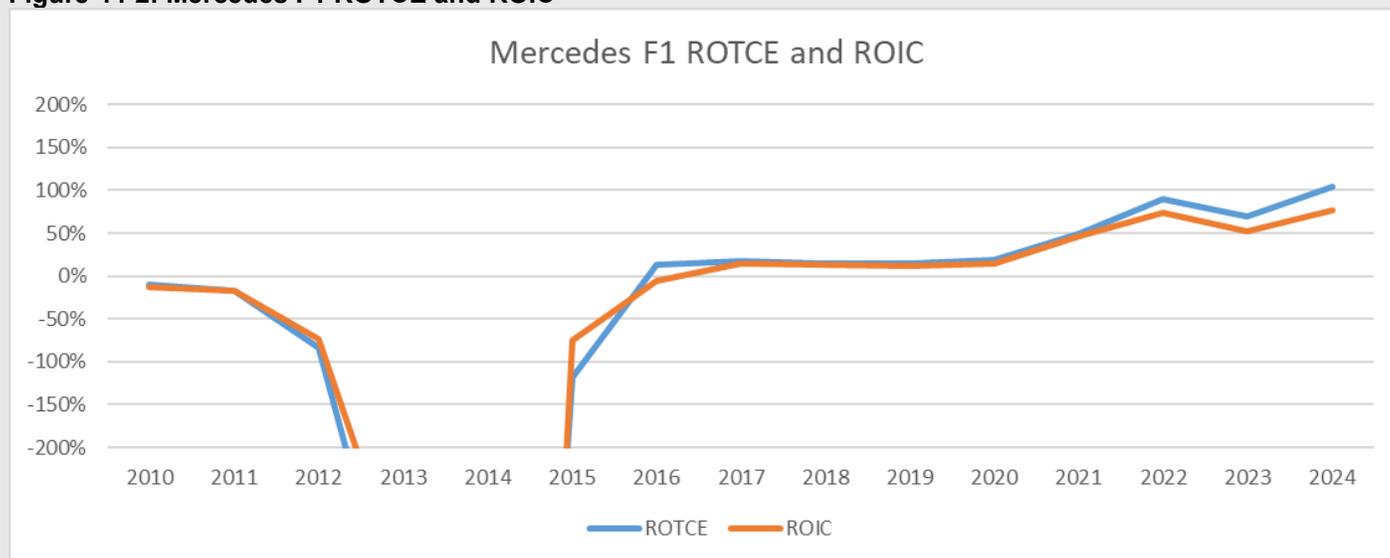
Figure 44-1: Mercedes F1 Revenue⁴⁴⁹



Note:

1. Original financial figures were reported in British pounds. For comparability, we translated them into USD using the average exchange rate for each respective year.⁴⁵⁰

Figure 44-2: Mercedes F1 ROTCE and ROIC⁴⁵¹



Notes:

1. Part of the above chart is cut off due to extreme value.
2. The underlying ratios shown are estimates derived from the annual reports of Mercedes-Benz Grand Prix Limited.
3. We typically calculate ROTCE as EBIT divided by the sum of net working capital and net fixed assets, that is, EBIT / ((Current Assets – Cash) – (Current Liabilities – Short-Term Debt) + Net Fixed Assets). However, based on the company’s disclosure format in its annual report, we instead approximated ROTCE as EBIT divided by (Net Current Assets – Cash + Short-Term Debt) + Tangible Assets.
4. We typically calculate ROIC as EBIT * (1 – Effective Tax Rate) / (Total Assets – Cash – Non-Interest Bearing Short-Term Liabilities). However, based on the company’s disclosure format in its annual report, we approximated its ROIC as EBIT * (1 – Effective Tax Rate) / (Shareholders’ Equity + STD + LTD – Cash), where debt includes money received from parent and associated companies.

⁴⁴⁹ Mercedes-Benz Grand Prix Limited Annual Report 2010 – 2024; Formula One Team Standings 2010 – 2024.

⁴⁵⁰ Data Explorer. IMF. [https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER\(4.0.1\)](https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER(4.0.1))

⁴⁵¹ Mercedes-Benz Grand Prix Limited Annual Report 2010 – 2024.

The founder of the Haas team articulated a similar rationale at the team's launch in 2015. His primary motivation for building a Formula One team from scratch was to internationalize Haas Automation, which had over \$1 billion revenue in 2014,⁴⁵² and elevate its global brand profile. **In an interview with CNN, he remarked that if Formula One exposure helped his company generate an additional \$1 billion in sales, the investment would justify itself, adding that mere association with sport could elevate a previously unknown brand to global prominence.**⁴⁵³ Since its debut, Haas F1 Team has generally finished in the lower half of the championship standings, reinforcing the idea that direct economic benefits (e.g., prize, sponsorship) from on-track success is not always the primary motivation for participation.⁴⁵⁴

On the cost side, operating a Formula One team remains an inherently expensive endeavor. Teams build their cars largely from scratch each season while maintaining large organizations spanning drivers, engineering, operations, marketing, and commercial functions,⁴⁵⁵ **making Formula One “the only form of motorsport in the world that requires a team to design and build their own car to enter.”**⁴⁵⁶ Among top-performing teams, roughly 70% of a car is manufactured in-house, with the remainder supplied by technical partners. For example, in 2022, Mercedes reportedly incurred operating costs of approximately \$400 million against revenues of around \$600 million. Developing a competitive Formula One car alone is estimated to cost roughly \$50 million, with additional millions required for manufacturing, testing, and race operations. R&D represents the single largest cost category, although teams do not disclose detailed breakdowns. While sponsorship contracts can span five to ten years, providing some revenue stability, continued on-track performance is essential to attracting and retaining such agreements.

To address growing cost disparities and improve competitive balance, Formula One and the FIA introduced a cost cap in 2021. Prior to its implementation, leading teams routinely spent in excess of \$400 million annually,⁴⁵⁷ far outpacing smaller competitors. **The budget cap was initially set at \$145 million and reduced to \$135 million by 2023,**⁴⁵⁸ **excluding driver salaries, marketing expenses, and certain capital costs.** In the past the budget could easily go over \$300 million with hundreds of members of workforce.⁴⁵⁹ The big teams have always outspent and outperformed smaller teams. This spending gap can exceed \$50 million or more. Smaller teams must stretch their dollars carefully just to stay in the mid-pack.⁴⁶⁰ **While financial inequality has not disappeared, the cost cap has constrained runaway spending and shifted competitive emphasis toward efficiency, innovation, and operational discipline.** Teams are now forced to prioritize aerodynamic development, materials science, and digital simulation within fixed budgets.⁴⁶¹ Historically dominant teams, such as Ferrari, Mercedes, and Red Bull, continue to benefit from superior infrastructure and expertise,⁴⁶² but the spending gap between front-runners and midfield teams has narrowed, promoting greater financial sustainability across the grid. **A few team principals during a CNBC interview confirmed that some of them has become profitable since the introduction of budget cap, from losing seven to nine figures previously, an approach similar to salary caps that American sports leagues introduced,**

⁴⁵² Haas Automation Tops \$1B Mark. <https://www.todaysmedicaldevelopments.com/news/haas-automation-2014-best-year-machine-tools-manufacturing-medical-2615/>

⁴⁵³ U.S. Tycoon Gene Haas Wants to Race to Billions with Formula One Team. CNN.

<https://www.cnn.com/2014/10/22/sport/motorsport/formula-one-gene-haas-wants-to-race-to-billions-with-formula-one-team>

⁴⁵⁴ 2016 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2016/team>; 2017 TEAMS' STANDINGS.

<https://www.formula1.com/en/results/2017/team>; 2018 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2018/team>;

2019 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2019/team>; 2020 TEAMS' STANDINGS.

<https://www.formula1.com/en/results/2020/team>; 2021 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2021/team>;

2022 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2022/team>; 2023 TEAMS' STANDINGS.

