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Analyses of National Football League 2011-17 Team Values: Stadium Renovation & Construction Trumps Winning

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Abstract

The National Football League (NFL) is the most valuable league out of America's "Big Four" professional sports. This paper examined the valuation of the NFL teams during the six-year span from 2011-2017. The data of team's value and other various information such as average game attendance, winning percentage, and record of stadium renovation and construction were retrieved from various webpages sponsored by Forbes and ESPN. According to the results of analyses, we witnessed the actualization of the Rule of 72 that demonstrated the NFL as a fast-growing vibrant industry. The authors further concluded that involvement in stadium renovation and construction is a more important financial contributor to a team's value than winning. However, we rejected this common practice in the NFL industry, because the teams are reaping the benefits at the expense of the taxpayers.

Key Words: The Rule of 72, team value, stadium renovation and construction

A Brief Introduction to the National Football League

The National Football League (NFL) is the highest level of American football and the most valuable professional sports league in the United States. It comprises 32 franchises that compete against each other annually to win the Super Bowl, the world's biggest annual sporting event. Founded in 1920, the NFL has become the most successful and profitable professional sport league in our country by using an aggressive revenue driven business model. Elements of its business model include extensively applying revenue sharing practices, creating excellent competitions and popular franchises across the board, and offering national distribution of games via various media platforms (National Football League, 2017). The NFL is the industry leader on a wide range of fronts. No wonder the NFL is recognized by the Business Week magazine as "one of the America's best-run businesses" (National Football League, 2017).

Although the NFL may not be a typical business organization, it strives for the same end goal as many other for-profit companies: to maximize the organization's profits. This concept applies to each of the 32 franchises that make up the NFL. Each franchise must determine the best ways to increase its value at a higher rate than other teams, which results in greater profits and success on the playing field.

Principles and Examples of Valuation for All Sport Franchises

According to numerous sport textbooks, profit maximization is often recognized as the primary goal and principle which guides the organization's behavior and actions (Eschenfelder & Li, 2007; Fort, 2005; Leeds, von Allmen, & Matheson, 2018). During the period of time between 2012 and 2017, NFL franchises demonstrated an increase in value ranging from 200% to 300% (Ozanian, 2018). The "Rule of 72" is a commonly used financial principle to illustrate how long it would take to double a franchise's investment (Corporate Finance Institute, 2015; Study.com, 2018). Industry typically grows about 2-3% in a good year as the same rate as the economy, and 7-8% annual growth is considered higher than average. Doubling the franchise value in six years implies a minimum of 12% of annual growth rate, which symbolizes an impressive growth. However, within a vibrant industry, if a competing organization is able to triple in its value during a short time span, it is logical to assume there are opportunities missed by other organizations. The amazing fact is that all NFL franchises were able to increase their value collectively in the specified six-year period.

Before the 1980s, the idea of franchises among professional sports leagues doubling in value every six years is an unrealistic expectation. Taking the purchase of the most valuable Major League Baseball (MLB) franchise, the New York Yankees, as an example, Columbia Broadcasting Station (CBS) purchased it for \$10.4 million in 1964. In 1972, George Steinbrenner purchased the Yankees for \$12 million (Durso, 1973). So in that eight-year timeframe, the Yankees did NOT double in value and had less than \$2 million increase in its value. Therefore, the phenomenon of the Rule of 72 was not observed in this case. However, this phenomenon becomes more achievable depend on which six-year timeframe is examined after the 1980s. For example, Leonard Tose sold the Philadelphia Eagles for \$65 million to Norman Braman in 1985. Braman then sold the Eagles to current owner Jeffrey Lurie for \$194 million in 1994, with a price nearly tripling the team's value (Fink, 2017). Within nine years, Eagles' franchise value had risen three times. In reality, it is hard to imagine how many fans a franchise needs to grow in order to increase its value two-fold in a six-year period. Thanks to the dramatic rate of growth in players' salaries, television contracts, and cost of stadium construction, the team owners were able to witness an incredibly fast-paced increase of their franchise value in the past 20 years (Eschenfelder, & Li, 2007; Fort, 2005; Leeds, von Allmen, & Matheson, 2018).

