Major League Baseball Long-Term Contracts Compared to Winning Percentage, Playoff
Appearances, and Repeat Playoff Appearances through Descriptive Analysis

By
William Johnstone

A thesis presented to the Honors College of Middle Tennessee State University in partial
fulfillment of the requirements for graduation from the University Honors College

November 2016

Major League Baseball Long-Term Contracts in Correlation to Winning Percentage, Playoff Appearances, and Repeat Playoff Appearances

William Johnstone

APPROVED:

_____

Professor Don Roy
Marketing

_____

Department Chair
Department

_____

Honors Council Rep
Department

_____

Dr. John R. Vile or Philip Phillips
Dean

Introduction

Every year, in every sport, sports analysts across the nation spend hours discussing what teams will win their respective leagues. It is very hard to predict these winners in most cases because sports are full of upsets, Cinderella stories, and unexpected situations, but there is no doubt that some teams always have a better chance at success than others. Major League Baseball successes are very hard to predict because baseball can be dominated by one pitcher or one hitter. The game is called "the game of inches" for a reason, and that is because an inch can and will be all the difference in many games. To further this, there are many theories and phenomena that go into player performance, and considering how important one person can be to a baseball team, the success of that team can hang on that one player.

Successful teams must have successful players on their roster. The basis of the study being conducted is to find out if there is any noticeable relationship between the amount of players on long-term contracts and team success. Basically, if a team locks productive baseball players into contracts, disallowing them to play elsewhere and retaining the talent, will there be a direct link to the winning percentage, playoff appearances, and repeat appearances.

Literature Review

Players on long-term contracts are generally supposed to be the talented players. A team is not going to lock a player that is not predicted to help their team win into a long-term contract, but long-term contracts in themselves have many theories behind them in the baseball world. These theories are refuted and backed by many sports economic analysts. Jason Martin, Jim Turvey, and Katie Stankiewicz all have various reports on the contract year phenomenon, shirking and various other theories on long-term contracts. Katie Stankiewicz found in her study that players with one year contracts shirk more than players with long-term deals (Stankiewicz

82). The fact that these particular players shirk more cannot be explained with reasonable explanations because it simply does not make sense. A player that is playing to try and land a big time deal is not going to play worse on purpose, and that is the definition of shirking. The controversy could be in how she conducted her research, the player pool not being refined enough, and the fact that the pool was not broken down by player age, arbitration players and time in the league.

Jim Turvey found in his study that long-term contracts do pay off in some cases. In the case of Evan Longoria and Elvis Andrus, the Tampa Bay Rays and the Texas Rangers locked down talented young players for many years at a bargain rate (Turvey 8). They took advantage of young players in arbitration trying to make a name for themselves. Jason Martin looked at the contract-year phenomenon in particular. In his study, he refutes Stankiewicz argument that shirking is not very evident in players receiving a long-term contract. Jason Martin found in a study of position players that the year after receiving a long-term deal five statistics that were analyzed decreased: batting average, slugging percentage, on-base percentage, runs created per game, and adjusted batting wins (Martin 21).

Two other analysts that added to the depths of information on long-term contracts are Matthew Cahill and Zachary Taylor. Cahill took a pool of thirty MLB players and compared their statistics three years before and three years after signing a long-term contract during an arbitration year (Cahill 20). His findings were quite inconclusive. He found that of the thirty players, only three players continued to perform the same. The other twenty seven changed in performance, but not necessarily for better or worse. Fourteen players improved the following three years, and thirteen declined in performance (Cahill 20). This analysis only halfway backs Martin's findings. To best put it, there is going to be a change in performance, but that change is

not always known. The reason his study may not coincide with Martin's is because of the data used to create the study. Cahill used all of Martin's percentages with the exception of adjusted batting wins. In addition to these, he also analyzed the average number of times a player gets a hit when that player puts the ball into play.