<https://www.formula1.com/en/results/2023/team>; 2024 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2024/team>;

2025 TEAMS' STANDINGS. <https://www.formula1.com/en/results/2025/team>.

⁴⁵⁵ How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

⁴⁵⁶ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁴⁵⁷ F1's Budget Cap Controversy Explained. ESPN. https://www.espn.com/f1/story/_/id/34723173/f1-budget-cap-controversy-explained-happens-team-did-overspend-2021

⁴⁵⁸ Do F1 Teams Make Money – A Breakdown of Revenue and Costs. <https://www.sportsboom.com/motor-sports/do-f1-teams-make-money-a-breakdown-of-revenue-and-costs/>

⁴⁵⁹ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁴⁶⁰ The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

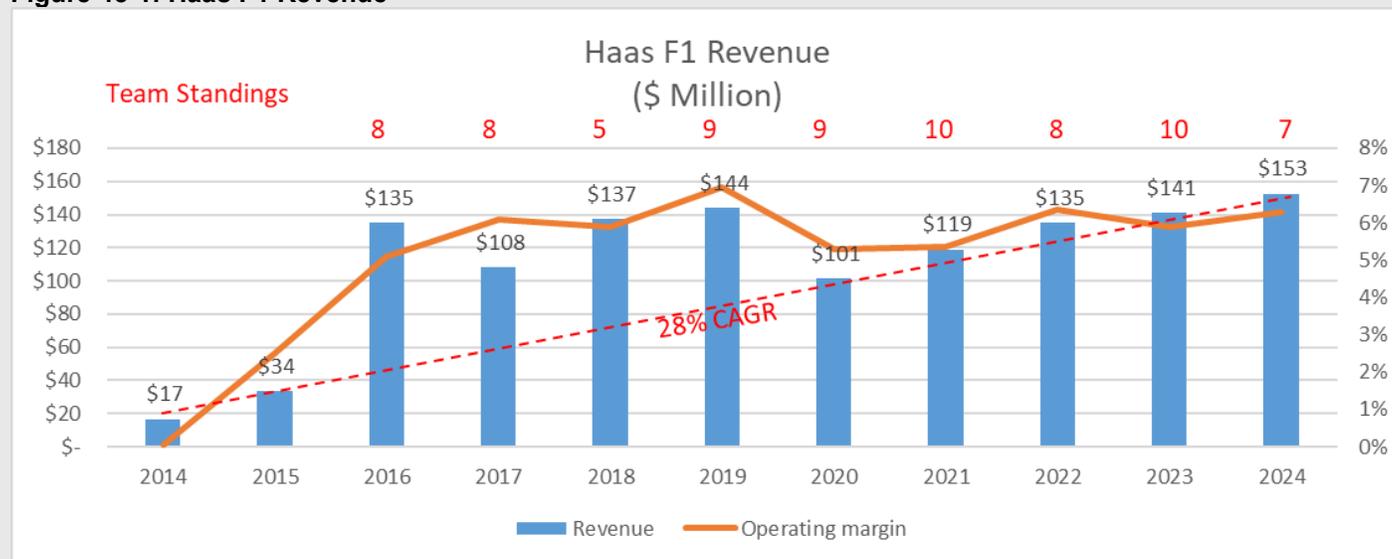
⁴⁶¹ The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

⁴⁶² The Economics of a Formula 1 Team. <https://www.grandprix247.com/formula-1-news/the-economics-of-a-formula-1-team>

making the businesses more sustainable.⁴⁶³ Even two years after introducing the budget cap, some smaller team such as Haas were still unprofitable and hoped to become so in the next two years.⁴⁶⁴

Although we were able to obtain annual reports for several Formula One teams with U.K.-registered entities, including Haas, McLaren, Red Bull Racing, Alpine, and Williams, we remain cautious about whether these filings fully reflect each team's overall financial position. In some cases, the reports may exclude related businesses not consolidated within the reporting entity. For example, Haas demonstrate this point. While the team is headquartered in the United States and its principal has indicated that it operated at a loss in 2023,⁴⁶⁵ the available filings from the U.K. registry present a different trajectory at the entity level. Since its founding in 2014 and entry into Formula One in the 2016 season, reported revenue has increased from approximately \$17 million to \$153 million, representing near 28% CAGR. Over the same period, operating margin expanded from roughly 0.1% to about 6%, with median ROTCE and ROIC both landing in the mid-teens.

Figure 45-1: Haas F1 Revenue⁴⁶⁶



Note:

1. Original financial figures were reported in British pounds. For comparability, we translated them into USD using the average exchange rate for each respective year.⁴⁶⁷

⁴⁶³ How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

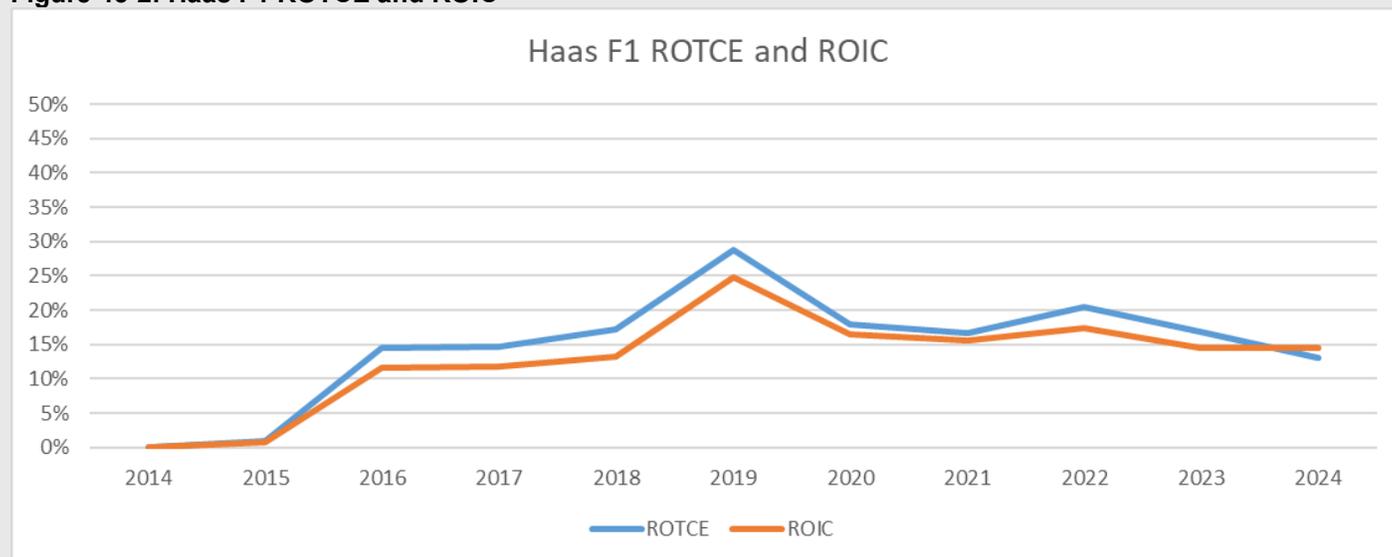
⁴⁶⁴ How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

⁴⁶⁵ How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

⁴⁶⁶ Haas Formula UK Limited Annual Report 2014 – 2024.

⁴⁶⁷ Data Explorer. IMF. [https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER\(4.0.1\)](https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER(4.0.1))

Figure 45-2: Haas F1 ROTCE and ROIC⁴⁶⁸



Notes:

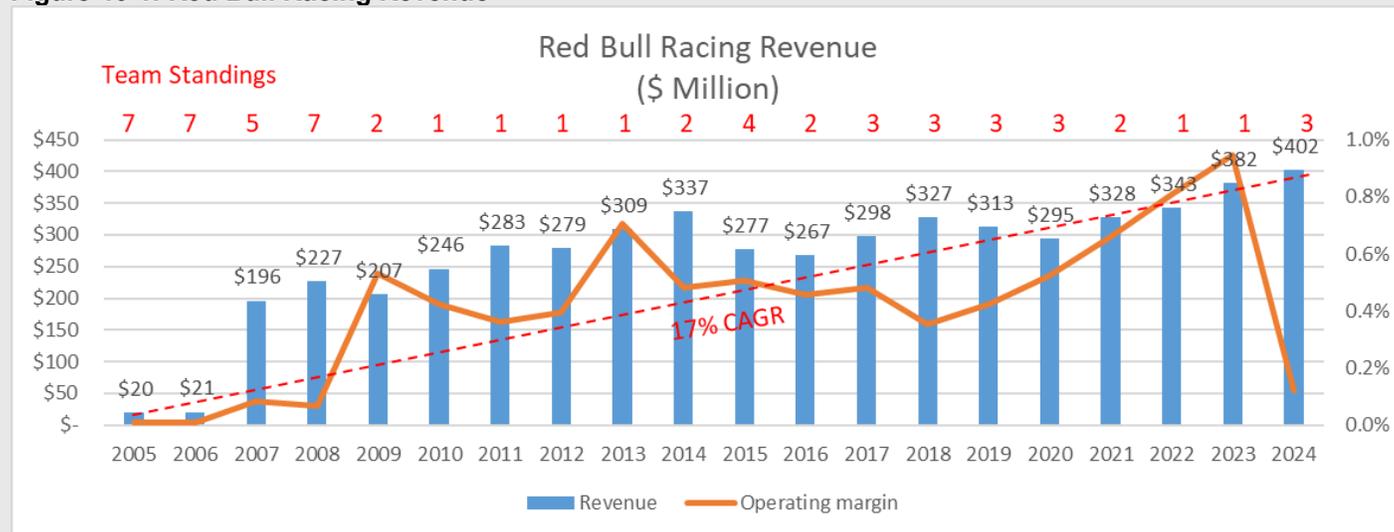
1. The underlying ratios shown are estimates derived from the annual reports of Haas Formula UK Limited.
2. We typically calculate ROTCE as EBIT divided by the sum of net working capital and net fixed assets, that is, $EBIT / ((Current\ Assets - Cash) - (Current\ Liabilities - Short-Term\ Debt) + Net\ Fixed\ Assets)$. However, based on the company's disclosure format in its annual report, we instead approximated ROTCE as EBIT divided by $(Net\ Current\ Assets - Cash + Short-Term\ Debt) + Tangible\ Assets$.
3. We typically calculate ROIC as $EBIT * (1 - Effective\ Tax\ Rate) / (Total\ Assets - Cash - Non-Interest\ Bearing\ Short-Term\ Liabilities)$. However, based on the company's disclosure format in its annual report, we approximated its ROIC as $EBIT * (1 - Effective\ Tax\ Rate) / (Shareholders'\ Equity + STD + LTD - Cash)$, where debt includes money received from parent and associated companies.