Different factors that influence the financial prosperity of a professional sport franchise in America include, but are not limited to, team classification, obtainment of new stadiums, team relocations, on-field performance, and market size (Alexander & Kern, 2004). In general, most of the franchises of the Big Four professional sports (NFL, MLB, National Basketball Association, and National Hockey Association) in America have a franchise value exceeding several hundred-million dollars (Brautigan, 2016; Investopedia, 2017). All NFL franchises' value exceeds one and a-half billion dollars (Investopedia, 2017; Statista, 2018). The total value of a franchise can be broken down in elements such as sport component, marketing aspect, stadium, and revenues from brand management (Brautigan, 2016). The sport component covers the cost of players' salaries, broadcasting deals, and operational costs (Leeds, von Allmen, & Matheson, 2018). The aspect of marketing refers to all the income from ticket sales, concession sales, and sponsorship deals. Brand management includes revenue from naming right deals and licensing merchandise sales (Shak and Lyberger, 2014).

Franchises with a rich tradition and history usually have a strong tie with the community and a strong fan base. In a case study focusing on the MLB franchises, Miller (2007) found that the age of a specific franchise does not correlate to success. However, a winning team has a positive impact on the franchise value, and an old facility tends to have a negative impact. MLB has seen a spike in team values with the recent sale of the Los Angeles Dodgers and the Miami Marlins (Miller, 2007). The Marlins have a relatively new stadium primarily paid for by local tax dollars (Miller, 2007). The price tag for the Dodgers could be even higher, if the team had a brand new stadium.

An important reason for the increase in value of some teams, as brought forth by Clapp and Hakes (2005), is the creation of new stadiums. A new venue creates a 'honeymoon' effect on the fans, thus increasing attendance. According to the IBIS World Report on the Sport Franchise Industry, ticket sales, merchandise, and concessions make up 41.7% of all revenue in the sports industry in the United States (Peters, 2017). All three of these revenue streams are driven by attendance at the games; therefore, the newly built stadiums have a distinct advantage in attracting fans. In general, the honeymoon effect would last for three to five years. When the novelty effect wears off, the attendance will drop back to the pre-construction level.

Another key factor that dictates the value of a franchise is the winning percentage on the field (Miller, 2007). A franchise must accomplish a better than average winning percentage (> 50%) in regular seasons and post-season to the benefit of extra incomes. We can logically assume that when a franchise is winning consistently, more fans and spectators will jump on the band wagon to cheer and support the team. Thus, its ticket revenues and other sales related revenue will also increase. When a franchise is not performing well, and its stadium has reached a certain age, it is not uncommon to see the owner pulling the trick of demanding a new stadium or threatening to leave for a new host city. If a franchise is granted relocation to a new host city, this means a new stadium is likely ready or to be built to welcome its arrival. Mercer's article (2014) confirmed that winning clearly has a positive impact on a team's franchise valuation, but its effect is limited based on market.

Methodology and Purpose of the Study Cation, Recreation and Dance

Analyses of NFL Franchises' Value from 2011 to 2017

The purpose of this investigation is to determine the most influential factors that increase the value of NFL teams. The authors hypothesized that the value of football franchises were associated with attendance, winning percentage, and length of the stadium being used. More specifically, the stadium construction and renovation would have a strong and direct impact on the franchise's added value. According to Alexander and Kern (2004), several factors determined the financial success of teams in 'Big Four' professional sports. This research adopted their concept by examining variables which specifically impact the value of NFL franchises. Recently, new reports have shown a slide of television ratings of NFL games (Carpenter, 2018; Stites, 2018). The attendance of the games also decreases from 2016-2017 (Stites, 2018). The authors wonder how NFL franchises continue to increase their value despite the attendance figures and TV rating are dropping. What are the primary reasons that cause us to witness the actualization of Rule of 72?

After retrieving the franchise values of all NFL teams during two different time periods (2011 and 2017), the authors further determine how winning, attendance, and condition/status of existing stadium related to the value of a sport franchise. The attendance results were found on each team's website and quarried through ESPN.com, as well as local and regional news outlets. The data of franchise value were retrieved from Forbes.com using key terms such as "year" and "NFL team".

Results

Figure 1 shows the values of each NFL franchise in billions of dollars. In 2011, the average franchise value of a NFL team was at \$1.025 billion dollars. This number had increased to \$2.522 billion dollars in 2017. On an average, all franchises reported a 248% gain in value within the six-year period, and even the least profitable franchises has a 200% increase in value. It is important to note that six of the 32 teams had an increase in value exceeding 300%. This means that the "Rule of 72" can be observed among all NFL franchises.