Zachary Taylor sought to find the same answer as Cahill, but instead of just using players in arbitration, he took a pool of all the free agents in baseball from 2006 to 2015. He based his numbers off of only two statistics (Taylor 3). The first is wins above replacement, and that is the measure of player's total contribution to their team including all stats. The second number used was on base percentage. In his study, he found that player performance actually increased as they signed long-term contracts (Taylor 19). This is contradicting to the findings of Martin. The reason this number could be different in this instance is that Taylor also looked at pitchers. In his study of pitchers, he went based off the pitcher's wins above replacement number. Martin and Cahill did not do an analysis of pitchers at all in either of their studies.

These studies are important to understand because they point out various situations that could happen once a player is locked into a long-term contract. The pool of data on long-term contracts goes back and forth. Many studies say players will perform better than they have in the past, while other prove that players will shirk after signing a long-term contract. Although there are arguments for both sides when it comes to player performance, this study is simply looking at if by having these long-term contract recipients on a team, that team will ultimately win.

Method

The hypothesis of this study is that there will be a positive relationship between long-term contracts and the success of a Major League Baseball team. This relationship should be a positive one if some of the above theories are correct. Good players get long-term contracts, and

therefore should create a successful season. The greater the number of long-term contracts should result in more wins for that particular team, and that team will have a higher winning percentage as a result. This hypothesis would also entail that teams that are making the playoffs are going to have more players on these contracts, and finally that the teams that are repeatedly making the playoffs are going to possess more players with long-term contracts as well.

The definition of a long-term contract must be determined. In order to be a long-term contract, it must be equal to or greater than three years at the beginning of each year, and the player that is under that contract must be on the twenty-five man roster for that team at the beginning of the year. For the sake of this study, players traded during each year were omitted, and if they did in fact receive a long-term contract, were added to the following year's total for that team. Injured players were counted if they made the roster. If the players were not named in the starting roster at the beginning of the year they were not counted. Next, the years being examined are going to cover the beginning of the 2009 baseball season to the end of the 2016 season. All teams' rosters were counted and be a part of this study. This makes for a total of eight years of data. Playoff teams were be examined more closely. That is, the number of contracts and the average were calculated for each playoff team and compared to the overall totals and averages. Furthermore, the teams that made repeated trips, or back-to-back appearances in the playoffs were again calculated. The strongest correlation should come in this form if the above hypothesis proves to be correct.

Results

The study results begin with Table 1, and that is a calculation of all thirty MLB teams over the past eight years with respect to their number of players on long-term contracts. There was a total of 1,556 long-term contracts distributed throughout the league over this time frame.

The average number of contracts that each team possessed was 6.483. In Table 1, all of the teams that possessed more than the overall average have been highlighted in light green, while teams possessing less than the average are highlighted in red. This is saying that the league average for anyone one team, on any one year is about six players that are on a three year deal or more. One of the major highlights in this chart is the line containing the New York Yankees. Every year for the past eight years, they have been above the average, and well above it for that matter.

Next, in Table 2 one can see the winning percentage of every team in Major League Baseball for the past eight years. The teams that are under .500, that is a losing record, are highlighted in red, while the teams over .500 are highlighted in green. The teams that are .500 on the mark are highlighted in green and outlined in a red border. Once again, there is some interesting information to this study that can be pointed out by this table. There are two teams that have had winning records every single year for the past eight years, and they are the New York Yankees and St. Louis Cardinals. This is starting to display the trend that has been proposed that there is a correlation between the winning percentage and amount of long-term contracts that a team has on their roster each year.

In Table 3, the Major League Baseball teams that made it to the postseason are all listed for the last eight years. The teams that ended up winning the World Series each year are highlighted in green. For the first three years of this study, there were only eight playoff teams. This number of eight is due to the fact that there was only one wildcard team from each league, the National League and the American League, in each of these years. In 2012, the postseason changed to include two wildcard teams from each league that would play a one game series to decide who would advance in the postseason. From 2012 to 2016 there are ten postseason teams each year. The total number of long-term contracts for all the teams in the time frame was 517

contracts. The average contracts per team was 7.03125. That is above the total league average of 6.483.