Red Bull Racing presents a contrasting profile. Following Red Bull GmbH's full acquisition of Jaguar Racing in late 2004, the team's revenue grew from approximately \$21 million in its first season under new ownership in 2005 to roughly \$400 million by 2024, equivalent to a CAGR of about 17%. Despite this growth, operating profitability has remained minimal, with margins consistently below 1% and both the average and median hovering near 0.4%, based on reported financials. Median ROTCE and ROIC over the past two decades have similarly settled in the mid-single-digit range. Taken together, we believe these figures may suggest that the team functions less as a standalone profit center and more as a strategic, high-cost marketing platform for Red Bull GmbH, a role aligned with the broader brand-building objectives discussed earlier by its team principal⁴⁶⁹ rather than strict profit maximization.

⁴⁶⁸ Haas Formula UK Limited Annual Report 2014 – 2024.

⁴⁶⁹ Original response: "It depends how you view it in terms of the recognition for the brand globally, what that would cost to advertise. Absolutely. It's a huge success in the amount that it's promoting the Red Bull brand. And I think as the sponsorship and partnerships and the income improve and cost caps take effect, we're seeing the intrinsic value of Formula 1 teams just increase dramatically." How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSOQ5s&t=32s

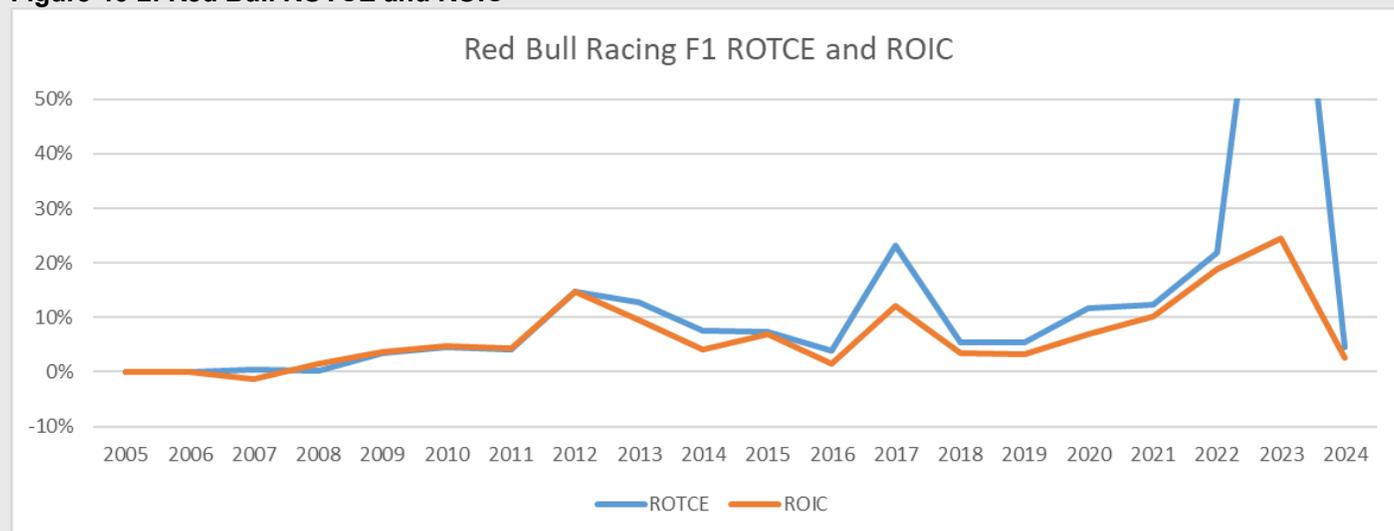
Figure 46-1: Red Bull Racing Revenue⁴⁷⁰



Note:

- Original financial figures were reported in British pounds. For comparability, we translated them into USD using the average exchange rate for each respective year.⁴⁷¹

Figure 46-2: Red Bull ROTCE and ROIC⁴⁷²



Notes:

- Part of the above chart is cut off due to extreme value.
- The underlying ratios shown are estimates derived from the annual reports of Red Bull Racing Ltd.
- We typically calculate ROTCE as EBIT divided by the sum of net working capital and net fixed assets, that is, EBIT / ((Current Assets – Cash) – (Current Liabilities – Short-Term Debt) + Net Fixed Assets). However, based on the company’s disclosure format in its annual report, we instead approximated ROTCE as EBIT divided by (Net Current Assets – Cash + Short-Term Debt) + Tangible Assets.
- We typically calculate ROIC as EBIT * (1 – Effective Tax Rate) / (Total Assets – Cash – Non-Interest Bearing Short-Term Liabilities). However, based on the company’s disclosure format in its annual report, we approximated its ROIC as EBIT * (1 – Effective Tax Rate) / (Shareholders’ Equity + STD + LTD – Cash), where debt includes money received from parent and associated companies.

As one of the oldest teams on the Formula One grid, McLaren entered the sport in 1966. From 1981, the earliest year for which public data is available, through 2024, the entity operating the team increased its revenue from approximately \$5 million to \$678 million, representing a CAGR of about 12%. Despite this expansion, operating margins have

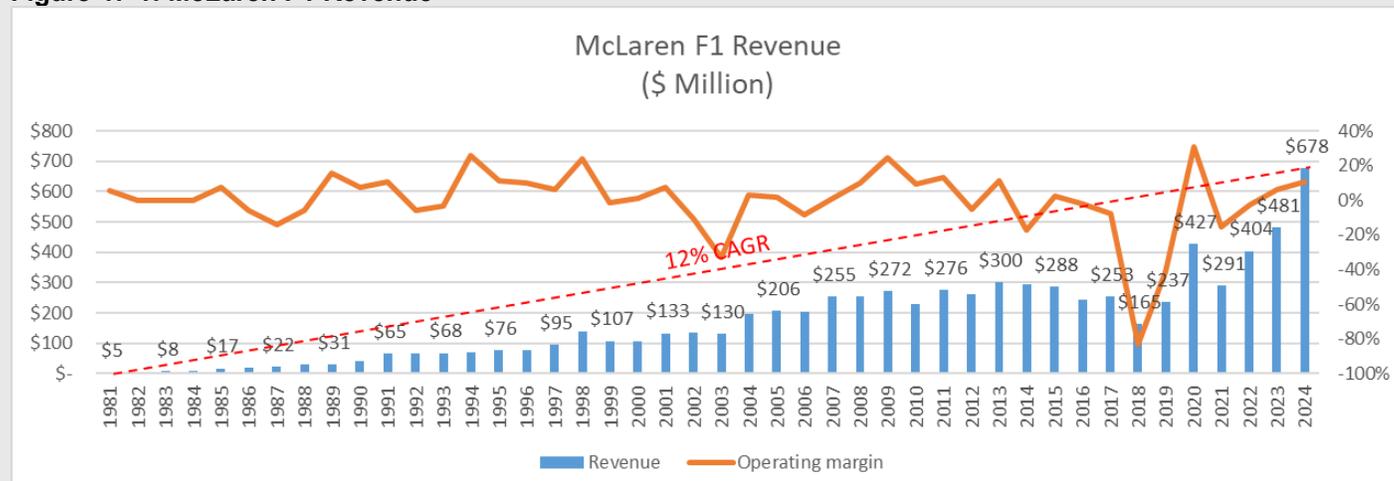
⁴⁷⁰ Red Bull Racing Ltd. Annual Report 2005 – 2024.

⁴⁷¹ Data Explorer. IMF. [https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER\(4.0.1\)](https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER(4.0.1))

⁴⁷² Red Bull Racing Ltd. Annual Report 2005 – 2024.

fluctuated significantly over the decades, with a median of roughly 1%, while both median ROTCE and ROIC have remained in the low single digits.