	Team	2011 Value	2017 Value	Added Value in 6 Years	
	Los Angeles Rams	0.775	3	387%	
	New England Patriots	1.14	3.7	325%	
	Oakland Raiders	0.761	2.38	313%	1)
	San Francisco 49ers	0.99	3.05	308%	
	Atlanta Falcons	0.814	2.475	304%	
	Minnesota Vikings	0.796	2.4	302%	
	Jacksonville Jaguars	0.725	2.075	286%	
	Chicago Bears	1.093	2.85	261%	
	Dallas Cowboys	1.85	4.8	259%	
	Miami Dolphins	1.012	2.575	254%	
	New York Giants	1.3	3.3	254%	1
	Denver Broncos	1.046	2.6	249%	1
	Los Angeles Chargers	0.92	2.275	247%	1
	Seattle Seahawks	0.997	2.425	243%	1
lealth, 🛛	Pittsburgh Steelers	1.018	2.45	241%	l Danc
	Arizona Cardinals	0.901	2.15	239%	1
	Green Bay Packers	1.089	2.55	234%	1
	Baltimore Ravens	1.088	2.5	230%	1
	Houston Texans	1.22	2.8	230%	1
	Philadelphia Eagles	1.164	2.65	228%	1
	Carolina Panthers	1.02	2.3	225%	1
	Indianapolis Colts	1.057	2.375	225%	1
	New York Jets	1.23	2.75	224%	1
	Washington Redskins	1.4	3.1	221%	1
	Kansas City Chiefs	0.986	2.1	213%]
	Tennessee Titans	0.964	2.05	213%]
	New Orleans Saints	0.965	2	207%]
	Cincinnati Bengals	0.875	1.8	206%]
	Buffalo Bills	0.792	1.6	202%]
	Detroit Lions	0.844	1.7	201%]
	Tampa Bay Buccaneers	0.981	1.975	201%]
	Cleveland Browns	0.977	1.95	200%	
	League Average	1.025	2.522	248%	

Figure 1. Team Values of All NFL Franchises in 2011 and 2017

Impact of Various Factors on NFL Franchises' Value

In the following sections, the authors further examined the franchise's total value and the added value within the six-year period by utilizing various independent variables, such as length of the stadium usage, winning percentage, and average game attendance to establish relationship or reflect group differences based on variables.

The Effect of Attendance

Figure 2 displays the average attendance numbers for each team's home games during the 2011 and the 2017 regular seasons, as reported by ESPN.com. Note that the Los Angeles Chargers temporarily played their 2017 season in a significantly smaller stadium, which was primarily used for soccer, as the franchise was transitioning from San Diego to Los Angeles. Overall, there were 12 franchises that experienced a decrease in average game attendance during the last six-year period. In the meantime, 20 teams had an increase in their average game attendance (with an average gain of 4.71%). The entire league had a slight gain (0.07) in average home game attendance.

Team	2011 Average Attendence per Game	2017 Average Attendence per Game	Percent Change
Los Angeles Rams*	56,394	63,392	12.41%
Miami Dolphins*	60,886	67,627	11.07%
Green Bay Packers	70,512	78,092	10.75%
Dallas Cowboys*	85,512	92,721	8.43%
Cincinnati Bengals	49,251	53,275	8.17%
Buffalo Bills	62,694	66,775	6.51%
Minnesota Vikings*	62,816	66,721	6.22%
Tampa Bay Buccaneers	56,614	59,952	5.90%
Arizona Cardinals*	61,181	64,217	4.96%
Atlanta Falcons*	68,986	71,960	4.31%
Seattle Seahawks*	66,413	68,976	3.86%
Jacksonville Jaguars*	62,331	64,303	3.16%
Kansas City Chiefs	72,082	74,106	2.81%
Carolina Panthers	72,292	73,617	1.83%
Denver Broncos*	75,327	76,355	1.36%
Philadelphia Eagles	69,144	69,596	0.65%
Detroit Lions	63,742	64,137	0.62%
San Francisco 49ers*	69,732	70,144	0.59%
Houston Texans	71,496	71,774	0.39%
New Orleans Saints	73,042	73,139	0.13%
Baltimore Ravens	71,224	70,588	-0.89%
Pittsburgh Steelers*	63,034	62,471	-0.89%
Chicago Bears*	62,145	61,142	-1.61%
New York Jets	78,986	77,562	-1.80%
Indianapolis Colts	64,828	63,440	-2.14%
Washington Redskins	76,921	75,175	-2.27%
Oakland Raiders*	59,242	57,775	-2.48%
New York Giants*	79,475	77,179	-2.89%
Cleveland Browns	65,859	63,882	-3.00%
New England Patriots*	68,756	65,878	-4.19%
Tennessee Titans	69,143	65,651	-5.05%
Los Angeles Chargers*	65,392	25,335	-61.26%
League Average	67,358	67,405	0.07%

