# Analysis of the Effectiveness of Toro Rosso Team as a Supporting Team of Red Bull Concern in Formula 1

### Nikita Egorov, Alexander Averin

Financial University under the Government of the Russian Federation, Moscow, Russia

### ANNOTATION

The main purpose of the study was to study the activities of the Formula 1 Toro Rosso team in order to understand the specifics of its functioning and its role in the implementation of the program of participation of the Red Bull concern in Formula 1. The basis for the analysis was obtained through the collection and interpretation of statistics regarding various characteristics of the performance of the Toro Rosso team and its pilots in Formula 1. Additional facts were also collected that allowed us to draw up a more detailed description of the role of the Toro Rosso team in realizing the goals of the Red Bull concern in Formula 1.

Keywords: sports partnership, management, motorsport, team-satellite.

## **INTRODUCTION**

The problem of the study and the degree of study. Last year we could see an example of one of the most ambitious cases of cooperation in modern professional sports in Formula 1 World Championship (Mourao, 2017). Since 2006 we have had the opportunity to look at the de facto union of Red Bull and Toro Rosso teams, which is unique (Judde et al., 2013). It appeared due to the fact that Red Bull corporation decided to carry out a large-scale expansion into the most prestigious auto racing world championship, and therefore it created not only the "main" team, which was originally aimed at long-term development and achievement of high results, but also the second, "junior" team-satellite, which was considered as: A) a place for the development of young pilots who potentially can later join Red Bull team; B) a place for checking various technical details; C) a team that, in theory, can help the main team achieve results during the races; D) an additional business unit which additionally promotes the brand of corporation (Cygan, 2007).

Due to such an unusual and at the same time large-scale project, which cost Red Bull a lot of time and money, the question immediately arises: Is it rational that Red Bull has a second team in Formula 1 (Walthert, 2015)? How efficiently does this team work? Does it really help the "main" team? Overall, how does the use of Toro Rosso affect Red Bull's motorsport ambitions? Exactly these questions will be considered and analyzed in detail in this article.

**The purpose** of this study was to investigate how Red Bull and Toro Rosso organize their cooperation in order to realize the goals of Red Bull concern in Formula One.

Object: Red Bull and Toro Rosso teams' cooperation.

### METHODOLOGY

The main research technique was the collection of statistical data and its analysis. The background information was the performance data of Toro Rosso and its drivers, facts about the connection of Toro Rosso and Red Bull and the role of Toro Rosso in the expansion of Red Bull into Formula 1 (Tsiotsou,

2012). The statistics was interpreted to create specific metrics and formulate clear and concrete conclusions about the success of Toro Rosso team (Bell et al., 2016).

## THE RESULTS OF THE STUDY AND THEIR DISCUSSION

For the completeness of research, Toro Rosso's performance as a Red Bull satellite team has been analyzed from a variety of aspects to provide answers to key questions that can clarify how the team is used to achieve Red Bull's Formula 1 goals (Smith, 2018). Questions for elaboration related to Toro Rosso's connection with Red Bull Junior Team (young drivers' support program), the confirmation for TR's junior team status, riders' dropout at each stage of their professional growth, the effectiveness of different drivers in Toro Rosso and Red Bull, the impact of Toro Rosso on the roster of Red Bull racers and the success of the corporation as a whole, the effectiveness of personnel decisions (Philipps, 2014).

All data on these issues is expressed in the following graphs / tables / diagrams. Based on it, some fundamental conclusions can be drawn.



Was not the member of Red bull Junior Team

Figure 1. Ways of joining Toro Rosso (created by authors based on https://en.wikipedia.org/wiki/Red\_Bull\_Junior\_Team)

Toro Rosso is really focused on forming its roster from the members of program Red Bull Junior Team – 13 of the 14 pilots were from RBJT (Figure 1). However, if we consider this issue in a more detailed way, we understand that everything is not so simple. Only 57% of the pilots went directly from the youth program to Toro Rosso. Other pilots: A) had no relation to RBJT; B) before their debut in Toro Rosso had races in other teams; C) came to Toro Rosso after a short-term performance for the main team of Red Bull. There were also such pilots who joined Toro Rosso after they ceased to be members of RBJT: they participated in the program, then Red Bull decided to finish the partnership with them, but after a few years they employed them again, as, apparently, the concern did not have a better alternative than to invite former drivers. These personnel decisions indicate that RBJT's effectiveness in preparing young pilots for performance in Formula 1 is declining.