Figure 47-1: McLaren F1 Revenue⁴⁷³

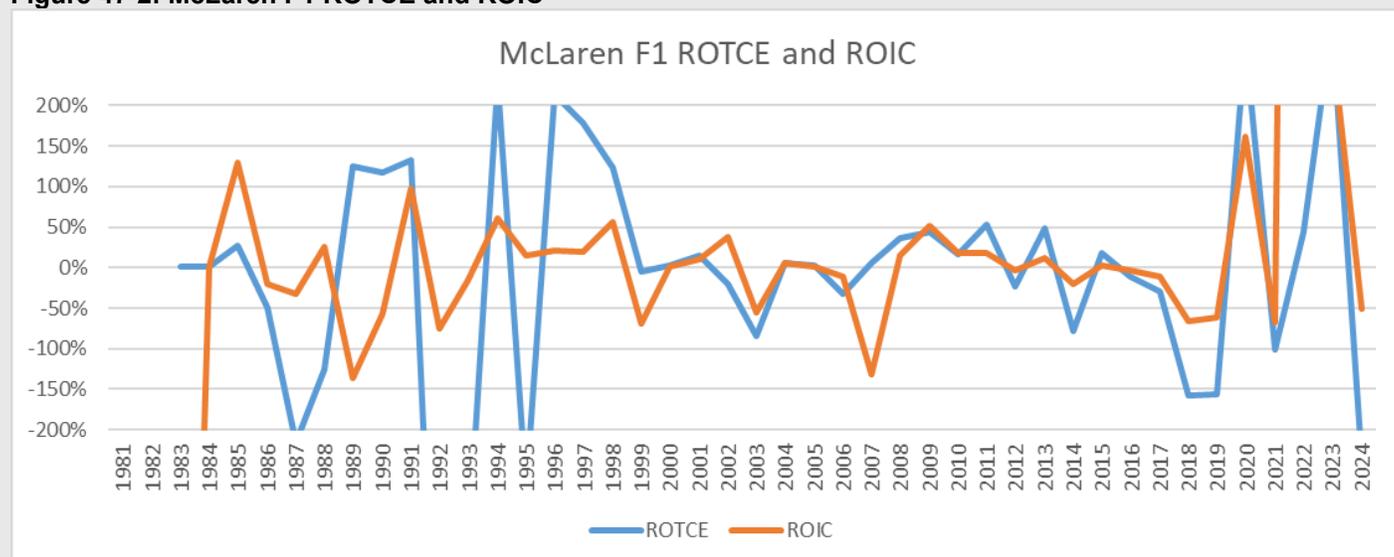


	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Team Standing	6	2	5	1	1	2	2	1	1	1	1	2	2	4	4	4	4	1	2	2	2	3
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Team Standing	3	5	2	3	DQ	2	3	2	2	3	5	5	9	6	9	6	4	3	4	5	4	1

Note:

1. Original financial figures were reported in British pounds. For comparability, we translated them into USD using the average exchange rate for each respective year.⁴⁷⁴

Figure 47-2: McLaren F1 ROTCE and ROIC⁴⁷⁵



Notes:

1. Part of the above chart is cut off due to extreme value.
2. The underlying ratios shown are estimates derived from the annual reports of McLaren Racing Limited.
3. We typically calculate ROTCE as EBIT divided by the sum of net working capital and net fixed assets, that is, EBIT / ((Current Assets – Cash) – (Current Liabilities – Short-Term Debt) + Net Fixed Assets). However, based on the company’s disclosure format in its annual report, we instead approximated ROTCE as EBIT divided by (Net Current Assets – Cash + Short-Term Debt) + Tangible Assets.
4. We typically calculate ROIC as EBIT * (1 – Effective Tax Rate) / (Total Assets – Cash – Non-Interest Bearing Short-Term Liabilities). However, based on the company’s disclosure format in its annual report, we approximated its

⁴⁷³ McLaren Racing Limited Annual Report 1981 – 2024.

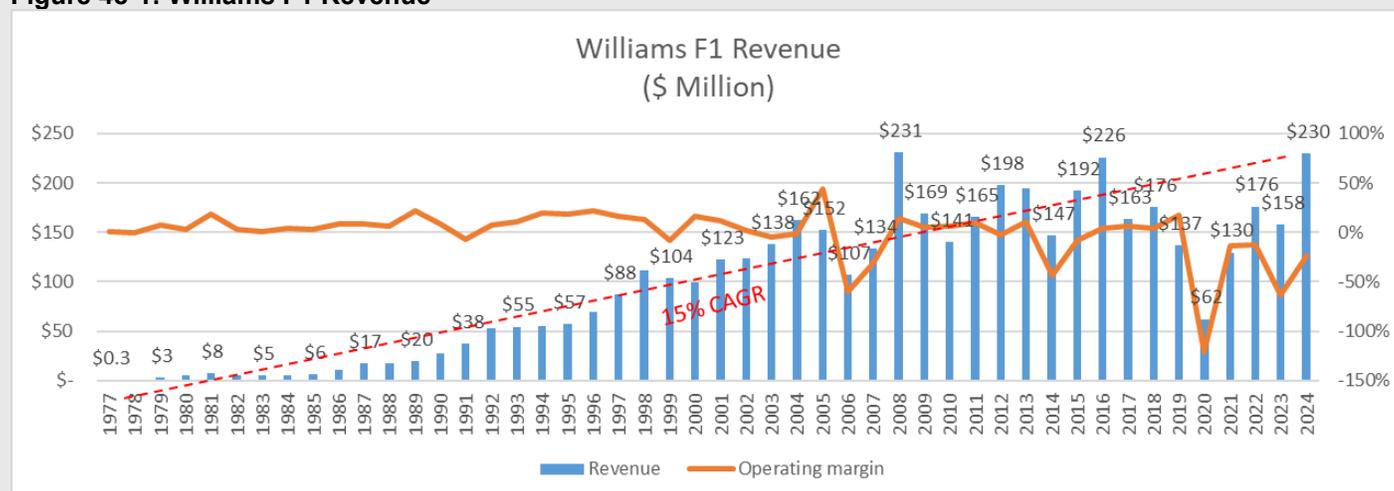
⁴⁷⁴ Data Explorer. IMF. [https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER\(4.0.1\)](https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER(4.0.1))

⁴⁷⁵ McLaren Racing Limited Annual Report 1981 – 2024.

ROIC as EBIT * (1 – Effective Tax Rate) / (Shareholders’ Equity + STD + LTD – Cash), where debt includes money received from parent and associated companies.

Williams entered Formula One in the late 1970s as an independent constructor under Williams Grand Prix Engineering. From 1977 to 2024, the entity operating the team is estimated to have grown revenue from approximately \$0.3 million to about \$230 million, implying a CAGR of roughly 15%. Like many teams, Williams has experienced pronounced volatility in operating margins, posting an average of around -1% and a median near 5% over the decades. However, the long-term trajectory has trended downward, reflecting the team’s competitive position in history – dominant performances in the 1980s and 1990s, when it frequently topped the grid, potentially supported relatively stable sponsorship and prize-money inflows, whereas more recent seasons have seen the team appear at the bottom of the standings, placing pressure on financial consistency. Estimated median ROTCE and ROIC have historically been in the high teens, but these returns also show a clear decline in recent years, broadly mirroring the team’s on-track struggles.

Figure 48-1: Williams F1 Revenue⁴⁷⁶



	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Team Standing		9	2	1	1	4	4	6	4	1	1	7	2	4	2	1	1	1	2	1	1	3	5	3
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Team Standing	3	2	2	4	5	8	4	8	7	6	9	8	9	3	3	5	5	10	10	10	8	10	7	9

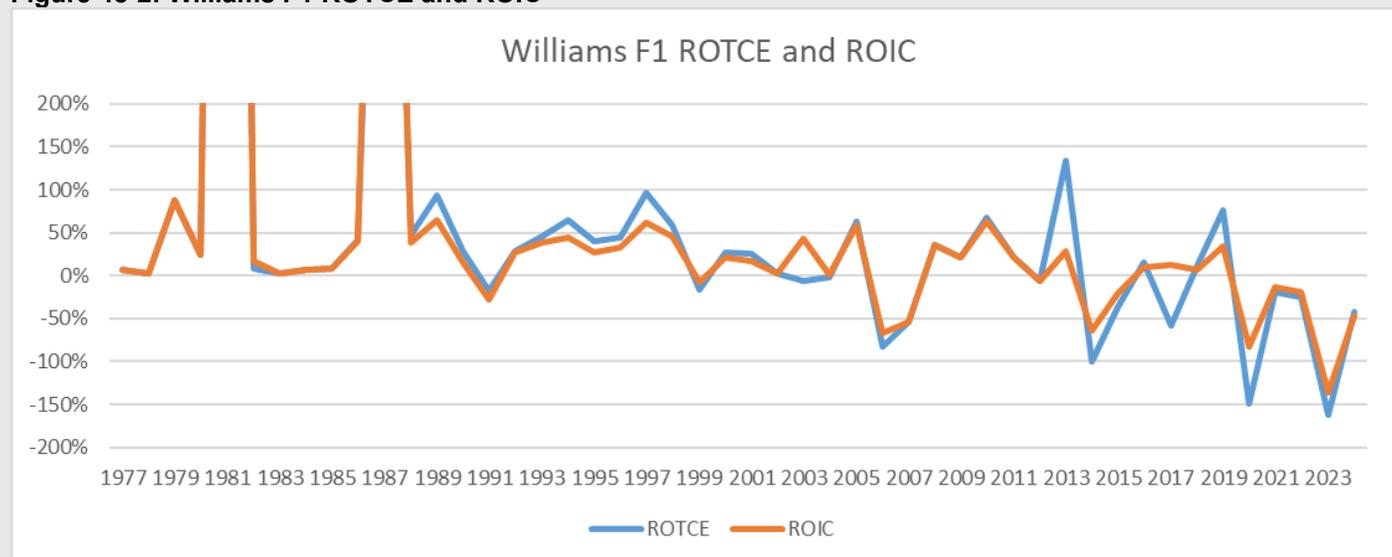
Note:

- Original financial figures were reported in British pounds. For comparability, we translated them into USD using the average exchange rate for each respective year.⁴⁷⁷

⁴⁷⁶ Williams Grand Prix Engineering Limited Annual Report 1977 – 2024.