Figure 2. Average Game Attendance of NFL in 2011 and 2017

* Top 50% of Added Value

Dance

A correlation analysis between each team's franchise value and total attendance figure of 2017 was performed. It was found that the franchise value was positively correlated to attendance (r = .577, p < .01). However, the relationship between the attendance figure and the added franchise value was not statistically significant.

Renovation, New Construction and Length of Stadium Usage

Figure 3 displays the age of the current stadium each NFL franchise plays in or will play in, if a new stadium is currently under construction. In this case, the age of the stadiums being used was calculated from the time of data collection (in 2017) to the year when the stadiums were built or renovated. According to our results reported in Figure 3, all teams, but two (except Kansas City Chief and Buffalo Bills), have renovated their stadium within the last six years. Without counting the six teams that are waiting to receive a new stadium, 23 out of the rest 26 NFL teams (88%) had used their current stadium for less than four years after the most recent renovation. In Figure 3, 16 teams with an asterisk were identified as the Top 50% beneficiaries, which had a greater added value than the rest of the league after the completion of renovation (or construction). Among these 16 teams, 10 (62.5%) had their stadium renovated within a year or were waiting to receive a new stadium. On the contrary, among the 16 teams in the bottom 50% in added value, five teams had their most recent renovation done three or more years ago, only four teams (25%) had a recent renovation less than a year (without counting Buffalo Bills' stadium which was scheduled to be renovated in 2018).

		Stadium	Last Stadium	
	Team	Built	Renovation	
	Los Angeles Rams*	2020	TBD	
	Oakland Raiders*	2020	TBD	
	Los Angeles Chargers*	2020	TBD	
	Atlanta Falcons*	2017	TBD	
	Minnesota Vikings*	2016	TBD	ion for
YY YA	San Francisco 49ers*	2014	TBD	
Health,	New York Giants*	2010	2014	creation and Dance
	New York Jets	2010	2014	
	Dallas Cowboys*	2009	2014	
	Indianapolis Colts	2008	2014	
	Arizona Cardinals*	2006	2017	
	Philadelphia Eagles	2003	2014	
	New England Patriots*	2002	2017	
	Seattle Seahawks*	2002	2015	
	Houston Texans	2002	2016	
	Detroit Lions	2002	2017	
	Denver Broncos*	2001	2015	
	Pittsburgh Steelers*	2001	2017	
	Cincinnati Bengals	2000	2015	
	Tennessee Titans	1999	2016	
	Cleveland Browns	1999	2015	
	Baltimore Ravens	1998	2017	
	Carolina Panthers	1998	2017	
	Tampa Bay Buccaneers	1998	2016	
	Washington Redskins	1997	2012	
	Jacksonville Jaguars*	1995	2016	
	Miami Dolphins*	1987	2017	
	New Orleans Saints	1975	2017	
	Buffalo Bills	1973	2018	
	Kansas City Chiefs	1972	2010	
	Green Bay Packers	1957	2015	
	Chicago Bears*	1924	2015	
	* Tee E0*/ of 6 dided Value	-		

Figure 3. Stadium Age and Renovation Record of Existing NFL Stadiums

* Top 50% of Added Value

The authors had a hypothesis that stadium construction and renovation would have a direct impact on the franchise's added value. We used three years as a cut-off line to divide all teams into two groups. The three-year time period was chosen because the first three years after the construction was the recommended timeframe which the "honeymoon effort" was most intensified (Clapp & Hakes, 2005; Leadley & Zygmont, 2006). The first group (n = 25) included teams which had not received a newly built stadium or had a recent renovation less than three years. The second groups contained seven teams which had their most recent renovation done for three years or more. Comparisons in actual total value and added franchise value were done between two groups, (a) 25 teams with a stadium renovation done within three year, and (b) seven teams with a stadium renovation done for more or equal to three years (see Table 1). The independent t-test showed those 25 teams of the first group actually had a lower average total value than those teams without a stadium renovation within the last three years (2.3684 billion vs. 3.0685 billion). However, those 25 teams' added franchise value was significantly greater than the other seven teams (249%vs. 243%, p < .05).