Driver	Year of debute	Age (debut race for Toro Rosso)	Age (last race for Toro Rosso)
Verstappen	2015	17 years 5 months 15 days	18 years 7 months 1 day
Algersuari	2009	19 years 4 months 3 days	21 years 8 months 4 days
Kvyat	2014	19 years 10 months 18 days	25 years 7 months 5 days
Vettel	2007	20 years 1 months 2 days	21 years 3 months 30 days
Buemi	2009	20 years 4 months 29 days	23 years 27 days
Sainz	2015	20 years 6 months 14 days	23 years 1 month 7 days
Gasly	2017	21 years 7 months 24 days	23 years 9 months 24 days
Vergne	2012	21 years 10 months 22 days	24 years 6 months 29 days
Ricciardo	2012	22 years 8 months 17 days	24 years 4 months 23 days
Albon	2019	22 years 11 months 22 days	23 years 4 months 12 days
Speed	2006	23 years 1 month 16 days	24 years 5 months 28 days
Liuzzi	2006	25 years 7 months 6 days	27 years 2 months 15 days
Hartley	2017	27 years 11 months 12 days	29 years 15 days
Bourdais	2008	29 years 17 days	30 years 4 months 14 days

Figure 2. Age of Toro Rosso drivers (including Kvyat and Gasly who will be the drivers of Toro Rosso in 2020 season) (created by authors based on statistics from official site of Formula One https://www.formula1.com/en/results.html)

Toro Rosso tries to match the status of "junior" team (Figure 2). 57% of the team's pilots made their debut before their 22nd birthday. In recent years, mostly young pilots (less than 23 years old) made their debut, while the invitation of "oldies" took place in the early years of the team's existence. Half of the pilots finished their performances at the Toro Rosso before their 24th birthday, but, based on the current lineup of racers, this situation will change soon. Due to this, we can conclude that Toro Rosso is really aimed at hiring young enough pilots and developing their skills in Formula 1 for a potential future transfer to Red Bull, but, at the same time, pilots can drive for the team even after they come out of a young age (by the standards of Formula 1).



Figure 3. Experience of Toro Rosso in different moments of time (races) (created by authors based on statistics from official site of Formula One https://www.formula1.com/en/results.html)

At the same time, if we talk about the experience of performance, we must admit that Toro Rosso begins to move away from the status of a "team for beginners" (Figure 3). There were many periods when drivers with minimal experience in Formula 1 drove for the team, but last years the average experience of Toro Rosso pilots is quite high, and since the 2019 Belgian Grand Prix we can see a paradox: the average experience of Toro Rosso pilots exceeds the average experience of pilots from the main team Red Bull! In such situation it is impossible to call Toro Rosso "junior team" even formally, and if this team plans to continue racing with experienced lineup of drivers, then it should finally stop to position itself as a team for rookies.

Status	How many
Member of RBJT	57
Toro Rosso driver	12 (screening out 78,95 %)
Red Bull driver	6 (screening out 50 %; general screening out 89,47 %)
Race podium for Red Bull	4 (screening out 33,33%; general screening out 92,98%)
Race win for Red Bull	3 (screening out 25%; general screening out 94,74%)
Championship win for Red Bull	1 (screening out 66,67%; general screening out 98,25%)

# Figure 4. Screening out of Red Bull drivers (from 2005, not including current RBJT members, Christian Klien and Vitantonio Liuzzi) (created by authors based on https://en.wikipedia.org/wiki/Red\_Bull\_Junior\_Team)

The specific of management of Red Bull Junior Team is aimed at serious level of screening out young drivers (

Figure 4). If we look at all pilots who were in the program since 2005 and could have gone a direct way from RBJT to the main Red Bull team, we can understand that, on average, only 1 out of 5 program pilots gets the opportunity to join Toro Rosso, and only 1 out of 10 eventually joins main team. This screening out has some great results (after going through all these stages, Sebastian Vettel, for example, won 4 championships for Red Bull), but it is still very serious, because almost 80% of the program participants do not even pass the 1<sup>st</sup> level. This fact again raises questions for Red Bull Junior Team: is the policy of supporting a large number of drivers and finding "the most ideal" among them rational? Perhaps a more targeted choice of pilots would allow Red Bull to reduce investment in the junior program and at the same time increase its efficiency.