Finally, in Table 4 the teams that had back-to-back playoff appearances were examined. In order to calculate each of these numbers the number of contracts for the two years were added and divided by two for an average. The total number of contracts for all the teams that had repeated appearances was 209.5, for an average of about 7.76 per team. This average is definitely well above the 6.48 of the overall population. The relationship is in fact very prevalent in this section of the study. Solely based on the numbers, there is definitely a noticeable correlation between the number of contracts and each of the three observed attributes.

Discussion

There is definitely more to these numbers that must be analyzed. First and foremost with respect to Table 1 and Table 2, the total number of long-term contracts for teams with a winning percentage above .500 was 855. This number makes the average for these teams about 7.25. The total number for teams below .500 was 650, making for an average of roughly 5.70. This is one of the most concrete forms of data from this study. Teams that are winning more games are carrying almost two more people a year on long-term contracts. This number in itself is convincing evidence that there is a correlation between long-term contracts and winning percentage. Then again, there is still more that can be taken from these two tables when looked at concurrently.

One of the more striking relationships comes with the New York Yankees. They are one of two teams to have a winning record for the past eight years. They also have more than the league average of long-term contracts for each year. They average ten and a half contracts per year for all eight years. The only other team to possess a winning record for all eight years is the

St. Louis Cardinals. They averaged seven and half long-term contracts per year. This number is lower than that of the Yankees, but it is still above the league average. It is also important to note that the Yankees have five playoff berths, while the Cardinals have six playoff berths over the course of this study. Now, to further solidify this, the worst teams over this span must be examined. The Houston Astros, Miami Marlins, and San Diego Padres had two, one, and one winning seasons respectively. The average amount of long-term contracts for these three teams each year were 3.5, 4.125, and 3.625 respectively.

These numbers are showing substantial differences between having players on long-term contract players on a roster and vice versa. There are also a few noticeable trends that one can pick up on when looking at Table 1 and Table 2 together. To begin, the Baltimore Orioles have some interesting situations in their data. In 2009, they had their worst season with a .395 winning percentage and six long-term contracts. By 2011, they were down to four contracts and their last losing record. This can be explained with guys retiring, and then bringing new players in to fill their spots. These players ended up helping the Orioles to three consecutive winning seasons. The Tampa Bay Rays contain a similar trend. They start with ten long-term contracts in 2009, and then they begin to lose contracts to three in 2013. Prior to 2013, they enjoyed a winning record every year, but in 2014 they drop below .500. They also add four more long-term contracts that year. They turn around and fall to three contracts by 2016 and have a .420 winning percentage. Obviously something did not work out in the 2014 season, and they ended up losing a lot of long-term contract players. This can be explained with various explanations. Some of the guys they signed did not pan out, or maybe some of the players did not fit into the kind of team they were trying create.

Another interesting takeaway from this data is to analyze the most and least successful teams each year. For all eight years, the team that had the worst record, that is the lowest winning percentage, averaged 4.375 long-term contracts. On the other side, the best team, or World Series champions, averaged 7.125 long-term contracts on their roster. The teams with the highest winning percentage, and not necessarily the world champions, had an average of 9.875 long-term contracts per year. Also, the team with the highest winning percentage out of any of this data is the 2009 Yankees at .644 and fourteen long-term contracts. On the opposite side, the Houston Astros had a .315 winning percentage in 2013 and nobody under long-term contract. To further this explanation, the teams that ultimately possessed the lowest number of long-term contracts had a losing record every year with the exception of two years.

The Oakland Athletics had one man locked down in the 2010 season, but they only had a .500 winning percentage. They did the same thing in 2014 with one man once again. This time they had a .540 winning percentage. There must be a reason for this success with nobody in long-term contracts. It goes against most of what has been backed by the rest of the data. The answer can come from the management side. Some teams do not believe in these long-term contracts, and these teams simply want to get the most wins for the cheapest price that year. A great theory that many baseball enthusiasts know is the idea of moneyball, and it is a theory that the A's came up with. In 2002, the A's went after players that got on base, not off batting average. They had to replace big time hitters like Jason Giambi and Johnny Damon. They tried getting pitchers that got groundballs instead of those with the lowest earned run average. They built a team off of stats that were not the norm for the time, and they wanted these players for the best price. A team with management such as this will go against this study. The Oakland

Athletics had the best record in baseball in 2002, but ultimately lost in the American League Division Series. They lacked the star power of big time players to boast any playoff success.