Category	Condition	Ν	Mean
Total Value	Renovation done within 3 years	25	\$2.3684 billion
	Renovation done 3 or more years ago	7	\$3.0685 billion
Added Franchise Value	Renovation done within 3 years	25	249%*
	Renovation done 3 or more years ago	7	243%
		8 /	

Table 1. The Effect of Renovation on Total Value and Added Franchise Value

**p* < .05

The Effect of Winning

Figure 5 showed the ranking of each NFL team by winning percentage of each franchise from the 2011 season through the 2017 season. The results included the playoff records of each team as well. Note that there are four teams with a winning percentage of over .600, and 50% of total teams hit the winning mark (.500). To further examine the differences in total and added value between the winning and losing team, the authors divided all teams into two different groups, winning teams and losing teams, and further compared their total and added value through another independent t-test (see Table 2). The results showed 16 teams with a winning percentage greater than .500 had a slightly higher total value than those 16 losing teams (\$2.5775 billion vs. \$2.4656 billion). However, this difference has not reached the statistically significant level. Perhaps, it is surprising to find that losing team's (winning percentage less than .500) added value within the six-year period was actually higher than the value of winning teams. Despite the difference not being significant, the losing team's value improved in a greater rate than those of winning teams. According to the result of the correlation analysis, winning percentage of added value during the observed six-year period (p > .05).

Figure 5. Winning Percentage of All NFL Franchises in 2011 and 2017

Team	Regular Season	Playoff Record	Winning	
N	Record in 6 Years	in 6 Years	Percentage	
New England Patriots*	75-21	11-4	0.775	
Seattle Seahawks*	65-30-1	8-4	0.681	
Denver Broncos*	64-32	5-3	0.663	
Pittsburgh Steelers*	61-35	3-4	0.621	
Green Bay Packers	58-37-1	5-5	0.599	
Carolina Panthers	58-37-1	3-4	0.597	
Cincinnati Bengals	56-38-2	0-4	0.570	
Arizona Cardinals	54-41-1	1-2	0.561	
Dallas Cowboys*	54-42	1-2	0.556	
Minnesota Vikings*	54-41-1	1-3	0.555	
Kansas City Chiefs	55-41	1-4	0.554	
Indianapolis Colts	53-43	3-3	0.549	
Atlanta Falcons*	52-44	4-3	0.544	
Philadelphia Eagles	51-45	3-1	0.540	
Baltimore Ravens	50-46	5-1	0.539	
New Orleans Saints	50-46	2-2	0.520	
Detroit Lions	47-49	0-2	0.480	
San Francisco 49ers*	44-51-1	4-2	0.475	
Houston Texans	45-51	2-3	0.465	
Buffalo Bills	45-51	0-1	0.464	
Miami Dolphins*	45-51	0-1	0.463	
Los Angeles Chargers*	43-53	1-1	0.449	
Los Angeles Rams*	42-53-1	0-1	0.438	
New York Giants*	42-54	0-1	0.432	
Washington Redskins	41-54-1	0-2	0.423	
New York Jets	38-58	NA	0.396	
Tennessee Titans	36-60	1-1	0.377	
Oakland Raiders*	36-60	0-1	0.371	
Tampa Bay Buccaneers	33-63	NA	0.344	
Jacksonville Jaguars*	27-69	2-1	0.293	
Chicago Bears*	27-69	NA	0.281	
Cleveland Browns	20-76	NA	0.208	11"

Table 2. The Effect of Winning on Total Value and Added Franchise Value

Category	Condition	Ν	Mean
Total Value	Winning percentage \geq .500	16	\$2.5775 billion
	Winning percentage < .500	16	\$2.4656 billion
Added Franchise Value	Winning percentage $\geq .500$	16	245%
	Winning percentage < .500	16	250%

Discussion and Conclusion

After examining various available data sets with utilization of designated independent variables, several conclusions come to the surface. Theoretically, each NFL team (franchise) has the same amount of opportunities to engage in promotional and marketing strategies to enhance its profits. External factors such as the general economy can also contribute to a team's financial success. When the economy is vibrant, people will have more disposable incomes to spend on discretionary items such as tickets to sporting events (Peters, 2017). When the NFL signs multi-year billion-

dollar broadcasting deals, teams also share those revenues evenly and the league ensures that the games are televised to reach out as many viewers and consumers as possible (Peters, 2017). Therefore, the increase of TV viewership and total attendance are critical in boosting revenues from broadcasting contracts and ticket sales. It is easy to understand why teams need to be located in big metropolitan cities with large media markets, so the teams can grow their fan base and attendance more efficiently. The results of our correlation analysis helped confirm some basic suggestions proposed by literature (Alexander & Kern, 2004; Leeds, von Allmen, & Matheson, 2018; Miller, 2007). The franchise value increased as the average game attendance also rose. However, it is clear that teams have taken other fast approaches to increase their financial value quickly besides cultivating fan base and improving ticket sales.

