14 | Formula One

In May 2009 Max Mosley, then President of the Federation Internationale de l'Automobile (FIA), declared that "the sport could survive without Ferrari." Incensed by such brazen disregard of the team's influence and further angered by proposed changes to the competition's format, Ferrari announced that it did not intend "to enter its cars in the next Formula One world championship." By June, eight of the ten F1 teams had declared their intention to join Ferrari's breakaway championship. Was this to be the end of F1 as we knew it?

The rise of Ecclestone

I am the CEO of Formula One Management and Formula One Administration, which runs the business in F1. From this point of view, I own F1.

—Bernie Ecclestone

The 2009 showdown with Ferrari was not the first time a schism threatened Formula One (a.k.a. F1). The competition has a long history: it is the oldest of the various events supervised by the International Automobile Federation (or FIA, for the French "Federation Internationale de l'Automobile"). However, for decades F1 was a very loose organization.³ Particularly disrupting was the fact that, until 1981, each team's participation was negotiated on a race by race basis when the team arrived at the next track! In such an uncertain environment, Formula One's collapse was constantly lurking over the horizon; only through the machinations of one Bernie Ecclestone did the sport become a stable, multi-billion dollar industry.

Ecclestone entered F1 as a team owner and quickly emerged as a leader of the Formula One Constructors Association (FOCA).¹⁶ Under his guidance and with the aid of team owner Max Mosley, FOCA attempted to seize control of F1 from the FIA's sport branch, FISA (which was dissolved in 1988). This move nearly ended F1 as FOCA teams boycotted races and prepared to start a rival championship. However, instead of a collapse, in 1981 Ecclestone managed to bring the FIA and FOCA to sign an agreement. Later known as the

Forthcoming in *The Economics of Entertainment and Sports: Concepts and Cases*. Portions of this chapter were written by Clare Finnegan and Mary Finnegan under the supervision of Luís Cabral. © Luís Cabral.



first Concorde Agreement, it was designed to clarify the terms by which teams competed. In particular, the agreement required constructors to participate in all of each season's races, thus giving the competition some much needed stability.

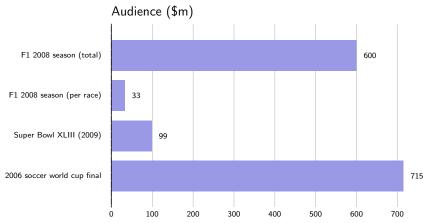
The Concorde Agreement was a watershed in the history of F1. Prior to Ecclestone's involvement, F1 primarily existed as "one huge, if rather louche, party" dominated by "rich businessmen, minor aristocrats and hangers-on." Run by amateurs with little interest in developing the professionalism of the sport, F1 was dangerous, chaotic and unprofitable. The Concorde Agreement helped Ecclestone transform F1 into a successful business. Teams agreed to limit their involvement to championships sponsored by the FIA, pledged to compete in all races during each season, and recognized the FIA's commercial and property rights over F1. The first Concorde Agreement lasted for 6 years and a series of similar agreements followed; in 2009, F1 teams agreed to the sixth Concorde agreement.

For Ecclestone the most important element of the Concorde Agreement was the teams' acknowledgement that FIA owned the commercial rights to F1. Given that, FIA could now loan its rights to FOCA (which it did for a four year period). As designated spokesperson for FOCA, Ecclestone thus received the responsibility of managing F1's commercial interests. Moreover, recognizing his rapidly increasing influence, Ecclestone was appointed FIA Vice President.¹⁶

By most accounts, Ecclestone's first stab at managing F1 was quite successful. In particular, he was able to convince the major European broadcasters to show all races of a season rather than provide ad hoc coverage. It came as no surprise that, when the original lease on commercial rights expired, Ecclestone was again appointed as administrator. More: under the new trust agreement with the FIA, the management rights were now assigned to Ecclestone's trading company, Formula One Promotions and Administration. Eventually, Ecclestone convinced the FIA to bypass FOCA entirely and grant the commercial rights of F1 directly to his Formula One Management company for a period of 210 years! Not only that, the FIA also allowed Ecclestone to defer the cost of the loan (\$360 million) for several years.