The Kansas City Royals are the next team that can be analyzed to explain another situation, and that is going to be called the nucleus theory. Basically, when a group of guys play together for a few years, they ultimately become better. This can come from having a group of leaders on a team that know how to set the team on the correct path to win games, and possibly a World Series. In 2010 the Royals had a .414 record and eight guys under contract. The next year they lost four of these players, and once again were under the .500 benchmark. Now the rebuilding began in 2012 when they added three guys to their roster. In 2013 they added two more for a total of nine, and had the first winning record of this study at .531. Now, these guys have played together for two years, and then again in the whole 2014 season. Their winning percentage shot up to .565 in 2014, and also had their first shot at the World Series in a long time. They would lose to the San Francisco Giants that year, but would return in 2015. In 2015, they won the World Series. These guys had four consecutive years of playing with each other, and it made them a better team; all the way to the point that they would win the Fall Classic.

Finally, the last two teams to zero in on are the 2016 World Series contenders, the Chicago Cubs and Cleveland Indians. These two teams are very similar in their winning percentage and their number of long-term contracts over the course of this data. In 2009 the Cubs had ten players on long-term contracts, and the Indians had nine. The Cubs would drop that number down to four by the 2014 season, and their winning percentage would follow in the same direction. They posted a .377 season in 2012. The Indians fell to three contracts in 2011 and dropped below .500 for every season until 2013. The story here is rebuilding. Each team saw a rise in contracts, and winning percentage eventually entailed. These teams were putting together

teams that would eventually lead them to one of the most exciting World Series in the history of the game. The Indians had eight guys under contract and a winning percentage every year after 2013. The Cubs' contracts jumped to seven in 2015 from four, and the team played for the National League Championship that year. The winning percentage of the Cubs also skyrocketed from .451 in 2014 to .591 in 2015 and .637 in 2016. That 103 win record in 2016 would lead them to become the World Champions.

In conclusion, all of this data points to a positive relationship between the three desired categories and long-term contracts when compared to each other. There seems to be a relationship prevalent that suggests that the more long-term contracts a team has, the higher the winning percentage. Now, this data is obviously not all conclusive. Throwing ten players onto a team with three year deals does not guarantee a winning season. In contrast, having zero long-term contracts does not necessarily mean that that team is going to have the worst record in history. This study suggests that many of the previous studies about long-term contracts that were presented may in fact prove accurate. The good players are going to perform better than their counterparts. The ultimatum that can be made is that more times than not these long-term deals that management and owners spend hours delving over are good moves. There are some important notions to understand as well. Management and owners can have a huge impact on the direction a team wants to go in with respect to signing players. As stated, in 2002 Billy Beane and others created this theory of moneyball, and that would definitely be an exception to this study. Other factors come into play as well. The Alex Rodriguez contract for the Yankees is proving to be one of the worst contracts in baseball history. It was so bad that they would buy him out of his contract in 2016 so he would not play in 2017 season. Arbitration rules and contract extensions also could be another aspect to look at in further studies. Players that have

not reached the ability to go in front of an arbitration panel can be locked down for a lot less money into a long-term contract or placed into a team's farm system. Extensions can allow for players to extend their long-term contracts for another year or however long the extension clause is for. These extensions were ultimately ignored in this study. These are normally very good players that could in fact play another season with their respective team and help them win more games.