Driver	Races	Points	Points per race	Average strength of team	Level of matching the strength of team	Ratio "own points/partner points"	Excess of team strength over the average level	Weighted points	Partners	Strength of partners	Weighted level of partner resistance
Verstappen	23	62	2,70	3,29	164,02%	2,82	1,44	1,87	100 % - Sainz	1,48	4,17
Vettel	25	103	4,12	3,62	227,46%	4,29	1,59	2,59	72 % - Bourdais 28 % - Liuzzi	0,68	2,91
Sainz	56	112	2,00	3,07	130,10%	1,58	1,35	1,48	55 % - Kvyat 41 % - Verstappen 4 % - Gasly	1,17	1,85
Gasly	35	61	1,74	2,76	126,46%	4,36	1,21	1,44	68 % - Hartley 26 % - Kvyat 6% - Sainz	0,37	1,62
Vergne	58	51	0,88	1,54	114,30%	1,34	0,67	1,30	67 % - Riccardo 33% - Kvyat	0,98	1,32
Ricciardo	39	30	0,77	1,52	101,32%	1,03	0,67	1,16	100 % - Vergne	1,30	1,34
Liuzzi	35	17	0,49	1,01	96,04%	0,94	0,44	1,09	80% - Speed 20 % - Vettel	0,91	0,85
Buemi	55	43	0,78	1,52	103,14%	1,08	0,66	1,18	84 % - Algersuari 16% - Bourdais	0,93	1,00
Algersuari	46	31	0,67	1,52	88,91%	0,94	0,66	1,01	100 % - Buemi	1,18	1,11
Kvyat	72	55	0,76	2,74	55,82%	0,49	1,20	0,64	43% - Sainz 26 % - Vergne 17% -Albon 13% - Gasly 1 % - Hartley	1,29	0,64
Bourdais	27	23	0,85	3,77	45,20%	0,23	1,65	0,52	67% - Vettel 33% - Buemi	2,13	0,48
Albon	12	16	1,33	4,05	65,84%	0,59	1,78	0,75	100 % - Kvyat	0,64	0,38
Speed	28	6	0,21	1,01	42,37%	0,86	0,44	0,48	100 % - Liuzzi	1,09	0,93
Hartley	25	4	0,16	2,11	15,16%	0,13	0,93	0,17	96% - Gasly 4% - Kvyat	1,41	0,19

Figure 5. Level of Toro Rosso drivers' performance (not including 2020 season) (created by author based on https://www.formula1.com/en/drivers.html)

Driver	Races	Points	Points per race	Average strength of team	Level of matching the strength of team	Ratio "own points/partner points"	Excess of team strength over the average level	Weighted points	Partners	Strength of partners	Weighted level of partner resistance
Vettel	25	103	4,12	3,62	227,46%	4,29	1,59	2,59	72 % - Bourdais 28 % - Liuzzi	0,96	4,12
Verstappen	23	62	2,70	3,29	164,02%	2,82	1,44	1,87	100 % - Sainz	0,96	2,71
Gasly	26	29	1,12	2,11	105,72%	7,25	0,93	1,21	92 % - Hartley 8% - Sainz	0,16	1,16
Albon	12	16	1,33	4,05	65,84%	0,59	1,78	0,75	100 % - Kvyat	2,25	1,33
Riccardo	39	30	0,77	1,52	101,32%	1,03	0,67	1,16	100 % -Vergne	0,74	0,77
Kvyat	19	8	0,42	1,58	53,16%	0,36	0,69	0,61	100 % - Vergne	1,16	0,42

Figure 6. Level of Toro Rosso drivers' performance before their transfer to Red Bull team (created by authors based on https://www.formula1.com/en/drivers.html)

If we take the weighted statistics of the performance of all pilots for Toro Rosso and then compare the indicators with the average values, we can understand that not all drivers who performed well in Toro Rosso got a place in Red Bull (Figure 5, Figure 6). At least two pilots (Carlos Sainz and Jean-Eric Vergne), who performed at a high level, did not get their chance in the main team. It looks especially strange in comparison with the fact that Alexander Albon and Daniil Kvyat, whose results can be called "middle-level performance", if not weak performance, joined Red Bull. From this point of view, questions arise about how Red Bull manages its personnel.