With Ecclestone's at the helm, F1 became — and still is — one of the world's most profitable sporting events. In 2007, F1's estimated global revenue of \$3.9 billion was only surpassed by two U.S. leagues, the National Football League and Major League Baseball. Exhibit ?? displays worldwide television audiences for selected events. While soccer (foot-

Figure 14.1 Worldwide television audiences of selected events



ball) remains the undisputed leader, F1 events are among the world's most watched. And eyeballs translate into revenue: an average Grand Prix earns \$229 million, making F1's one of the "world's highest revenue generating annual sporting events;" Ecclestone himself is worth a reported 4 billion dollars.

Despite, or because of, Ecclestone's "carbon-fiber fist" when presiding over negotiations between the FIA and FOTA (the successor of FOCA) since the 1980s, F1 continued to be a source of conflict. In 2002, manufacturers BMW, DaimlerChrysler, Fiat (owner of Ferrari), Ford and Renault announced their intention to start a rival series in 2008 (the expiration date of the 5th Concorde Agreement). Ecclestone managed to appease Ferrari with a \$101 million deal and the threat of secession subsided for the time.

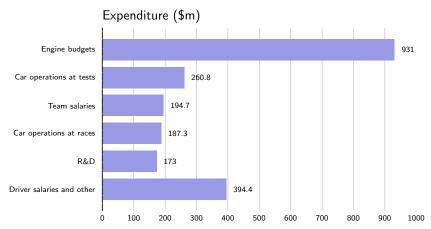
The economics of F1 racing

A F1 grand prix, just like any other car race, requires three important ingredients: a race track, cars and drivers. Cars and drivers are organized into teams. A typical team consists of two cars, each with its own driver, and is named after a car manufacturer (e.g., Ferrari), a product (e.g., Red Bull) or the founder's name (e.g., MacLaren, founded in 1963 by Bruce McLaren).

Exhibit 14.2 displays the average team budget during the 2003 season. The slice "other" under "driver salaries and other" includes items such as wind tunnel operations, travel & accommodation, corporate entertainment & catering, and car manufacturing. Perhaps surprisingly, engines represent almost one half of the total budget. By contrast, actual car manufacturing accounts for less than 1%. Driver salaries, at about 6% are about one third of total salaries (about 15%).

Formula One is not just a race between drivers; it is also a race between constructers, who will spare little expense to shave an extra second from average lap time. In fact, without any regulations, constructor competition can easily turn into a sort of arms race. Two areas where "the sky is the limit" are (a) testing and (b) car engines. For example, developing a new engine may cost tens of millions of dollars. By 2008, engine manufacturers were selling engines for about \$25 million a piece.⁹

Figure 14.2 Average structure of a 2003 team's budget.



The economic crisis hits F1

The economic crisis of 2008 merely exacerbated the tenuous relationship between the teams and the FIA. The sport, now notorious for the excessive cost of involvement, was forced to undergo significant restructuring. Some teams left the competition, alleging budgetary reasons, and the prospect of a rival championship gained legitimacy with support of Ferrari. While F1 ultimately survived, it was forced to enact several changes to adjust to the weakened economy.

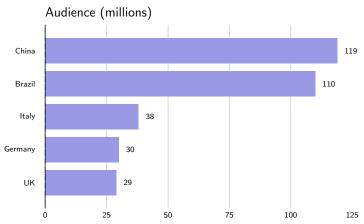
A strained relationship between the FIA and F1 teams was not the only problem plaguing F1. Prior to the economic crisis of 2008 a veritable arms race erupted among the teams. In a period of seven years (1980 to 1987) the budgets of leading teams quadrupled. By 2008 a team that had spent approximately 12.5 million in 1980 was spending upwards of \$300 million. Much of the budget was spent on minute improvements that did little to improve the overall racing experience; teams were spending millions of dollars on "the interaction between the front-wing end-plate, the revolving front wheel and the front tyre contact patch," but such minute change "is of no interest whatsoever to the millions of spectators who indirectly pay for it." The energy of the sport dwindled as smaller teams struggled to even exist and winners routinely alternated among those with the deepest pockets. 12

In October of 2008 the FIA president, Max Mosley, and FOTA representatives met to discuss the sport's combined \$1.6 billion in spending. Mosley had previously described the sport's spending as "unsustainable" and urged the adoption of a highly controversial proposal for standardized engines and chassis parts.

The October meeting concluded with an agreement to cap the cost of engines supplied to smaller teams. However, as the following statement by the FIA indicated, this discussion on costs was only the first of many, "Today's meeting in Geneva has produced significant cost savings for 2009 and 2010. FOTA are working urgently on further proposals for 2010 and thereafter." Mosley continued to argue that the poor economy would not support a sport which relied heavily on the goodwill of rich individuals and corporate sponsors.