The authors further confirm a renovation or construction of a stadium clearly affects a franchise's value as suggested by Miller's observations (2007). Among the top-10 newest stadiums built in the NFL, the majority of those 10 teams are also on the list of the top-50% team value (National Football League, 2017). When a stadium is newly built or renovated, we witness the average game attendance soar as the "honeymoon effect" suggested. All the spending or costs for building or renovating the facility have become added value to the franchise. The facility became a part of assets of the owners. This way of gaining franchise value led to a spread of renovation or construction hype by many sport franchises and created unexpected high expenses for the host city's tax payers. The Miami Marlins had most of their new facility paid by taxpayers' monies. It is a controversial subject in the city of Miami to this day (Elfrink, 2011; Notte, 2017). After a small amount of service debt was paid off, the previous owner sold the team and building to a Derek Jeter-led financial group for \$\$1.2 billion dollars (Jackson, 2017).

Traditionally, sport teams' performance (winning percentage) was thought to be the most vital reason that dictated their financial success. Based on certain case observations, we found the New England Patriots, the team with the highest winning percentage in the six-year timeframe, also had the second highest percentage in added franchise value (325%). On the contrary, the Cleveland Browns, who had the worst winning record from 2011 to 2017, also had the lowest percentage of gain in added value (about 200%). Logically, winning teams will likely bring more fans to the stadium, thus creating more revenues and increasing the value of a franchise. Surprisingly, the authors did not find a meaningful relationship between winning percentage and the total franchise value, as well as added value during the observed six-year period. We suspected there must be other strong contributing factors regarding the increase of franchise value and percentage of added value other than winning.

When teams don't perform well on the court or field, they often ask for a new stadium to attract more fan support. Many teams are now using this practice, renovating the existing stadium or asking for a brand new stadium, to quickly raise the value of the franchise. Regardless of ones' performance level, teams all point to the need to have a newer home to boost attendance and rally for support. Evidently, people are blaming the old FedEx Field, which was renovated in 2012, for ruining the team performance and fans' experience at Redskins games (Zielonka & Paras, 2018). If the host city decide not to offer a new stadium or renovate the existing facility, the team owners will threaten local fans with a proposal of relocation and ask for a new stadium from other cities. For this reason, the authors believe that renovation and construction of stadiums trumps winning in

affecting the increase of franchise value (or added value). The authors, however think it is just a hoax when team owners address the need to build a new stadium to improve performance.

Increases in attendance will certainly boost the value of a team. Although the majority of revenue of the NFL is from broadcasting contracts, ticket and merchandise sales still play a vital role in a team's financial success. Franchises that are able to increase attendance will also be more likely to grow their overall value. To witness the actualization of the Rule of 72 in retail or wholesales businesses, we would assume that firms or organizations must grow their consumers tremendously or expand the stores or sales platforms rapidly. In the case of NFL's growth, we do not really see a massive increase of fans and viewership, or the expansion of the leagues with more franchises. What are the actually reasons that make franchises increase their value so rapidly? The authors do not agree that putting an extra burden on taxpayers to fund a construction or renovation project is a good means to help boost a franchise' value. We sincerely denounce the teams' practice of boosting their own financial gains on the expense of taxpayers' dollars.

Finally, a limitation of our study was not including the impact of broadcasting deals on improving the franchise value. Broadcasting deals can be viewed as a steady fixed annual income that are often settled for a long term period; however, when a new deal is renewed, we often likely see an increased amount of revenue flowing into the teams' account. In the meantime, we would also see a spike of players' salaries after the change of broadcasting deals. Interestingly, the increase of players' salaries is supposed to be extra expenditures that hurt the financial profits of the team. However, this unique increase of cost is reflecting the value of the players, and the players are considered as important assets of the franchise. The franchise value is actually further enhanced with an increase of players' salaries. The authors believe this is an important topic for future researchers to address when examining the valuations of professional sport franchises.

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