The biggest factor that would be interesting to look at in relation to this study for future research is the value of every player's contract, as this is a huge factor when deciding to sign a player to a club. Robinson Cano is a prime example of this with the Yankees and Mariners. There is no doubt that the second basemen helped the Yankees win games throughout the 2013 season, and he would have continued to help them had he stayed. After the 2013 season, Cano wanted over two-hundred thirty million dollars in a contract. He wanted to essentially become one of the highest paid second basemen's in the game of baseball, however he could not reach a deal with the Yankees and took his talents to Seattle. Did he in fact help the Mariners win? Prior to the 2014 season, the Mariners had a losing season in every year except 2009, and in 2014 they finally broke the .500 mark. An interesting direction to take this study would be to value particular star players and see their effect on team's winning percentage. By singling out all the star players, baseball theories such as shirking and the contract year phenomena could be more accurately pinpointed. While doing all of this, one could also look at the particular dollar amount of the contract and see if the dollars spent were actually worth it in the form of team revenue from jersey, ticket and souvenirs with that man's name attached to it. All of these would be interesting ways to further this study, and all could be used to further predict winning teams in Major League Baseball.

Bibliography

Cahill, Matthew J. "Change in Major League Baseball Player Performance after Signing a Long-Term Deal." Thesis. St John Fisher College, 2014. *Sports Management Department.* Fisherpub.sjfc.edu. Web. 19 Oct. 2016.

Martin, Jason A., Trey M. Eggleston, Victoria A. Seymour, and Carrie W. Lecrom. "One-Hit Wonders: A Study of Contract-Year Performance among Impending Free Agents in Major League Baseball." *A Journal of Baseball History and Culture* 20.1 (2011): 11-26. *Project MUSE.* Web. 10 Oct. 2015.

Stankiewicz, Katie. "Length of Contracts and the Effect on the Performance of MLB Players." *Park Place Economist* 17 (2009): 76-83. *OAlster.* Web. 29 Sept. 2015.

Taylor, Zachary. "An Analysis of the Effects of Long-Term Contracts on Performance in Major League Baseball." Thesis. Haverford College, 2016. *Department of Economics.* Thesis.haverford.edu. Web. 20 Oct. 2016.

Turvey, Jim. *The Future of Baseball Contracts: A Look at the Growing Trend in Long-term Contracts.* Rep. Vol. 42. N.p.: Society for American Baseball Research, 2013. Ser. 2. *Academic OneFile.* Web. 28 Sept. 2015.

"Upcoming Chats." *Baseball Prospectus.* Baseball Prospectus LLC, n.d. Web. 10 Oct. 2016.

Table 1

Total Number of Long-Term Contracts Per Team Per Year									
	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL NUMBER
Baltimore Orioles	6	5	4	6	6	7	5	6	45
Boston Red Sox	8	13	12	10	6	5	9	9	72
New York Yankees	14	14	12	8	7	8	10	11	84
Tampa Bay Rays	10	6	5	5	3	7	4	3	43
Toronto Blue Jays	8	5	6	7	11	9	6	5	57
Chicago White Sox	10	11	12	10	10	7	9	9	78
Cleveland Indians	9	5	3	4	5	7	8	6	47
Detroit Tigers	10	10	8	6	6	5	6	8	59
Kansas City Royals	8	8	4	7	9	9	8	9	62
Minnesota Twins	7	7	8	7	4	5	6	7	51
Houston Astros	5	5	3	3	0	2	5	5	28
Los Angeles Angels	10	7	6	11	8	8	8	6	64
Oakland Athletics	2	1	3	3	3	1	2	4	19
Seattle Mariners	7	10	6	6	4	4	5	6	48
Texas Rangers	5	3	3	7	7	10	10	9	54
Atlanta Braves	7	5	7	4	5	7	8	5	48
Miami Marlins	2	3	4	8	3	2	4	7	33
New York Mets	12	10	6	4	4	3	3	4	46
Philadelphia Phillies	9	13	14	10	9	8	5	4	72
Washington Nationals	3	2	5	8	10	7	7	7	49
Chicago Cubs	10	10	8	5	5	4	7	6	55
Cincinnati Reds	6	6	9	7	9	7	8	6	58
Milwaukee Brewers	4	5	7	8	7	8	8	4	51
Pittsburgh Pirates	5	4	4	4	5	5	5	6	38
St. Louis Cardinals	6	6	7	6	6	9	9	11	60
Arizona Diamondbacks	10	6	2	4	5	5	3	3	38
Colorado Rockies	8	9	7	4	4	5	3	5	45
Los Angeles Dodgers	5	3	5	4	14	14	13	11	69
San Diego Padres	4	2	0	5	4	4	7	3	29
San Francisco Giants	6	3	3	3	9	10	9	11	54
								TOTAL	1556
	* Greater than the average							AVERAGE	6.483333333
	*Less than the average								