Despite Mosley's fear that investors and corporate sponsors would desert F1, Ecclestone

Figure 14.3 F1 viewers in selected countries: 2008 totals.



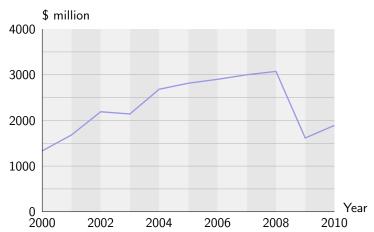
was able to close a "recession-busting" deal with LG Electronics.¹⁴ As part of the five-year agreement, the South Korean consumer electronics group received significant on-screen branding. Additionally, LG became a strategic partner in developing consumer products with F1 branding and providing technology to F1.¹⁶ LG also sponsored the LG F1 Racing Global Fan Survey 2010, designed to evaluate the multiple changes enacted during the 2010 season.¹⁵ Ecclestone hoped that the agreement with LG would both reassure current investors and convince potential sponsors that F1's global reach was worth the cost. Ecclestone also broached the possibility of revamping the scoring system. He suggested that a new approach, such as awarding drivers gold medals for race wins rather than points, would encourage overtaking and increase the sport's excitement.

Apparently, not all participants in F1 were convinced that the potential benefits out-weighed the excessive cost. In a dramatic November 2008 move, Japanese carmaker Honda announced that it was withdrawing from the competition. Despite having a long history with F1 as an engine supplier, Honda had only reintroduced its constructor team in 2006 (a 38 year hiatus). Discouraging sales figures and unimpressive performances during the 2006 and 2007 seasons forced the carmaker to reconsider its fledgling \$294 million investment.

Honda's departure provided the perfect opportunity for Mosley to both urge the adoption of his proposal for a standardized engine and unveil further plans to control costs, such as standardizing the gearbox. ¹⁶ Even with these measures, some feared that F1 would still not survive the crisis since the changes would have no effect until the 2010 season.

Spurred on by the loss of Honda, the FIA and FOTA were able to agree to several budget reducing measures.²⁰ To preserve "the essence of Formula One as a sport" most of the cuts occurred in areas that are not typically part of the public domain. The most extensive limitations were placed on elements that had previously consumed up to 40% of a F1 team's budget: the engine and gearbox. Disappointing "gear-heads" who followed F1 for its engineering prowess, F1 banned all engine development and adopted the controversial standardized gearbox. Drivers were limited to eight engines per season, a significant restraint as in earlier years they had sometimes used three engines a weekend. FOTA also agreed to instate a maximum engine rpm limit of 18,000 (previously the maximum had been 19,000 rpms).¹⁶ Testing underwent considerable cutbacks. Teams were banned from testing

Figure 14.4 Arms race: Formula One total team budgets. ¹⁹



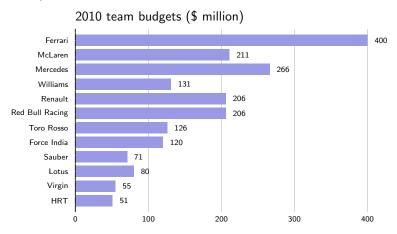
during the season and wind tunnel use was reduced. Impacting the race itself was the ban on refueling, a restraint that proved unpopular with many fans as it limited overtaking opportunities.²¹ Initial estimates placed savings at 30% for manufacturer-owned teams and even higher for independent teams.²²

Changes within F1 were not limited to new rules regarding car construction. Looking for ways to keep costs reasonable and make F1 more exciting, F1 turned to its fans. In 2008 ING, Renault's sponsor, and F1 Racing commissioned the Global Fan Survey (the predecessor to LG's 2010 survey).²³ While the FIA had previously conducted an annual FIA/AMD Formula One Survey, the Global Fan Survey was the most extensive poll of fans at the time. In particular the survey focused on ways F1 could "be more open to the media and fans." Among other questions, fans were asked to rate the most important element of F1, and weigh in on whether race length should be changed. End of the construction.

