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AP Research 4A

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November 16 2016

Annotated Bibliography

Meltzer, J. (2005, May). Average Salary and Contract Length in Major League Baseball: When Do They Diverge. *Stanford University Department of Economics,* 1-40. Retrieved November 15, 2016, from

The research paper focused on “average salary and contract length” and when these come apart. The idea that contract length and value come together and they are determined by player performance is introduced to open the paper. Meltzer looked at general stats of player’s contract structures. He also looked at the qualified hitters in the league who play catcher shortstop and in the outfield and determined where contract value was not in accordance to length. Meaning when is a contract not matching in average length and value for a certain type of player. He concluded that there are areas of divergence in length and value for young, rookie players and chronically injured players. There are two areas for contract divergence. This research is of interest to me as it gives me an idea of how to analyze player contracts, which is by taking average salary, and length for each sets of players (status, position, age). It also gives me an idea and the guidelines on how to suit an appropriate contract to a said player, this will help me justify the given contract in the end of the research paper. His method is too complicated to replicate, yet it can be simplified. It also confirms my idea of a link between contract length, value, and player performance. (True Research Paper)

Staudohar, P. D. (1997, Fall). Baseball's Changing Salary Structure. *Compensation and Working Conditions,* 2-8. Retrieved November 15, 2016, from http://www.bls.gov/opub/mlr/cwc/baseballs-changing-salary-structure.pdf.

This research paper focuses or shows how there has been “salary polarization” in most MLB rosters. Meaning that one player eats up a lot of the teams’ available payroll and all other players earn medium to low salaries. This paper also shows the huge difference that exists between team payrolls (highest vs lowest paying teams.) It states that since 1976 team payrolls and player salaries have been on the rise, salary polarization has also been on the rise. This paper is of interest to me as it addresses the ideas of team payrolls, “salary polarization” and the rise of salaries in baseball. The research paper itself offers no solution or no attempt at solving the issue of salary polarization. It gives me a chance to address a gap that is still trending in baseball today: how can a team maintain its best player while keeping in accordance to its own payroll. With these ideas in mind I can accommodate the contract not only in accordance to the player but also to the team’s payroll as well as trying to avoid salary polarization, addressing a solution to that existing problem. The data presented will be of great use when introducing the idea of team payrolls in my paper. (Current Climate or Gap)

Averbukh, M., Chase, B., & Brown, S. (2015, October 22). Baseball Pay and Performance. *MIS University of Arizona,* 2-6. Retrieved November 15, 2016, from https://ai.arizona.edu/sites/ai/files/MIS580/baseball.pdf.

This research paper focused in finding the best general offer that a team could make to a pitcher considering his performance throughout his MLB career. They looked at every individual pitcher stats including ERA, strikeouts and wins in relation to their pay. The idea that performance determines pay was reinforced yet they state that as they focused on creating one general offer for the whole league they could not create one as they did not consider the differences between all of the league’s team payrolls. They also failed to address contract length. This paper is of great use for my research as its methodology follows one that is very similar that I want to use. I will do something very similar to this paper but with hitters and considering averages in length and value and I will make it on one particular player so that the offer can be done. (True Research Paper)

Stankiewicz, K. (2009). Length of Contracts and the Effect on the Performance of MLB Players. *The Park Place Economist,* *XVII*, 76-82. Retrieved November 15, 2016, from https://www-test.iwu.edu/economics/PPE17/stankiewicz.pdf.

Stankiewicz explores if there is a relationship between the length of a contract and the players’ performance. She states that players prefer a long-term contract as they have a guaranteed income over a longer period of time. She concludes that a multi-year deal is better than a one-year deal as it increases the productivity of players. She suggests that in further research players be divided by position or age group, she also recommends dividing the contracts into further divisions not one-year and multi-year deals. This paper is of interest to me as it will help me create the proposed contract structure with the ideas of contract length. It also gave me an idea on what to probably use to measure productivity for each type of player under said contracts for my data analysis. This research paper gave me an insight to a gap as I will take the recommendations of separating players by position and more options for contracts in length. (True Research Paper)