Table 2

Win Percentage of Each Through 2009-2016								
	2009	2010	2011	2012	2013	2014	2015	2016
Baltimore Orioles	0.395	0.407	0.426	0.571	0.525	0.586	0.500	0.546
Boston Red Sox	0.576	0.549	0.556	0.426	0.605	0.438	0.481	0.564
New York Yankees	0.644	0.585	0.593	0.573	0.525	0.518	0.534	0.518
Tampa Bay Rays	0.518	0.587	0.554	0.556	0.559	0.475	0.494	0.420
Toronto Blue Jays	0.463	0.525	0.500	0.451	0.457	0.512	0.567	0.550
Chicago White Sox	0.488	0.543	0.488	0.525	0.389	0.451	0.469	0.481
Cleveland Indians	0.401	0.426	0.494	0.420	0.564	0.525	0.503	0.591
Detroit Tigers	0.528	0.500	0.578	0.543	0.567	0.545	0.460	0.534
Kansas City Royals	0.401	0.414	0.438	0.444	0.531	0.565	0.593	0.500
Minnesota Twins	0.524	0.570	0.389	0.407	0.407	0.432	0.512	0.364
Houston Astros	0.457	0.469	0.346	0.340	0.315	0.432	0.530	0.518
Los Angeles Angels	0.597	0.494	0.531	0.549	0.481	0.594	0.525	0.457
Oakland Athletics	0.463	0.500	0.457	0.575	0.587	0.540	0.420	0.426
Seattle Mariners	0.525	0.377	0.414	0.463	0.438	0.537	0.469	0.531
Texas Rangers	0.537	0.551	0.596	0.571	0.558	0.414	0.539	0.576
Atlanta Braves	0.531	0.554	0.549	0.577	0.584	0.488	0.414	0.422
Miami Marlins	0.537	0.494	0.442	0.426	0.383	0.475	0.438	0.491
New York Mets	0.432	0.488	0.475	0.457	0.457	0.488	0.560	0.534
Philadelphia Phillies	0.576	0.597	0.623	0.500	0.451	0.451	0.389	0.438
Washington Nationals	0.364	0.426	0.497	0.599	0.531	0.584	0.512	0.581
Chicago Cubs	0.515	0.463	0.438	0.377	0.407	0.451	0.591	0.637
Cincinnati Reds	0.481	0.551	0.488	0.593	0.552	0.469	0.395	0.420
Milwaukee Brewers	0.494	0.475	0.584	0.512	0.457	0.506	0.420	0.451
Pittsburgh Pirates	0.385	0.352	0.444	0.488	0.577	0.540	0.601	0.481
St. Louis Cardinals	0.551	0.531	0.559	0.543	0.596	0.550	0.608	0.531
Arizona Diamondbacks	0.432	0.401	0.575	0.500	0.500	0.395	0.488	0.426
Colorado Rockies	0.560	0.512	0.451	0.395	0.457	0.407	0.420	0.463
Los Angeles Dodgers	0.582	0.494	0.509	0.531	0.564	0.572	0.563	0.555
San Diego Padres	0.463	0.556	0.438	0.469	0.469	0.475	0.457	0.420
San Francisco Giants	0.543	0.582	0.531	0.590	0.469	0.559	0.518	0.533