As a result of the survey, FOTA suggested a new point system for races with winners receiving 25 points (as opposed to 10) and the top ten rather than eight drivers awarded points. FOTA also suggested that race length be decreased in order to make the sport more attractive for television audiences.²⁶ a

Despite significant savings, Mosley urged further action. Teams were still not operating at a level of profitability due to their excessive budgets. Mosley proceeded to raise the ire of most teams by championing a universal budget cap. He defended this proposal with the statement "one view is that having much more money than a rival team is just as unfair as having a bigger engine." ²⁷ As an alternative to the budget cap, Mosley introduced the idea of a two-tier F1: teams choosing to ignore the budget cap would face technical restrictions while those opting to submit to the cap would have greater freedom.

Figure 14.5 Competitive balance in Formula 1.



Power games

In 2010, a 1963 Ferrari 250 GTO auctioned for \$18 million.²⁸ While many collect Ferraris simply for the prestige of ownership, Enzo Ferrari built his fantastic cars for the racetrack. Drawn into design and manufacture after a short driving career, Enzo managed to build the most successful team in motorsport history.²⁹ The oldest constructor in F1, Ferrari first entered a Grand Prix in 1932.³⁰ Since then Ferrari has won 16 constructor and 15 driver championships. Its achievements on the track have translated into a brand worth \$1.05 billion. Forbes lists Ferrari as one of the 50 most valuable sports teams; of the 50 only two (McLaren being the other) are involved in motorsport.³¹ Unsurprisingly, Ferrari's long-term and successful involvement in F1 has encouraged the development of a large and active fan base. Drawing on its notoriety, Ferrari has opened 34 merchandising stores and generated over \$100 million in revenue (ibid).

As one of the largest spenders, Ferrari opposed Mosley's insistence on a \$40 million budget cap, less than a third of what teams had previously spent, especially hard.³² It was at this time that Ferrari, further aggravated by Mosley's earlier declaration regarding the team's importance, declared that "if the regulations adopted for 2010 will not change, then Ferrari does not intend to enter its cars in the next Formula One world championship." ¹⁶

Disappointed with the FIA's "refusal to effectively reach an understanding with constructors and teams," Ferrari resorted to legal action.³³ The Italian national team filed an injunction against the budget cap in French courts. Ferrari proved unsuccessful in its legal action and the team began to explore alternatives (such as leaving F1).³⁴

By June the FIA and FOTA had still not reached an understanding.³⁵ The FIA maintained that the technical regulations it supported for the 2010 series would allow "the championship to maintain its vitality" and "encourage the introduction of new teams." The FIA suggested that issues between the FIA and FOTA be resolved with an extension of the 1998 Concorde Agreement and criticized Ferrari for disrupting negotiations that the

a. The survey identified three groups of fans: (a) regular fans (25% by volume, predominantly male, cross section of ages); (b) moderate fans (44% by volume, female and male, cross section of ages); and infrequent fans (31% by volume, unlikely to watch grands prix, predominantly female, cross section of ages.



In 2009, Ferrari threatened to abandon the F1 championship and start a competing one.

FIA claimed were very close to resolution. ¹⁶.

The conflict intensified when eight of the ten F1 teams declared they were leaving F1 for the 2010 season and would start their own championship league.³⁶ According to FOTA "the wishes of the majority of the teams are ignored" which left them "no alternative other than to commence the preparation for a new championship which reflects the values of its participants and partners." External spectators felt that the conflict would most likely be resolved with the restructuring of the FIA and the possible resignation of Mosley.

A crisis resolved

What is F1 without Mosley? In the showdown between Ferrari and Mosley's FIA, Ferrari won yet another championship.³⁷ Worried about losing his \$4 billion empire, Ecclestone eventually intervened. Just prior to a meeting of the World Motor Sport Council (WMSC), Mosley, president for 14 years, announced he would decline to run for a fifth term. Ecclestone, who had supported Mosley during his initial rise to president stated, "I'm obviously very, very happy common sense has prevailed which I've always believed it would because the alternative was not good at all." ¹⁶ Following Mosley announcement of departure, Ferrari voiced their satisfaction that F1 would no longer be ruled by a "dictator" and threats of succession ceased. The teams solidified their commitment to F1 by signing a continuation of the 1998 Concorde Agreement. FOTA also reinstated Force India and Williams, the only teams that had refused to join the rival series.³⁸

The departure of Mosley did not solve F1's economic problems. BMW, the largest premium carmaker in the world and a F1 constructor since 2006 (when it purchased the Sauber team), announced its iminent departure at the end of the 2009 season.³⁹ Since its entrance into F1, BMW had spent an estimated \$346 million per year and had failed to finish above third. Ecclestone, not known for his tact, bluntly stated that "When you consider how much money they have spent and the results they got, it's probably not such a good investment." BMW, however, stated that continued participation did not fit with the company's growing interest in "green" technology.