⁴⁷⁷ Data Explorer. IMF. [https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER\(4.0.1\)](https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER(4.0.1))

Figure 48-2: Williams F1 ROTCE and ROIC⁴⁷⁸



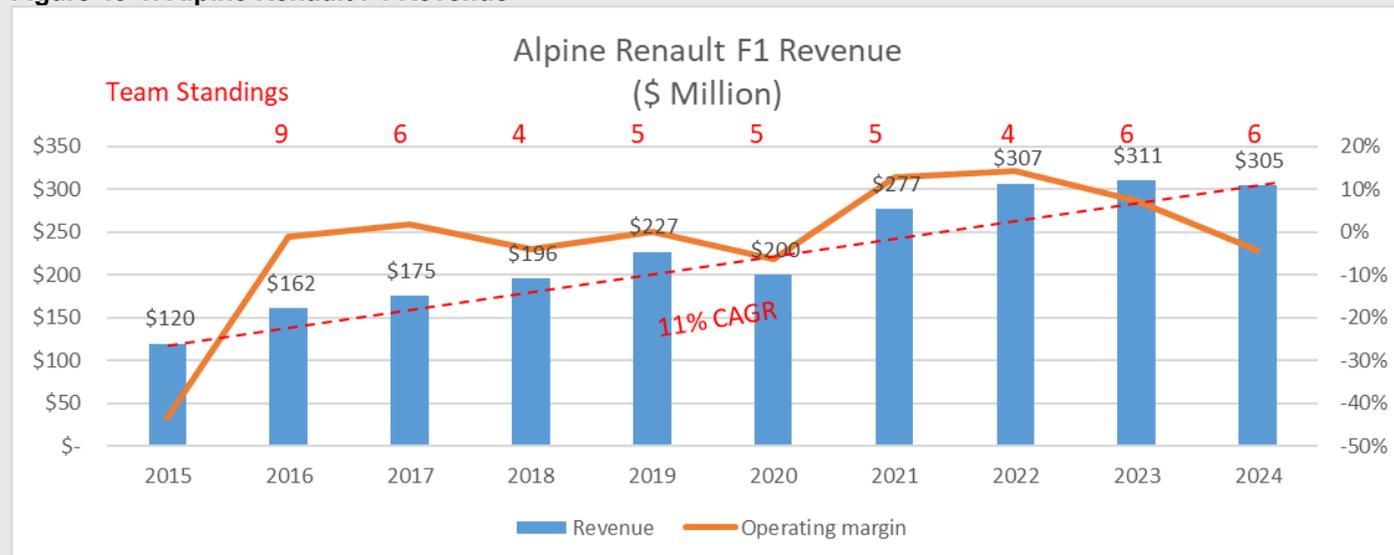
Notes:

1. Part of the above chart is cut off due to extreme value.
2. The underlying ratios shown are estimates derived from the annual reports of Williams Grand Prix Engineering Limited.
3. We typically calculate ROTCE as EBIT divided by the sum of net working capital and net fixed assets, that is, $EBIT / ((Current\ Assets - Cash) - (Current\ Liabilities - Short-Term\ Debt) + Net\ Fixed\ Assets)$. However, based on the company's disclosure format in its annual report, we instead approximated ROTCE as EBIT divided by $(Net\ Current\ Assets - Cash + Short-Term\ Debt) + Tangible\ Assets$.
4. We typically calculate ROIC as $EBIT * (1 - Effective\ Tax\ Rate) / (Total\ Assets - Cash - Non-Interest\ Bearing\ Short-Term\ Liabilities)$. However, based on the company's disclosure format in its annual report, we approximated its ROIC as $EBIT * (1 - Effective\ Tax\ Rate) / (Shareholders'\ Equity + STD + LTD - Cash)$, where debt includes money received from parent and associated companies.

Alpine entered Formula One as a constructor at the start of the 2021 season, following the rebranding of the Renault F1 Team to promote the French manufacturer's specialized brand for high-performance sports cars. From 2015, one year prior to Renault's return to the sport, through 2024, the team increased revenue from approximately \$120 million to more than \$300 million, representing a CAGR of nearly 11%. While the team has historically operated at a loss, with a median operating margin of about -23%, profitability has shown a gradual improving trend in recent years.

⁴⁷⁸ Williams Grand Prix Engineering Limited Annual Report 1977 – 2024.

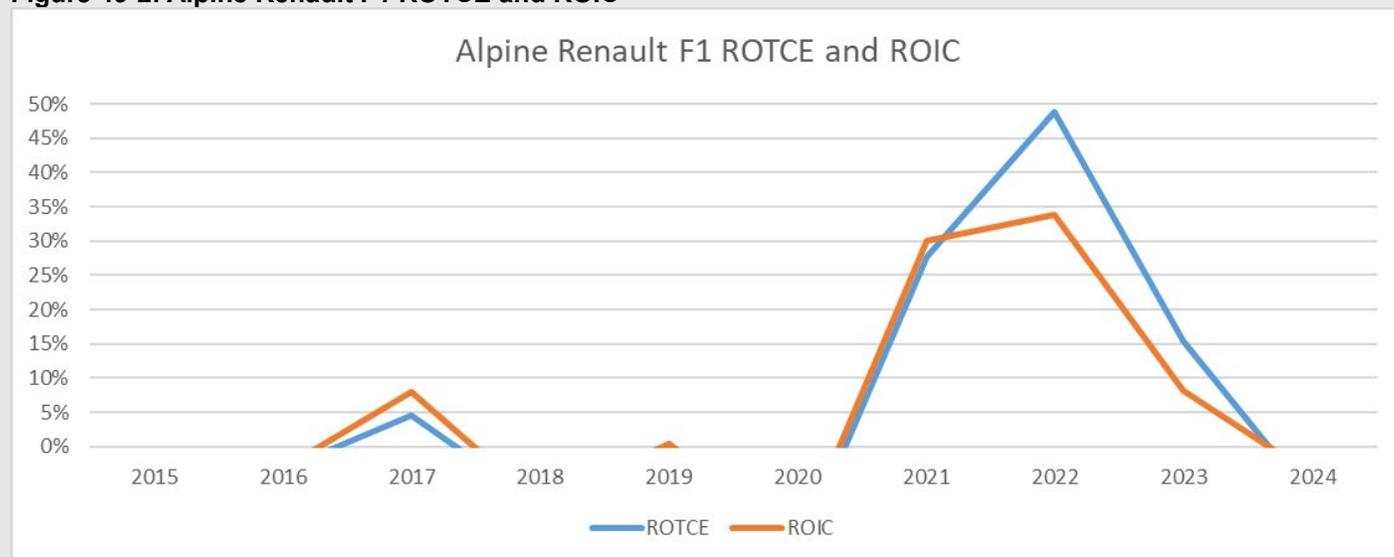
Figure 49-1: Alpine Renault F1 Revenue⁴⁷⁹



Note:

1. Original financial figures were reported in British pounds. For comparability, we translated them into USD using the average exchange rate for each respective year.⁴⁸⁰

Figure 49-2: Alpine Renault F1 ROTCE and ROIC⁴⁸¹



Notes:

1. Part of the above chart is cut off due to extreme value.
2. The underlying ratios shown are estimates derived from the annual reports of Renault Sport Racing Limited and Alpine Racing Limited.
3. We typically calculate ROTCE as EBIT divided by the sum of net working capital and net fixed assets, that is, EBIT / ((Current Assets – Cash) – (Current Liabilities – Short-Term Debt) + Net Fixed Assets). However, based on the company’s disclosure format in its annual report, we instead approximated ROTCE as EBIT divided by (Net Current Assets – Cash + Short-Term Debt) + Tangible Assets.
4. We typically calculate ROIC as EBIT * (1 – Effective Tax Rate) / (Total Assets – Cash – Non-Interest Bearing Short-Term Liabilities). However, based on the company’s disclosure format in its annual report, we approximated its ROIC as EBIT * (1 – Effective Tax Rate) / (Shareholders’ Equity + STD + LTD – Cash), where debt includes money received from parent and associated companies.

⁴⁷⁹ Renault Sport Racing Limited Annual Report 2015 – 2019; Alpine Racing Limited Annual Report 2020 – 2024.

⁴⁸⁰ Data Explorer. IMF. [https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER\(4.0.1\)](https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER(4.0.1))

⁴⁸¹ Renault Sport Racing Limited Annual Report 2015 – 2019; Alpine Racing Limited Annual Report 2020 – 2024.

Aston Martin returned to Formula One as a constructor in 2021, having previously competed only briefly during the 1959 and 1960 seasons. The entity operating the team increased its revenue from approximately \$23 million in 2020 to \$359 million in 2024. Despite this growth, the team has reported negative operating margins each year.