Bennett, J. M., & Flueck, J. A. (1983, February). An Evaluation of Major League Baseball Offensive Performance Models. *The American Statistician,* *37*(1), 76-82. Retrieved November 15, 2016, from http://www.jstor.org/stable/2685850

This paper discusses the different “Offensive Performance Models” or statistics that exist in baseball that measure the offensive production of a player. Bennet and Flueck review all official statistics recognized by the MLB like AVG. or SLG. and stats that are widely recognized by fans like WAR in order to come up with the most productive player in the history of the MLB. They end up concluding that no previous model takes into account all stats that make up offense in baseball, they end up creating their own statistic to measure offensive productivity, ERPA. This is the first stat ever created in baseball that encompasses all other stats giving the best offensive model of a player. Even though their method and stat creation is very difficult to follow, this paper is of great interest to me as it gave me the ideas to use a standardized WAR; as it mentioned that WAR was ineffective as they were many versions of it in existence, and it also gave me the idea to determine the most productive hitter in the league. It also gives a detailed process on how to measure each offensive model for each player which could be of great use in the future. (Historically Significant)

Pantuosco, L. J., & Stone, G. (2010, Fall). Babe Ruth as a Free Agent: What the Old-Time Greats Would Earn in Today's Labor Market for Baseball Players. *The American Economist,* *55*(2), 154-161. Retrieved November 15, 2016, from http://www.jstor.org/stable/41429204

Pantuosco and Stone look to determine how much would baseball hall of famers like Babe Ruth, Lou Gehrig, and Ty Cobb, would earn in today’s money-driven MLB. In order to do this, the players’ most productive year was taken along with their salary and it was then converted to 2009 USD. He concludes that most of these players would have won salaries well over 10 million USD per year. After comparing it to 2009 all-stars these members of the HOF would have destroyed the league’s economy. This paper is important for me in three ways. (1) It gave me the idea to determine how much a player would earn in his next contract based on his performance, (2) He has a detailed and easy to follow process on how he converted the USD, I will use this if there is a change the value of currency and (3) I could also use his idea of comparing All-Star rosters in order to limit my sample size when determining most productive players. (True Research Paper)

Schwartz, N. L., & Zarrow, J. M. (2009). An Analysis of the Impact of Team Payroll on Regular Season and Postseason Success in Major League Baseball. *Undergraduate Economic Review,* *5*(1), 1-13. Retrieved November 15, 2016, from

http://digitalcommons.iwu.edu/cgi/viewcontent.cgi?article=1046&context=uer

Explores the relationship between the payroll of MLB teams and their success in regular season and postseason. Their results show that a team’s payroll will have a significant impact in winning percentage of the regular season. If a team has a big payroll, then it will win more games as it will have the ability to sign better players over the teams with a smaller payroll who in turn, will win less games. They also introduce the idea that teams are now restructuring their players’ deals in order sign more players who are more productive and thus giving the team more wins. This paper interests me as it covers the ideas of team payrolls and success in baseball. Following their conclusion (higher payroll more wins and vice-versa) and his idea of teams restructuring deals. I will try to restructure the player’s deal so that it fits into the team’s payroll so that it helps their winning percentage. (True Research Paper)

Judge, T. L. (2010, October). The Relationship between Pay and Job Satisfaction. *Journal of Vocational Behavior,* *77*(2), 157-167. Retrieved November 15, 2016, from http://www.timothy-judge.com/Judge, Piccolo, Podsakoff, et al. (JVB 2010).pdf

This meta-analysis by Judge and colleagues, reviews over 120 years of research in terms of the relationship between money, job satisfaction and motivation. This ended up in the conclusion that less than 2% of people were motivated by their salaries and the also 2% of people did not relate job satisfaction to their salaries. All employees (who were in different paygrades) reported similar engagement and motivation to their jobs. This is if they had no guarantee on their contract for future years. If their contract had some degree of guarantee, there was a slight increase in motivation and job satisfaction (6%). This is very significant to my paper as I can use it on my contract structure in terms of salary. By guaranteeing players a future salary, their motivation should increase thus increasing their statistics. While if a one-year deal is used then there is no future guaranteed and thus less motivation and less productivity. It is important to consider that this study took data from all labor sectors in over 92 countries, not only from baseball. It still backs up Stankiewicz’ conclusion and it could be used as a theoretical and statistical basis for my contract structure. (Historically Significant)