Despite the withdrawal of Honda and BMW, F1 did not suffer from a lack of constructors during the 2010 season. Shortly after BMW announced its departure, Qadbak Investments, a Swiss group, offered to buy the team. When this deal eventually collapsed, BMW sold



Nelson Piquet's Renault is removed from the track after it crashed out of the 2008 Singapore grand prix.

the team back to Sauber. 41 New 2010 entrants to F1 included the teams Lotus, Hispania, and Virgin Racing. 42 The FIA agreed to extend the grid from 10 to 13 in order to make room for the new constructors. 43

Crashgate

Drama within F1 is not limited to disagreements between the FIA and FOTA. During the 2009 season, constructor Renault embroiled itself in scandal by fixing Singapore's Grand Prix. During the race Renault ordered its driver, Nelson Piquet Jr, to crash in order to give Renault's other driver, Fernando Alonso, the advantage.⁴⁴ While not uncommon for teams to favor one driver over another (during the 2010 season Alonso was again offered the advantage during the German Grand Prix), ordering a driver to crash is both highly dangerous and unethical.⁴⁵ Edward Gorman, writer for The Times, summed up the WMSC's opinion of the incident nicely: "it ticks every box on the cheating menu and, uniquely, it also involves the deliberate and reckless exposure of a sportsman and others to serious danger."⁴⁶ As a result of the incident, Renault was given a two-year suspended ban and Flavio Briatore, Renault's former team principle, received a life-long ban from any involvement in F1.⁴⁷ Briatore did have the ban overturned by the French Tribunal de Grande Instance, but stated that he would not return to F1.⁴⁸

A New Formula: The Golden Era

The changes implemented as a result of the turbulent 2008–2009 period brought unprecedented energy and variability to the sport. F1 has experienced three phenomenal seasons over the 2010–2012 period, leading spectators to dub it "The Golden Era." 2010 was the first time in F1 history that there were four possible winners going into the last race of the season. The presence of many talented, competitive drivers rather than one dominating driver continued into the 2011 and 2012 seasons. During the 2012 season, fans brimmed with excitement as history was made during the first seven events which were "won by different people — and six teams were triumphant." Although Vettel took home his third title, it was "far from a foregone conclusion for much of the year," with Vettel's win coming as a surprise.

Figure 14.6

Summary of FOTA key proposals for the 2009-2010 seasons resulting from 2008 study.

Technical

2009:

More than 100% increase in mileage per engine (eight engines per driver per season)

Reduction in wind tunnel and CFD (computational fluid dynamics) usage

Engine available at 8 million per team per season

2010:

Engine available at 5 million per team per season

Gearbox available at 1.5 million per team per season

Standardised KERS (put out to tender, with a target price of 1-2 million per team per season)

Target a further 50% reduction of the 2009 aerodynamic development spend

Specified number of chassis, bodywork and aerodynamic development iterations (homologations) during the season

Prohibition of a wide range of exotic, metallic and composite materials

Standardised telemetry and radio systems

Sporting

2009:

Testing reduction (50New points-scoring system (12-9-7-5-4-3-2-1), to give greater differentiation/reward to grand prix winners

Race starting fuel loads, tyre specifications and refuelling data to be made public

2010:

Commitment to recommend new qualifying format

Radical new points-scoring opportunities (eg, one constructors' championship point to be awarded for the fastest race pit stop)

Further testing reductions (four four-day single-car pre-season tests plus one single-car pre-season shakedown)

Reduction of grand prix duration (250km or a maximum of one hour 40 minutes) pending the approval of the commercial rights holder

Commercial

2009:

Increased data provision for media

Explore means by which the presentation of Formula One action can be more informatively and dynamically presented, common to other sports such as tennis and cricket, to dramatically improve engagement with the public

Nominated senior team spokesman available for TV during grand prix

Commitment to enhance consumer experience via team and FOTA websites

Mandatory driver autograph sessions during grand prix weekends

2010:

Commitment to enhance consumer experience via TV coverage

Much of the variability can be attributed to the 2008–2009 changes as well as the "introduction of Pirelli as sole tyre supplier in place of Bridgestone," which began in 2011.¹⁶ Pirelli adopted a policy of "deliberately making faster-wearing tyres" which make teams choose between "tyre-shredding pace" and "husbanding the wear to make fewer pit stops." ⁵¹ This policy has demanded more precision and attention from drivers, as they strive to preserve the tyres.