Figure 7. Duration of drivers' performance in Toro Rosso (not including 2020 season) (created by authors based on statistics from official site of Formula One https://www.formula1.com/en/results.html)

If we look at statistics, describing how many years on average pilots race for Toro Rosso, we can conclude that the team's policy is aimed at quick check of pilots' skills and their later promotion to the main team (Figure 7). The average period of pilots' performance in TR is 2 seasons, and if we talk only about those pilots who after TR moved to Red Bull, then this indicator equals 1.24 seasons. It means that Red Bull expects its drivers to demonstrate their potential in the first year in Toro Rosso, and then, based on this, is looking for variants to transfer them to the main team.

Driver	Races	Points	Points per race	Average strength of team	Level of matching the strength of team	Ratio "own points/partner points"	Excess of team strength over the average level	Weighted points	Partners	Strength of partners	Weighted level of partner resistance
Vettel	113	3028	26,80	27,80	192,75%	1,22	22,01	2,32	83 % - Webber 17 % - Riccardo	9,76	22,65
Verstappen	79	890	11,27	20,18	111,63%	0,88	12,75	1,22	73 % - Riccardo 15 % - Gasly 12 % - Albon	10,70	13,05
Riccardo	100	969	9,69	18,55	104,49%	0,81	11,93	1,08	58 % - Verstappen 23 % - Kvyat 19 % - Vettel	13,21	14,27
Albon	9	68	7,56	19,48	77,57%	0,85	8,86	0,70	100 % - Verstappen	12,75	8,93
Kvyat	23	116	5,04	16,26	62,03%	0,71	7,08	0,88	100 % - Riccardo	11,93	10,50
Gasly	12	63	5,25	19,48	53,90%	0,85	6,16	0,35	100 % - Verstappen	12,75	4,46

# Figure 8. Level of former Toro Rosso drivers' performance in Red Bull (not including 2020 season) (created by author based on https://www.formula1.com/en/drivers.html)

If we analyze how the pilots who have passed the "school" of Toro Rosso, performed in Red Bull, then we can understand that, in general, personnel policy from this point of view is normal (Figure 8). Most of the pilots either proved their level or even better revealed their potential. The only driver who did not met the expectations was Pierre Gasly: Despite good performances in Toro Rosso, he failed 2019 season with Red Bull and was eventually transferred back to TR.



Figure 9. Share of RBJT and Toro Rosso drivers' in Red Bull lineup (created by authors based on https://www.formula1.com/en/teams.html)

With the development of the Toro Rosso team its role in the formation of Red Bull pilots lineup increases (Figure 9). One representative of Red Bull Junior Team was in the main team in first 2 years of its existence, however, the main driving force of Red Bull in the early years were pilots who were not initially connected with Red Bull. However, since 2009 Red Bull has at least one pilot with experience in Toro Rosso, and since 2014 Red Bull is completed exclusively by drivers who have raced for junior team.



Figure 10. Share of Red Bull and Toro Rosso points in total amount of Red Bull concern points (created by author based on https://www.formula1.com/en/teams.html)

If we look at how 2 teams contribute to the overall success of Red Bull concern, we can understand that they are still teams of 2 different echelons, but at the same time Toro Rosso is trying to close the gap

(Figure 10). On average, points are split between Red Bull and Toro Rosso in an 86:14 ratio. In the history of their cooperative performance we can find some interesting moments: anomalous 2008 season, when Toro Rosso scored more points than the "main" team; the period from 2009 to 2014, when the share of the points of the satellite team did not exceed 7%; 2015–2019 seasons, when Toro Rosso is either gaining slightly less than the average level of their points contribution or even exceeding it. This disposition should be recognized as optimal, because it is still clear which team is the main one and which is "supporting one", but at the same time the contribution of Toro Rosso to the success of Red Bull concern is noticeable.