Alm, J., Kaempfer, W. H., & Sennoga, E. B. (2012, July). Baseball Salaries and Income Taxes: The "Home Field Advantage" of Income Taxes on Free Agent Salaries. *Journal of Sports Economics,* *13*(6), 1-23. Retrieved November 15, 2016, from http://econ.tulane.edu/RePEc/pdf/tul1209.pdf

This paper explains how the income tax and luxury tax work in the MLB. It also looked for a relationship or impact of income tax on a free agent’s salary. It found that each percentage point of an income tax raised a free agent’s salary by $21 to $24. With this being said, the cities with a lower income tax have a “home field advantage” in signing free agents as their salaries will be lower in cities. With lower salaries, the team payroll decreases and no luxury tax will be imposed by the MLB, saving the team millions of dollars. It is interesting for me because it introduced me to the idea of taxes in salaries. This is important for me to consider in my paper as it will determine the minimum contract given to the player that will be studied in detail. The idea is to give the player a salary that sticks to income avoids luxury tax for the team to save money. This paper is also of great use as it already has the income tax for each city that holds an MLB franchise; I will not have to look for it. (Current Climate or Gap)

Steinberg, L. (2016, August 12). A Historic Breakthrough in Guaranteed NFL Contracts. Retrieved November 15, 2016, from http://www.forbes.com/sites/leighsteinberg/2016/08/12/historic-breakthrough-in-guaranteed-nfl-contracts/#1b269aae5712

In this article Steinberg discusses the structure of NFL contracts. As opposed to other leagues, the NFL has been able to impose a “no guaranteed contract structure.” Only a portion of the contract is guaranteed, including a signing bonus. In recent years, the NFLPA has been able to include into contract structures injury guarantees. Steinberg argues that the NFL should continue to use this no guarantee contract structure in another way, giving a full guaranteed money and then adding some more for career milestones. This can connect to my paper as I could apply the NFL no guarantee contract structure in my contract if it is seen by stats that his production over time has decreased. If this is the case, not guaranteeing a future salary could motivate the player to perform. (Wildcard)

Badenhausen, K. (2015, January 23). Average MLB Player Salary Nearly Double NFL's, but still Trails NBA's. Retrieved November 15, 2016, from http://www.forbes.com/sites/kurtbadenhausen/2015/01/23/average-mlb-salary-nearly-double-nfls-but-trails-nba-players/#439488b2269e

In this article, Badenhausen puts MLB contracts in perspective with the other top three leagues (NFL, NBA, MLB.) He explains that the MLB signed a new TV deal in both local and national proportions, this has fueled all teams with cash. The MLB average salary of 2014 was around 3.82 million USD. Only the NBA has a higher average salary. MLB players earn in average the double as NFL and NHL players. MLB average salary is expected to increase for both the 2015 and 2016 season as team payrolls increase as well. This is important for my research paper as one can see how the new deal is expected to be higher than that of the previous one. It would be normal for my final contract structure in terms of value to be higher or I would expect it to be higher as that is what the trend in previous year(s) states. This also could indicate that applying contract structures of other leagues into the MLB would not work as the average salaries vary greatly from league to league. (Wildcard)

Krautmann, A. C., & Oppenheimer, M. (2002, February). Contract Length and the Return to Performance in Major League Baseball. *Journal of Sports Economics,* *3*(1), 6-17. Retrieved November 15, 2016, from http://jse.sagepub.com/content/3/1/6.short

Krautmann and Oppenheimer look to see if there is a correlation between length and wages of an MLB contract. This is the first research paper that is able to link length and value of a contract. They also found a negative correlation between contract length and a player’s return to performance. They describe this as a tradeoff between the player and the team owner. The greater the contract value, the greater the length the player stays and is paid yet the longer he takes to produce similar numbers as in previous seasons. This is important for me to take into my research paper as I am now sure that there is a correlation between length and value but there is a risk of seeing low production in the first years of the contract. They also present the idea of getting the highest productivity at the lowest price possible, this is a key aim for the contract structure that will be proposed in my paper. These ideas of tradeoffs between productivity, wages and length, are essential to take into account when measuring for previous performance and future performance under the new proposed contract structure. (Historically Significant)