However, Pirelli made the tyres a tad too soft in the 2013 Spanish Grand Prix, causing a large number of pit stops. To remedy the situation, it has "pledged to offer harder-wearing tyres" in the future. ¹⁶ Once the modified version is introduced, the 2013 season will undoubtedly remain up for grabs between the highly competitive playing field. While there was speculation that F1 would not survive the economic crisis of 2008 and the ensuing power struggle of 2009, F1 seems to both weathered the changes and inserted new life into motorsport.

Reduced testing and rookie errors

While most of the 2008–2009 changes enhanced the sport positively, one change has wrought undesirable side-effects upon drivers: reduced testing. While this money-saving measure may aid the teams financially, it also "vastly limit[s] the amount of testing a Formula One team may do" and deeply cuts into the practical experience of young drivers. Prior to the testing reductions, rookies had a chance to safely practice their skills on the field prior to competition. Now, however, "teams rarely want to test inexperienced drivers" and it has become frighteningly "more difficult for a young driver to break into and prove himself in Formula One." ¹⁶

The difficulty to enter and practice the sport not only discourages new recruits, but it also increases the dangers for rookie drivers, and places them in a uniquely disadvantaged position when compared to more experienced drivers. For instance, in the initial months of the 2013 season, the "five rookie drivers this season have had little time for adapting, and so far none has scored a point." Poor performance is not the only side-effect of reduced driving time. Rookie errors are also on the climb; this was most recently demonstrated at the Chinese Grand Prix, where "Esteban Gutiérrez, a Mexican rookie driver at the Sauber team, plowed into the back of another driver." ¹⁶

In response to these dangers, Formula One required teams to "have an extra set of tires for the Friday morning practice session to allow drivers to spend more time driving on the track." ¹⁶ While this was a well-intentioned effort, it has been difficult to convince teams to utilize these tires on rookies rather than experienced drivers. A more effective solution has yet to be suggested and newer drivers must continue to vie for driving time.

The End of Ecclestone?

Continuation of the "golden era" is contingent on the outcome of Ecclestone's recent bribery charges. Ecclestone, the mastermind behind the commercial success of Formula One for the past forty years, may at last have to abandon the business. In the wake of bribery charges, Ecclestone could be legally "forced to relinquish control of Formula One." ⁵³ The roots of the accusation lie in Ecclestone's role in the 2006 sale of Formula One to CVC Capital Partners.

Ecclestone paid \$44 million to Gerhard Gribkowsky, "the former chief risk officer at BayernLB Bank, during the sale of the bank's 47.2 per cent stake in Formula One" to CVC. The payment to Gribkowsky has resulted in prosecutors filing "charges of bribing a public official and inciting a breach of fiduciary duty" which, if Ecclestone is found guilty of, would "carry a jail sentence of up to ten years." ¹⁶

The connection between Ecclestone and BayernLB Bank (and later Gribkowsky), began in 2002 when BayernLB inherited a significant portion of Formula One's shares.⁵⁴ The bank was hardly prepared for ownership; a fact that Ecclestone soon capitalized on as he sought to gain control.

After three years of tense interactions, a buyer — CVC Capital Partners — was finally chosen. At first, all appeared to be running smoothly, with CVC reaping over "\$2 billion in dividends." However, in 2011 Gribkowsky was "charged with bribery, embezzlement and tax evasion" and "sentenced to eight and a half years of prison." ¹⁶ Ecclestone claimed he paid Gribkowsky not to bribe him but to win his silence. Allegedly, Gribkowsky threated to inform the British tax authorities "that Mr. Ecclestone controlled the Bambino trust," which Ecclestone set up for his former wife and daughters. ¹⁶ Had Gribkowsky informed authorities that Ecclestone was in control, Ecclestone would have lost his tax-free status on the trust. Gribkowsky, however, claimed that Ecclestone bribed him to "deliberately undervalue the price that CVC paid" to BayernLB. ⁵⁵ Due to this claim, Ecclestone faces litigation from two sources. BayernLB is claiming "\$400 million in compensation" for its losses and Bluewaters, a private equity company, is demanding "\$650 billion plus costs and damages" because it maintains that it was "prevented from buying Formula One even though it offered a higher price than CVC." ⁵⁶ Should the claims be pursued, the trial is schedule to commence in the fall of 2013.