Figure 50: Aston Martin F1 Revenue⁴⁸²



Note:

1. Original financial figures were reported in British pounds. For comparability, we translated them into USD using the average exchange rate for each respective year.⁴⁸³

Driver salaries remain a major expense to individual teams, ranging from approximately \$1 million to over \$55 million per year depending on drivers' experience and marketability.⁴⁸⁴ For example, an early 2026 third-party report suggests that while some rookie drivers earn under \$1 million annually, top drivers such as Max Verstappen and Lewis Hamilton may receive between \$60 million and \$70 million.⁴⁸⁵ Beyond drivers, teams employ large multidisciplinary workforces. In the 1970s, a Formula One team might have employed fewer than 20 people. By 2024, leading teams such as Mercedes reportedly employed around 1,400 staff,⁴⁸⁶ spanning engineering, aerodynamics, software development, operations, marketing, and strategy. Human capital has become one of the most critical, and costly, inputs in modern Formula One competition.

Despite the lack of comprehensive, publicly disclosed financial data, based on available information, we believe operating a Formula One team might have historically been a difficult and often unprofitable business. **Since the championship's inception in 1950, more than 100 teams have entered and exited the sport,⁴⁸⁷ many failing due to sustained financial losses.** Some estimates place the average tenure of a Formula One team at fewer than six years before exiting the grid or changing ownership, underscoring the sport's structural financial challenges.⁴⁸⁸

A 2015 Forbes analysis estimated that Ferrari was the only profitable team at the time, achieving a modest profit margin of approximately 4% on revenues of around \$450 million.⁴⁸⁹ The report concluded that Formula One teams rarely operate with profit as a primary objective; rather, breaking even is typically considered a best-case outcome. The analysis concluded that Formula One teams rarely operate with profitability as a primary objective; instead, merely breaking even is typically regarded as a best-case outcome. Team owners have historically justified investment in the

⁴⁸² AMR GP Limited Annual Report 2020 – 2024.

⁴⁸³ Data Explorer. IMF. [https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER\(4.0.1\)](https://data.imf.org/en/Data-Explorer?datasetUrn=IMF.STA:ER(4.0.1))

⁴⁸⁴ Do F1 Teams Make Money – A Breakdown of Revenue and Costs. <https://www.sportsboom.com/motor-sports/do-f1-teams-make-money-a-breakdown-of-revenue-and-costs/>

⁴⁸⁵ Salaries F1 drivers 2026. <https://racingnews365.com/f1-drivers-salaries-2026>

⁴⁸⁶ Foreword. Formula 1: The Official History.

⁴⁸⁷ Top 10... Defunct Formula 1 Teams. <https://www.goodwood.com/grr/f1/top-10...-defunct-formula-1-teams>

⁴⁸⁸ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁴⁸⁹ F1 Team Values – How The World's Top Racing Circuit Is Leaving Billions On The Table. Forbes.

<https://web.archive.org/web/20160316012719/https://www.forbes.com/sites/chris-smith/2015/12/14/f1-team-values-how-the-worlds-top-racing-circuit-is-leaving-billions-on-the-table/#6d8c5ec7fedf>

sport through global brand exposure and marketing value derived from Formula One's massive audience, in lieu of dividends. This dynamic helps explain why leading teams are willing to spend aggressively in pursuit of on-track success, and, conversely, why competitive balance has long been challenged, contributing to an increasingly pronounced divide between well-capitalized teams and the rest of the grids.

Over the years, Forbes has made repeated efforts to estimate the valuations and underlying economics of Formula One teams, with data available going back to 2010. Tracking consistent changes across individual teams is challenging, as Formula One has historically seen frequent team turnover driven by financial distress, ownership changes, and restructuring. For illustrative purposes, we focus on a select group of leading teams that have existed between 2010 and 2025. **As of 2025, Forbes estimates team valuations of approximately \$6.5 billion for Ferrari, \$6.0 billion for Mercedes, \$4.4 billion for McLaren, and \$4.35 billion for Red Bull Racing,⁴⁹⁰ implying CAGR of roughly 13%, 23%, 12%, and 21%, respectively.** Over the same period, team revenues increased to an estimated \$670 million for Ferrari, \$799 million for Mercedes, \$614 million for McLaren, and \$618 million for Red Bull Racing, corresponding to revenue CAGRs of approximately 5%, 15%, 6%, and 13%. Notably, all four teams were operating at a loss in 2009. By 2024, one year prior to the latest valuation estimates, each had achieved positive operating income, with Ferrari generating approximately \$80 million, Mercedes \$202 million, McLaren \$61 million, and Red Bull Racing \$26 million. These figures imply operating margins of roughly 12%, 25%, 10%, and 4%, respectively. Niki Lauda, who was the former non-executive chairman at Mercedes Formula One, noted that "teams must always be at the top of their game because if their competitiveness is compromised, so is there commercial success."⁴⁹¹ This sentiment highlights the connection between on-track performance and financial success, underscoring that leading teams tend to be more profitable, while those further down the grid may struggle financially and even face the risk of exiting the sport.

As of 2024, the latest Forbes estimates point to a wide profitability divide across the Formula One grid. The top four teams, Ferrari, Mercedes, McLaren, and Red Bull Racing, continued to dominate financially, each generating revenues of roughly \$600 million to \$800 million, with operating margins estimated 12%, 25%, 10%, and 4%, respectively.⁴⁹² By contrast, the remaining six teams delivered far weaker results. Two managed only modest profitability, with operating margins in the 2% to 6% range, while four operated at a loss. With revenues spanning around \$150 million to \$350 million, these teams underscore the polarized economics of modern Formula One, where financial strength is concentrated among a small group at the top, leaving midfield competitors structurally disadvantaged and potentially reinforcing a self-perpetuating cycle of competitive imbalance.

It is important to emphasize the figures cited above are therefore estimates compiled by Forbes involved third-party data and industry sources, and actual results may differ materially.⁴⁹³ Nonetheless, the data highlights a clear divergence within the sport – while leading teams have increasingly achieved scale, profitability, and valuation growth, many midfield and smaller teams, many of which have exited the sport over time, might have historically operated at persistent losses.

⁴⁹⁰ Forbes Formula 1's Most Valuable Teams 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/11/20/formula-1s-most-valuable-teams-2025/>

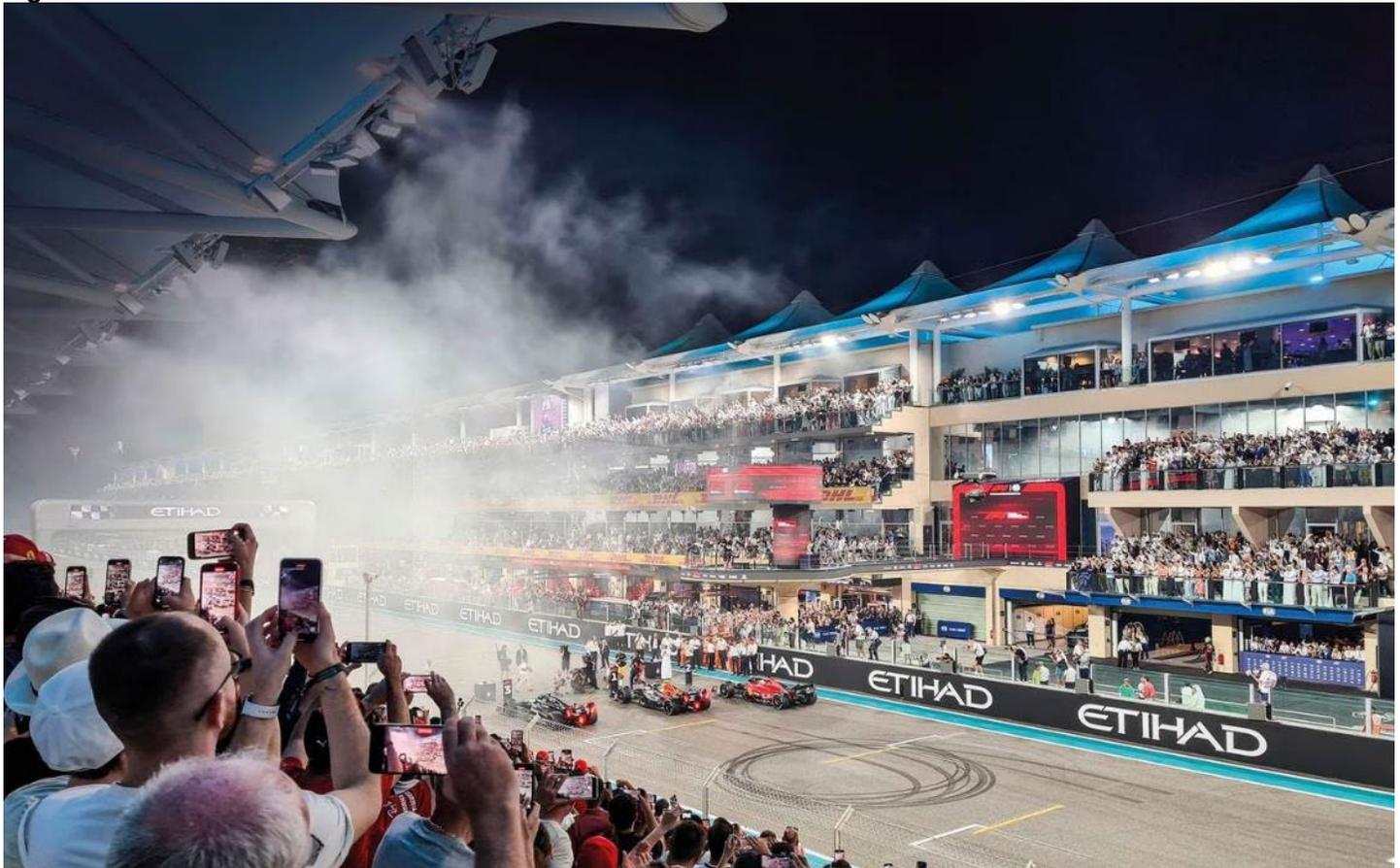
⁴⁹¹ Foreword. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁴⁹² Forbes Formula 1's Most Valuable Teams 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/11/20/formula-1s-most-valuable-teams-2025/>