Driver	Races	Points	Points per race	Average strength of team	Level of matching the strength of team	Weighted points	Excess over the opponent	Points per race (team partner)	Excess over the team partner (points)	
Kvyat (Red Bull)	4	21	5,25	22,29	47,11%	0,24	-	9	0,58	
Verstappen (Toro Rosso)	4	13	3,25	3,05	213,11%	1,07	4,46	1	3,25	
					Exchange					
Kvyat (Toro Rosso)	17	5	0,29	3,05	19,29%	0,10	-	2,47	0,12	
Verstappen (Red Bull)	17	192	11,29	22,29	101,34%	0,51	5,10	12,94	0,87	
				Ratio before e	exchange/after exchang	e				
	Difference Level of matching the strength of team	Difference Weighted points	Difference Excess over the team partner		Difference Level of matching the strength of team	Difference Weighted points	Difference Excess over the team partner		General conclusions	
Kvyat	47,11 %→19,29 % (-27,82 %)	0,24→0,1 (-58,33%)	0,58→0,12 (-79,31%)	Red Bull	47,11 %→101,34 % (+54,23%)	0,24→0,51 (+112,5%)	0,58→0,87 (+50%)	Red Bull fully won from the exchange Max Verstappen lost in terms of "self-realization" but fulfilled his role in Red Bull Daniil Kvyat and Toro Rosso lost from exchange As a result, in general, for Red Bull concern, the exchange is not completely effective		
Verstappen	213,11 %→101,34% (-111,77%)	1,07→0,51 (-52,34%)	3,25→0,87 (-73,23 %)	Toro Rosso	213,11 %→19,29 % (-193,82%)	1,07→0,1 (-90,65%)	3,25→0,12 (-96,31%)			

Figure 11. Statistics of exchange between Red Bull and Toro Rosso in 2016 season (created by authors based on statistics from official site of Formula One https://www.formula1.com/en/results.html)

Driver	Races	Points	Points per race	Average strength of team	Level of matching the strength of team	Weighted points	Excess over the opponent	Points per race (team partner)	Excess over the team partner (points)
Gasly (Red Bull)	12	63	5,25	19,48	53,90%	0,27	-	15,08	0,35
Albon (Toro Rosso)	12	16	1,33	4,05	65,84%	0,33	1,22	2,25	0,59
					Exchange				
Gasly (Toro Rosso)	9	32	3,56	4,05	175,58%	0,88	2,26	1,11	3,20
Albon (Red Bull)	9	68	7,56	19,48	77,57%	0,39	-	10,78	0,70
				Ratio before e	exchange/after exchang	je			
	Difference Level of matching the strength of team	Difference Weighted points	Difference Excess over the team partner		Difference Level of matching the strength of team	Difference Weighted points	Difference Excess over the team partner	General conclusions	
Gasly	53,9 %→175,58 % (+121,68%)	0,27→0,88 (+225,93%)	0,35→3,2 (+814,29%)	Red Bull	53,9 %→77,57 % (+23,67%)	0,27→0,39 (+44,44%)	0,35→0,7 (+100%)	Everyone benefited from the exchange to some extent, especially Pierre Gasly and Toro Rosso. The exchange should be recognized as successfu	
Albon	65,84 %→77,57 % (+11,73%)	0,33→0,39 (+18,18%)	0,59→0,7 (+18,64%)	Toro Rosso	65,84 %→175,58 % (+109,74%)	0,33→0,88 (+166,67%)	0,59→3,2 (+442,37%)		

Figure 12.**Statistics of exchange between Red Bull and Toro Rosso in 2020 season** (created by authors based on statistics from official site of Formula One https://www.formula1.com/en/results.html)

Concern Red Bull used the exchange of pilots between 2 teams of the company during the season 2 times, which is a unique case for Formula 1 (Figure 11, 12). This idea was not always effective. In 2016, only Red Bull team won from the exchange because it, due to the exchange of Daniil Kvyat for Max Verstappen, received a stronger pilot in its lineup. However, at the same time, according to statistics, the level of performance of Verstappen slightly decreased in comparison with his performance for Toro Rosso. "Junior" team was a loser, because it got Kvyat, who was very demotivated. and, as a result, did

not bring the necessary benefit to the team. In 2019, the exchange was more successful, as all parties won from it. Red Bull improved their performance due to the fact that Alexander Albon, who was "raised" to the team, began to perform better than in Toro Rosso and scored more points than Pierre Gasly, who was sent to TR. Pierre, after his failure in Red Bull, began to feel more self-assured and, as a result, after the exchange, raced even faster than Albon, and the apotheosis of this performance was Pierre's 2nd place at the 2019 Brazilian Grand Prix. Thus, potentially an exchange between 2 teams of Red Bull concern can be effective, however, additional, primarily psychological factors must be taken into account in order to find an optimal variant for both teams and all pilots.