The question remains, how would Formula One cope without Ecclestone? He has freely acknowledged that "he would be forced to resign if he is charged." ⁵⁷ CVC, the current shareholder of Formula One, has already created a list of possible replacements for Ecclestone. However, no replacement would have an easy time fulfilling Ecclestone's role or picking up his "loose ends." ¹⁶ Uncertainty and tension shall remain until Ecclestone's exoneration or his trial, during which CVS will be hard pressed to find a suitable successor. Whether Formula One has solidified enough to survive without Ecclestone remains to be seen, yet its stability may soon be tested in the near future.

Endnotes

- 1. Roger Blitz, and James Allen, "Ferrari threatens to quit Formula One," FT.com, May 12, 2009.
- 2. "8 Teams Threaten to Splinter From Formula One," The New York Times, June 20, 2009.
- 3. Turun Khanna, Kartik Varma, and David Lane, "Formula One Motor Racing," Harvard Business School, 2003.
- 4. "Grand Prix, Grand Prizes." The Economist, July 13, 2000.
- 5. "Notice published pursuant to Article 19(3) of Council Regulation No 17 concerning Cases COMP/35.163," Official Journal of the European Communities, 2001.
- 6. "F1 Grands Prix are the world's most valuable annual sporting events," www.delotte.com,

http://www.deloitte.com/view/en_IE/ie/news/ie-pressreleases-

- en/061fea904e00e110 VgnVCM100000ba42f00aRCRD.htm, accessed December 1, 2010
- 7. Kinga Tihanyi, "F1 Grands Prix are the world's most valuable annual sporting events, Deloitte
- 8. David Treymane, "Ferrari's New Deal Wins More Control for Ecclestone," The Independent, January 20, 2005.
- 9. http://news.bbc.co.uk/sport2/hi/motorsport/formula_one/7718682.stm, accessed June 2011.
- 10. David Miller, "Formula seeking the right solution," The Times, July 28, 1987.
- 11. Max Mosley, "Does Formula 1 cost too much? Yes," The Guardian, March 8, 2006.
- 12. Maurice Hamilton, "Formula One: Silverstone Row: The Sport that Lost its Soul," The Observer, October 3, 2004
- 13. "Deal reached to curb some Formula One costs," The New York Times, October 21, 2008.
- 14. James Allen, and Christian Oliver, "Deal puts Formula One in pole position," Financial Times, November 27, 2008
- 15. "More F1 Fan Survey Results Released," themotorreport.com,

http://www.themotorreport.com.au/50053/f1-formula-1-rolls-into-melbourne-more-f1-fan-survey-results-released, accessed December 14, 2010.

- 16. "Formula One in the pits," Financial Times, December 6, 2008.
- 17. "Honda's F1 History," Honda Racing F1, http://www.f1network.net/main/s169/st19511.htm, accessed December 4, 2010.
- 18. "Formula One in the pits," Financial Times, December 6, 2008.
- 19. Source: Eurobusiness Magazine and others.
- 20. James Allen, "Formula One agrees cost cuts," Financial Times, December 13, 2008.
- 21. "2010 Season Changes," Formula1.com,

 $http://www.formula1.com/inside_f1/rules_and_regulations/sporting_regulations/8692/,\ accessed\ December\ 6,\ 2010.$

- $22.\ \,$ James Allen, "Formula One agrees cost cuts," Financial Times, December 13, 2008.
- 23. "Fans' Input Sought Again," Formula-one.speedtv.com ,

http://formula-one.speedtv.com/article/f1-fans-input-sought-again/, accessed December 6, 2010.

- 24. "Team bosses launch roadmap to save their sport," The New York Times, March 5, 2009.
- 25. Christine Banchford, "ING / F1 Racing Survey Results," sidepodcast.com,

http://sidepodcast.com/post/ing-f1-racing-survey-results.

- 26. "Team bosses launch roadmap to save their sport," The New York Times, March 5, 2009.
- 27. "Formula One teams agree to cost-cutting measures," The New York Times, January 8, 2009.
- 28. Drew Phillips, "RM Auctions sells 1963 Ferrari 250 GTO for reported \$18 million," autoblog.com,

http://www.autoblog.com/2010/05/16/rm-auctions-sells-1963-ferrari-250-gto-for-reported-18-million/, accessed December 2, 2010.