⁴⁹³ Forbes Formula 1's Most Valuable Teams 2025 List. Forbes. <https://www.forbes.com/sites/brettknight/2025/11/20/formula-1s-most-valuable-teams-2025/>

In addition to race promotion, Formula One generates revenue from a range of ancillary activities, including logistics services for transporting cars and equipment to non-European races, television production services, support race organization, and limited direct ticket sales.⁴⁹⁴ A particularly important component of this category is premium hospitality, most notably the F1 Paddock Club. Offering prime trackside viewing, often located directly above the pit lane and team garages, the Paddock Club provides guests with some of the most immersive perspectives in the sport, including views of the start-finish line.⁴⁹⁵ Access is strictly controlled through highly coveted, credit-card-sized credentials worn around the neck, reinforcing the exclusivity of the experience. Once inside, the Paddock Club functions as far more than a hospitality suite. It is an extension of the global corporate boardroom, a space where sponsorships are negotiated, partnerships are formed, and where some senior executives, institutional investors, and decision-makers converge to do businesses.⁴⁹⁶ Unlike standard ticket sales, which primarily accrue to local race promoters, Formula One retains direct control over Paddock Club revenues, making it a strategically important and high-margin offering within the sport's commercial model. As of 2025, Paddock Club packages typically ranged from approximately £4,500 to £13,000 per event, with select races commanding five figures.⁴⁹⁷ This ability to consistently monetize exclusivity underscores Formula One's transformation from a pure sporting competition into a sophisticated luxury entertainment platform, where access itself has become a premium product.

Figure 51: Paddock Club at Yas Marina Circuit⁴⁹⁸



Formula One also derives revenue from affiliated racing series, including Formula 2, Formula 3, and the F1 ACADEMY.⁴⁹⁹ These championships serve as developmental platforms for emerging talent while expanding content offerings for

⁴⁹⁴ Liberty Media Annual Report 2017 – 2024.

⁴⁹⁵ Formula 1 – Paddock Club Redevelopment, Yas Marina Racetrack. BDP. <https://www.bdp.com/uk/projects/yas-marina-circuit-expansion-at-the-paddock-club>

⁴⁹⁶ Chapter 1. Performance at the Limit. Mark Jenkins, Ken Pasternak, and Richard West.

⁴⁹⁷ F1 Paddock Club: What's Included, How Much It Costs & How to Book. <https://motorsporttickets.com/blog/f1-paddock-club-whats-included-how-much-it-costs-and-how-to-book-tickets/>

⁴⁹⁸ Formula 1 – Paddock Club Redevelopment, Yas Marina Racetrack. BDP. <https://www.bdp.com/uk/projects/yas-marina-circuit-expansion-at-the-paddock-club>

⁴⁹⁹ Liberty Media Annual Report 2024.

broadcasters and sponsors. Collectively, they enhance fan engagement, strengthen the sport's talent pipeline, and further diversify Formula One's commercial base.

Valuation

When Liberty Media announced its acquisition of Formula One on September 7, 2016, completed and consolidated in January 2017,⁵⁰⁰ Formula One was valued at an enterprise value of approximately \$8.0 billion and an equity value of \$4.4 billion, despite generating a net loss at the time. Based on our estimates, the transaction implied a multiple of roughly 18x trailing twelve-month EBITDA.⁵⁰¹

Since then, Liberty Media has simplified its structure through the spin-offs of Braves Holdings in 2023 and Sirius XM in 2024.⁵⁰² As of June 30, 2025, Formula One accounted for more than 90% of Liberty Media's consolidated revenue, with the remainder consisting primarily of corporate revenue.⁵⁰³ This structure remained in place until July 3, 2025, when Liberty Media completed its acquisition of MotoGP, the premier world championship for motorcycle road racing regulated by Fédération Internationale de Motocyclisme (FIM).

Accordingly, as of June 30, 2025, Liberty Media's enterprise value and market capitalization should have largely reflected the market value of Formula One. That said, the MotoGP acquisition had been publicly announced as early as April 2024⁵⁰⁴ and remained subject to regulatory approval for an extended period, suggesting that market expectations related to the transaction may have already been partially priced into the company's public valuation.

By June 30, 2025, FactSet data indicated that Liberty Media, then deriving over 90% of its revenue from Formula One, had an enterprise value of approximately \$23.9 billion and a market capitalization of \$23.7 billion, representing CAGRs of roughly 14% and 22%, respectively, since the end of 2016, when Liberty Media first acquired Formula One. On the same data, Liberty Media had over 40x trailing twelve-month EBITDA and a net loss. Notably, Liberty Media has not paid a cash dividend on any class of its stock during this period.⁵⁰⁵

Formula One operated as a privately held organization from its inception in 1950 until its acquisition by Liberty Media in 2017, a public company that owned other businesses such as Sirius XM. As a result, publicly available information regarding the sport's strategy, operations, historical financial performance, financing, and valuation has been limited, especially before Liberty Media's acquisition. Our estimated valuation was based on limited public valuation information across non-Formula One sources – had Bernie Ecclestone retained his ownership stake from 2001, when he secured the sport's 100-year commercial rights for approximately \$360 million,⁵⁰⁶ through June 30, 2025 – when the market cap of Liberty Media, which derived over 90% revenue from Formula One Group following the spin-off of several other businesses in prior years and before acquiring MotoGP in July 2025,⁵⁰⁷ was around \$24 billion⁵⁰⁸ – the investment would have returned roughly a 65x, or an estimated 20% CAGR for more than two decades. This calculation assumes that the price paid for the commercial rights represented a reasonable proxy for the organization's equity value at the time.

⁵⁰⁰ Liberty Media Annual Report 2017.

⁵⁰¹ \$8.0 billion of enterprise value at the time of acquisition and approximately \$441 million EBITDA. Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; Liberty Media Proxy Statement 12/09/2016.

⁵⁰² Liberty Media Annual Report 2024.

⁵⁰³ Liberty Media Corporation Reports Second Quarter 2025 Financial Results.

<https://www.libertymedia.com/news/detail/564/liberty-media-corporation-reports-second-quarter-2025>

⁵⁰⁴ Liberty Media Announces Agreement to Acquire Commercial Rightsholder of MotoGP™.

<https://www.libertymedia.com/news/detail/527/liberty-media-announces-agreement-to-acquire-commercial>

⁵⁰⁵ FAQ. Liberty Media Corporation (FWONA). <https://www.libertymedia.com/investors/stock-data/faq>

⁵⁰⁶ F1 Is The Empire Bernie Ecclestone Built But Can It Thrive Without Him. The Guardian.

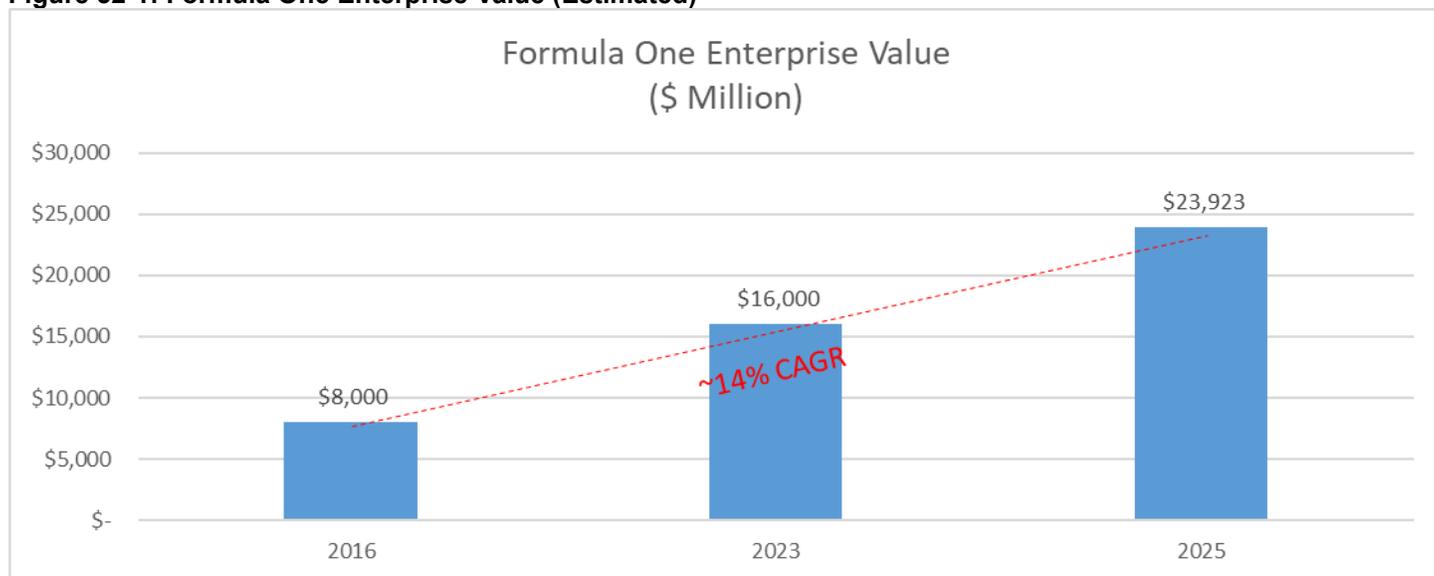
<https://www.theguardian.com/sport/2017/jan/24/f1-bernie-ecclestone-liberty-media-chief-executive>