Also, for the completeness of research, there were some facts collected which allow to say that Toro Rosso helped the main team and Red Bull concern in general with technical and marketing aspects too.

Toro Rosso often tests various small technical details, which later, in case of successful use, can be used in Red Bull. The largest case of help from TR happened in 2018 season, when the main team was looking for a new supplier of engines and decided to test Honda power units on its "junior team". The experience was positive, and, as a result, both Red Bull teams have been using Japanese engines since 2019.

If we talk about the marketing component, then we must admit that Toro Rosso cars were constantly painted in the colors of Red Bull, the name of this company was written on them and also the names of smaller companies that collaborated with Red Bull concern got their place on machines. (Kunz et al., 2016) From 2017 to 2019 Toro Rosso had another livery which gave Red Bull concern an opportunity to advertise their new drink, which was sold in cans with a similar color. Before 2020 season the rebranding took place: The team changed its name to Alpha Tauri and repainted its cars in order to actively advertise the new Red Bull project – a fashionable brand of clothes.

# CONCLUSIONS

Based on all the above facts, the following should be said:

• In general, the idea of a satellite team in Red Bull works effectively: Toro Rosso really helps to assess the potential of the drivers and prepare them for main team, performs well in Formula-1, provides technical support and works as an additional object for promoting Red Bull concern.

• Red Bull should take a more careful and constructive approach to the issue of transferring racers from "junior" team to "main" one, as well as to the issue of rotation of drivers during the season, because, according to statistics, some pilots who performed well enough in Toro Rosso, did not receive places in Red Bull, and changes in the lineup of racers did not always lead to improvement of results of both teams of the concern.

• Red Bull is working to ensure that Alpha Tauri (formerly Toro Rosso) is not an "appendage" of the main team, and it is worth continuing to do this, positioning it as a full-fledged second incarnation of the Red Bull concern. Enough funds are invested in it, which allows the team to confidently perform in the second echelon of Formula 1 and at the same time not interfere with the main team. Recently, the average experience of Alpha Tauri pilots has been increasing, which means that the team is not focused

exclusively on training young drivers. Also, now the team itself advertises not the entire Red Bull brand, but a separate project of the concern.

• It is necessary to correct the model of Red Bull Junior Team program functioning. It will be more logical to concentrate on a more targeted search of candidates. Perhaps, when Red Bull was just beginning its business in motorsport, it was relevant to actively search for talents in large numbers all over the world, but now, after many years, it becomes clear that the concern is spending too much money to support pilots, who even do not join Toro Rosso (there are almost 80% of them). It reduces the effectiveness of the program.

• Now Red Bull concern has the opportunity to effectively use the moment of the upcoming big changes in Formula 1. In 2022 the championship will move to a new regulation, which implies a new technical specification of cars and teams' budgets limits. In theory, such measures should reduce the gap between the teams and make the fight in the peloton tighter. If Red Bull correctly distributes efforts between the development of two teams, then in theory Red Bull will be able to actively enter the fight for the championship title (which has not been observed since 2014), and Toro Rosso will be able to fight even more effectively for the title of the best middle-level team (it implies the fight at the level of 4th-5th places in the team competition).

This is how one of the most unusual examples of partnership in professional sports looks like. As you can see, it has both pluses, connected with the realization of the main advantages of such a partnership, and minuses connected with possible management errors caused by the complexity of interaction between two parties. It will be interesting to watch whether partnership of this kind will be used in the future by other sports organizations. One way or another, this process can play a rather significant role in the development of professional sport and the achievement of success by different subjects of sports industry.