- $29. \ \ ^{''}Enzo\ Ferrari, ^{''}ferrari.com, \ http://www.ferrari.com/English/about_ferrari/History/Pages/Enzo_Ferrari.aspx, accessed December 2, 2010.$
- 30. Alan Henry, Ferrari-The Grand Prix Cars, 1989.
- 31. "The World's Most Valuable Sports Teams," www.forbes.com, http://www.forbes.com/2010/07/20/most-valuable-athletes-and-teams-business-sports-sportsmoney-fifty-fifty-teams_slide_2.html, accessed December 7, 2010.
- 32. Roger Blitz, and James Allen, "Ferrari threatens to quit Formula One," FT.com, May 12, 2009.
- 33. "Teams Fail To Reach Deal", The Associated Press, May 16, 2009.
- 34. "Ferrari lose court appeal to block FIA's Formula One budget cap," The Telegraph, May 20, 2009.
- 35. "FIA press release," FIA, June 16, 2009.
- 36. "8 Teams Threaten to Splinter From Formula One," The New York Times, June 20, 2009.
- 37. "FIA 'Dictator' Stands Down," Liverpool Echo, June 25, 2009.
- 38. "Williams and Force India Rejoin Teams Association," Reuters, September 10, 2009.
- 39. Daniel Schafer. "BMW set to pull out of Formula One," Financial Times, July 30, 2009.
- 40. Roger Blitz. "Swiss group snaps up BMW Sauber F1 team," Financial Times, September 16, 2009.
- 41. "BMW Sells To Sauber As Qadbak Deal Collapses". Formula-one.speedtv.com,
- $http://formula-one.speedtv.com/article/f1-bmw-sold-to-sauber-as-qadbak-deal-collapses/.,\ accessed\ December\ 6,\ 2010$
- 42. "For Lotus, Hispania and Virgin the chequered flag is victory in itself," thegaurdian.co.uk,
- http://www.guardian.co.uk/sport/blog/2010/mar/30/lotus-hispania-virgin-formula-one, accessed December 15, 2010.
- 43. "2010 Season Changes," Formula1.com,

http://www.formula1.com/inside_f1/rules_and_regulations/sporting_regulations/8692/, accessed December 6, 2010.

- 44. "Renault F1 Won't Contest Cheating Charges," The New York Times, September 17, 2009.
- 45. "No further Ferrari penalty, team orders to be reviewed," Formula1.com,

http://www.formula1.com/news/headlines/2010/9/11221.html., accessed December 15, 2010.

- 46. Edward Gordon, "Are Renault really the worse villains?," The Times,
- http://www.timesonline.co.uk/tol/sport/formula_1/article6839134.ece, accessed December 7, 2010.
- 47. Ben Smith, "Renault given two-year suspended ban in 'Crashgate' hearing," Times Online,
- http://www.timesonline.co.uk/tol/sport/formula_1/article6842843.ece, accessed December 7, 2010.
- 48. "Briatore Rules Out F1 Return," Madeinmotorsport.com,

http://www.madeinmotorsport.com/en/headlines/news-f1-briatore-rules-out-f1-return-1752.html, accessed December 7, 2010.

- 49. "With four drivers in the hunt for this season's Formula One world title for the first time in the sport's history, the permutations as to who can become the winner are numerous," Belfast Telegraph, November 12, 2010.
- 50. Weaver, Paul, "Formula One: Seven F1 teams face crisis over extra £1.32bn bill: Rocketing costs raise fears over grand prix racing: Equity firm CVC Capital under fire from teams," *Guardian*, 25 May 2013.
- 51. Slater, Steven, "Too many pit stops spoil the action," Straits Times, 18 May 2013.
- 52. Spurgeon, Brad, "There's No Clear Path for Racing Drivers on the Way Up," New York Times, 10 May 2013.
- 53. Charter, David, and Kevin Eason, "Ecclestone could lose Formula One if Germans press bribery charges," *Times*, 16 May 2013.
- 54. Davidoff, Steven, "Hazards of Formula One Extend Beyond the Racecourse," New York Times, 4 Dec 2012.
- 55. Bower, Tom, "In Formula One, Everyone Cheats. The Trick is Not to Get Caught," Sunday Times, 19 May 2013
- 56. Eason, Kevin, "Ecclestone's F1 future hangs in the balance over German bribery probe," Times, 15 May 2013.
- 57. Eason, Kevin, "Road widens between F1's haves and have-nots in paddock austerity drive," Times, 18 Feb 2013.