* Greater than .500
*Less than .500
*Equal to .500

Table 3

Playoff Teams and Their Long-Term Contracts

2016		2015		2014		2013		TOTAL
Toronto Blue Jays	5	Houston Astros	5	Kansas City Royals	9	Tampa Bay Rays	3	
Baltimore Orioles	6	New York Yankees	10	Oakland Athletics	1	Cleveland Indians	5	
Texas Rangers	9	Kansas City Royals	8	Los Angeles Angels	8	Boston Red Sox	6	
Cleveland Indians	6	Toronto Blue Jays	6	Baltimore Orioles	7	Detroit Tigers	6	
Boston Red Sox	9	Texas Rangers	10	Detroit Tigers	5	Oakland Athletics	3	
San Francisco Giants	11	Chicago Cubs	7	Oakland Athletics	10	Pittsburgh Pirates	5	
Mets	4	Pittsburgh Pirates	5	Pittsburgh Pirates	5	Cincinnati Reds	9	
Washington Nationals	7	St. Louis Cardinals	9	Washington Nationals	7	St. Louis Cardinals	6	
Los Angeles Dodgers	11	New York Mets	3	St. Louis Cardinals	9	Los Angeles Dodgers	14	
Cubs	6	Los Angeles Dodgers	13	Atlanta Braves	4	Atlanta Braves	5	
TOTAL	74	TOTAL	76	TOTAL	65	TOTAL	62	277
AVERAGE	7.4	AVERAGE	7.6	AVERAGE	6.5	AVERAGE	6.2	6.925

2012		2011		2010		2009		TOTAL
Baltimore Orioles	6	Detroit Tigers	8	Texas Rangers	3	New York Yankees	14	
Texas Rangers	7	New York Yankees	12	Tampa Bay Rays	6	Minnesota Twins	7	
New York Yankees	8	Texas Rangers	3	New York Yankees	14	Los Angeles Angels	10	
Detroit Tigers	6	Tampa Bay Rays	5	Minnesota Twins	7	Boston Red Sox	8	
Oakland Athletics	3	Philadelphia Phillies	14	Philadelphia Phillies	13	Los Angeles Dodgers	5	
St. Louis Cardinals	6	St. Louis Cardinals	7	Cincinnati Reds	6	St. Louis Cardinals	6	
Atlanta Braves	4	Milwaukee Brewers	7	San Francisco Giants	3	Philadelphia Phillies	8	
Washington Nationals	8	Arizona Diamondbacks	2	Atlanta Braves	5	Colorado Rockies	9	
San Francisco Giants	3							
Cincinnati Reds	7							
TOTAL	58	TOTAL	58	TOTAL	57	TOTAL	67	240
AVERAGE	5.8	AVERAGE	7.25	AVERAGE	7.125	AVERAGE	8.375	7.1375

TOTAL 517
AVERAGE 7.03125

*World Series winners in green

Table 4

Repeat Playoff Teams and Their Long-Term Contracts from 2009-2016

2009-10		2010-11		2011-12		2012-13	
New York Yankees	14	New York Yankees	13	New York Yankees	10	Atlanta Braves	4.5
Minnesota Twins	7	Texas Rangers	3	Texas Rangers	5	Cincinnati Reds	8
		Philadelphia Phillies	13	St. Louis Cardinals	6.5	St. Louis Cardinals	6
						Oakland Athletics	3
						Detroit Tigers	6
TOTAL	21		29		21.5		27.5
AVERAGE	10.5		9.666667		7.166667		5.5

2013-14		2014-15		2015-16			
Los Angeles Dodgers	14	Kansas City Royals	7	Toronto Blue Jays	5.5		
St. Louis Cardinals	7.5	Los Angeles Dodgers	13.5	Texas Rangers	9.5		
Pittsburgh Pirates	5	St. Louis Cardinals	9	Los Angeles Dodgers	12		
Detroit Tigers	5.5	Pittsburgh Pirates	5	Chicago Cubs	6.5		
Oakland Athletics	2	Kansas City Royals	8.5				
						TOTAL	209.5
34		43		33.5		AVERAGE	7.759259
6.8		8.6		8.375			

*Number of contracts is the average of the repeated years