## REFERENCES

- 1. Bell, A., Smith, J., Sabel, C. E., Jones, K. (2016). Formula for success: multilevel modelling of Formula One driver and constructor performance 1950–2014. *Journal of Quantitative Analysis in Sports*, 12 (2), 99–112.
- Cygan, A. (2007). Are all sports special? Legal issues in the regulation of Formula One motor racing. *European Business Law Review*, 18 (6), 1327–52.
- 3. Formula One Group. (2020). "Drivers". Internet link: https://www.formula1.com/en/drivers.html [Accessed on 02 05 2020].
- 4. Formula One Group. (2020). "Standings. Archive 1950–2019". Internet link: https://www.formula1.com/en/results.html [Accessed on 01 05 2020].
- 5. Formula One Group. (2020). "Teams". Internet link: https://www.formula1.com/en/teams.html [Accessed on 03 05 2020].
- 6. Judde, C., Booth, R., Brooks, R. (2013). Second place is first of the losers: An analysis of competitive balance in Formula One. *Journal of Sports Economics*, 14 (4), 411–439.
- 7. Kunz, R., Elsässer, F., Santomier, J. (2016). Sport-related branded entertainment: The Red Bull phenomenon. *Sport, Business and Management*, 6 (5), 520–541.
- 8. Mourao, P. (2017). The Economics of Motorsports: The Case of Formula One. London: Palgrave Macmillan.
- 9. Philipps, A. J. K. (2014). Uncovering Formula One driver performances from 1950 to 2013 by adjusting for team and competition effects. *Journal of Quantitative Analysis in Sports*, 10 (2), 261–78.

- Red Bull Junior Team. (2020). Internet link: https://en.wikipedia.org/wiki/Red\_Bull\_Junior\_Team [Accessed on 02 05 2020].
- 11. Smith, L. (2018). The top 10 most famous brands in Formula 1. Internet link: https://www.raconteur.net/business-innovation/the-top-10-most-famous-brands-in-formula-1 [Accessed on 22 02 2019].
- 12. Tsiotsou, R. (2012). Developing a scale for measuring the personality of sport teams. *Journal of Services Marketing*, 26 (4), 238–252.
- 13. Walthert, M. (2015). *F1 team budgets: Which teams are getting the best value for their money in 2015?* Internet link: https://www.bleacherreport.com/articles/2550212-f1-team-budgets-which-teams-are-getting-the-best-valuefor-their-money-in-2015 [Accessed on 22 02 2019].

# Analysis of the Effectiveness of Toro Rosso Team as a Supporting Team of Red Bull Concern in Formula 1

### Nikita Egorov, Alexander Averin

Financial University under the Government of the Russian, Moscow, Russia

#### ABSTRACT

**Background.** The main goal of this research was to study the activities of Formula 1 team Toro Rosso in order to understand the peculiarities of its functioning and its role in realization of the performance program of Red Bull concern in this auto racing championship. This study provided an in-depth look at one of the most unusual examples of partnership in professional sports – Red Bull and Toro Rosso alliance.

**Methods.** The main research method was the collection and interpretation of statistical data concerning various characteristics of the performance of Toro Rosso team and its pilots in Formula 1, primarily sports performance. Also, additional facts were collected, which made it possible to give a more detailed description of the role of the Toro Rosso team in realizing the goals of Red Bull concern in Formula 1.

**Results.** During the study various characteristics were identified that reflect the peculiarities of managing Toro Rosso team. Among them we want to admit the next ones: A) Toro Rosso confirms the status of the team that prepares pilots for the performance in the main team Red Bull; B) TR, with some features, matches the status of "junior" team; C)–among the personnel decisions, connected with the Toro Rosso team in Formula 1, there were both successful and ineffective ones; D) the team brings sufficient benefits to both the main team of Red Bull and the entire Austrian concern.

**Conclusions.** Toro Rosso team proves the effectiveness of its existence and its value for Red Bull concern, and in order to increase the efficiency of its activity the leaders of Austrian company should continue to realize the strengths of the team, taking into account the interests of the RB main team, and, at the same time, improve the principles of personnel policy, carefully think out the positioning of team and correct the character of work of Red Bull Junior Team program.

Keywords: sports partnership, management, motorsport, team-satellite.

Gautas 2020 08 23 Priimtas 2020 12 10