⁵⁰⁷ For Q3 2025, ended September 30, Liberty Media consolidated MotoGP into its financial results. During the period, MotoGP contributed approximately 15% to 16% of total revenue and operating income, and more than 20% of the group's adjusted OIBDA (operating income before depreciation and amortization, a metric comparable to EBITDA). Liberty Media Corporation Reports Third Quarter 2025 Financial Results. <https://www.libertymedia.com/investors/news-events/press-releases/detail/571/liberty-media-corporation-reports-third-quarter-2025>

⁵⁰⁸ FactSet.

From Liberty Media's perspective, the acquisition has also delivered exceptional returns. Based on an equity purchase price of approximately \$4.4 billion at the beginning of 2017,⁵⁰⁹ the investment is estimated to have appreciated by more than 5x through June 30, 2025, corresponding to a CAGR nearly 22%. If Liberty Media's market capitalization as of January 31, 2026⁵¹⁰ is assumed to reflect the company's most recent quarterly results (Q3 2025, ended September 30, 2025), including MotoGP's post-consolidation contribution of roughly 15% of operating income, the adjusted market capitalization would indicate a return closer to 4x, or approximately a 16% CAGR.

Figure 52-1: Formula One Enterprise Value (Estimated)⁵¹¹



Notes:

1. The valuation data presented above is for illustrative purposes only. The 2016 figures are based on Liberty Media's announcement of its agreement to acquire Formula One, which was subsequently completed in January 2017. The 2023 valuation is derived from a CNBC interview conducted that year, and the specific valuation date is not known. The 2025 valuation is our estimate cited from FactSet, based on Liberty Media's market capitalization after the spin-off of its other businesses, at a time when Formula One accounted for more than 90% of the company's total revenue.⁵¹²

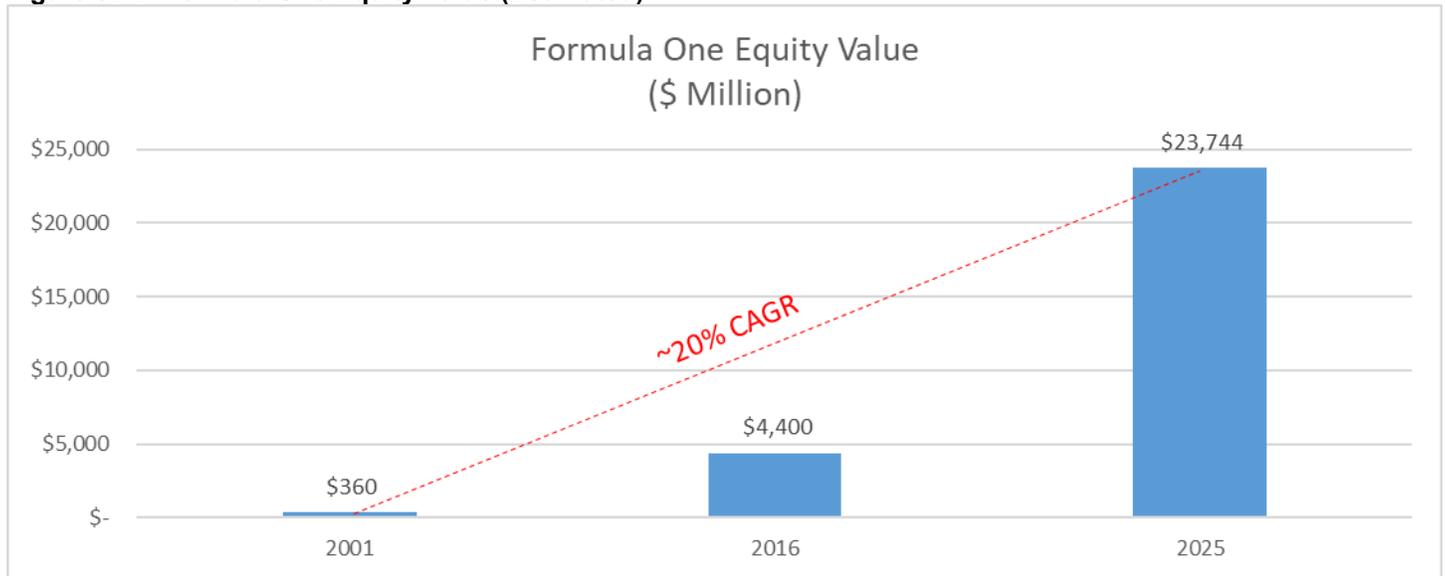
⁵⁰⁹ Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; Liberty Media Proxy Statement 12/09/2016.

⁵¹⁰ FactSet.

⁵¹¹ 2016: Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; 2023: How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSQ5s&t=32s; 2025: FactSet.

⁵¹² 2016: Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; 2023: How Formula 1 Teams Make Money – CNBA. YouTube. https://www.youtube.com/watch?v=fobN_XSQ5s&t=32s; 2025: FactSet.

Figure 52-2: Formula One Equity Value (Estimated)⁵¹³



Note:

1. The valuation data presented above is for illustrative purposes only. The 2001 figure reflects the price paid by Bernie Ecclestone for the acquisition of Formula One's 100-year commercial rights and does not necessarily represent the organization's equity value at the time. The 2016 figures are based on Liberty Media's announcement of its agreement to acquire Formula One, which was subsequently completed in January 2017. The 2025 valuation is our estimate cited from FactSet, based on Liberty Media's market capitalization after the spin-off of its other businesses, at a time when Formula One accounted for more than 90% of the company's total revenue.⁵¹⁴

⁵¹³ 2003: F1 Is The Empire Bernie Ecclestone Built But Can It Thrive Without Him. The Guardian.

<https://www.theguardian.com/sport/2017/jan/24/f1-bernie-ecclestone-liberty-media-chief-executive>; 2016: Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; 2025: FactSet.

⁵¹⁴ 2016: Liberty Media Corporation Agrees to Acquire Formula One. Liberty Media. <https://www.libertymedia.com/investors/news-events/press-releases/detail/139/liberty-media-corporation-agrees-to-acquire-formula-one>; 2025: FactSet.

Disclosures

Worldly Partners, and its affiliates, do not have a financial interest in Formula One or related securities, or derivatives thereof, issued by this company. This research report has been published on February 20, 2026, and is for informational and educational purposes only and is not meant to provide information on any services or products connected to Worldly Partners and its affiliates. The statements or conclusions made are opinions only and should not be relied upon as fact. The report does not serve as an endorsement or as an investment recommendation. Worldly Partners did not receive compensation for creating or providing this research report. No investors in Worldly Partners or its affiliates or in its Funds requested that we produce this report or make the statements or conclusions included herein.

Data throughout this report is sourced from third-parties, including multiple levels of third-parties, unrelated to Worldly Partners. While we believe the sources to be reliable, we have not confirmed the accuracy of the data presented or the analyses or assumptions made by such third-parties in arriving at any projections shown or conclusions made. Accordingly, the actual data may be materially different from what is presented in the third-party reports. In addition, the projections included in the report as determined by such third-parties may not be achieved, and the actual results could be materially different from those projected by such third-parties. In addition, past performance is not an indication of future results. Comments made in the Notes section of charts or graphs throughout this research report include statements and concepts from companies' annual reports, including direct statements, summaries of statements, and, in some cases, interpretations, extrapolations, or analyses of statements contained therein.

When comparing performance to an index, keep in mind that individuals cannot invest directly in any index, and index performance does not include transaction costs or other fees, which will affect actual investment performance. An individual investor's results will vary. The S&P 500 is an unmanaged index of 500 widely held stocks that is generally considered representative of the U.S. stock market.

Much of the information throughout this report represents historical analysis or data which, if updated to periods closer to the report year or date, could result in materially different data and conclusions. Worldly Partners is not updating this report as new data is released or made available. The statements made are based upon information reviewed as of the date of the report.

This presentation is confidential and is intended solely for the information of the person to whom it has been delivered. This report is provided for the purpose of providing insight into the research approach used by Worldly Partners in its investment process. This document may not be copied, quoted, or referenced without the prior written consent of Worldly Partners.