S. 1114, 109th Cong., U.S. G.P.O. (2006) (enacted).

Passed in 2005 the “Clean Sports Act” established a minimum drug testing standards for major professional sports leagues in the United States. Identifies anabolic steroids as a health problem nationwide. In order to discourage steroid use in teens (over 500,000 teens used steroids in 2004) they are banning their use in said sports leagues as professional athletes are the role models of these teens and they hugely impact their behavior. Studies suggest that as steroid use has increased at professional and collegiate levels, they have also increased in teens and children. Creates an anti-doping code for all professional sports leagues. All professional athletes are required to go through the anti-doping process before participating in the league and at least 5 times per calendar year. This sports act is almost a guarantee for my research paper that steroids will not play an impactful part in previous and future player performances across the MLB. This almost entirely disregards a variable that cannot be controlled at a large scale in my data sets. It is almost assured that now only a small amount of players use PEDs so these can be easily discarded from my data set and my sample size will not be affected as much and my results will suffer little impact. (Historically Significant)

Perry, D. (2014, November 17). Leaderboarding: Stanton, A-Rod and the biggest MLB contracts ever. Retrieved November 29, 2016, from http://www.cbssports.com/mlb/news/leaderboarding-stanton-a-rod-and-the-biggest-mlb-contracts-ever/

Perry discusses the new rise of multi-year, multi-million deals in the MLB. In the last four years (2013-2016), more $200+ million deals have been signed than in the entire history of the league. These deals range from 9 to 13 years in length. In 2015 the biggest contract in sports history was signed between Giancarlo Stanton and the MLB’s Miami Marlins. Perry argues that these deals just reflect what the teams would pay for the prime of the player’s career not the entire length of the contract as they intend to payoff for the near coming years and are not considering the future veteran years of the careers of the players. Says teams need to learn from this statement and avoid the same mistake that they have committed repeatedly in these last years. This is important as it provides two takes on contracts. The first how the teams are currently paying their players and how they consider that they should be structuring their contracts within the current standing of team payrolls in the league. The second from a member of the Baseball Writers Association, who has studied economics and markets and has insight on how deals should work. It will be important to take both perspectives into account as one comes from the guys who run the league and the other from an expert in baseball and economics. (Current Climate or Gap)

Dubberke, T. (2009, June 19). What do American Players Make in Japan? Retrieved November 15, 2016, from http://bleacherreport.com/articles/202322-what-do-american-players-make-in-japan

Bleacher Report explores the biggest contracts signed in Japanese professional baseball and compared them to those made by MLB teams. The biggest contract ever offered in Japanese baseball was the $61million 10-year deal offered to Hideki Matsui by the Yomiuiri Giants. In the MLB, the biggest contract ever offered by a team is the $325 million 13-year deal offered to Giancarlo Stanton by the Miami Marlins. In other deals covered it is stated that Japanese teams offer half of what MLB teams put on the table. The difference he explains, is that Japanese teams mostly offer shorter deals on average and Look to invest their money throughout the player’s contract unlike MLB who do it to keep the player during his prime years. This is important for my paper as it covers and compares the two biggest baseball leagues in the world and how their contract negotiations and structures work and compare to one another. It would be wise to take in elements from both leagues to create a more complete contract. This will take into account both Japanese and American perspectives on the economics of baseball. (Current Climate or Gap)

Rhymer, Z. D. (2013, May 22). Proof that the Steroid-Era Power Surge in Major League Baseball has been Stopped. Retrieved November 15, 2016, from http://bleacherreport.com/articles/1648362-proof-that-the-steroid-era-power-surge-in-baseball-has-been-stopped

In this article, Rhymer shows evidence to prove his point that the Steroid-Era power surge has come to an end. He mainly focuses on power statistics like Isolated Power (ISO), which measures how good players are for hitting extra bases, Homeruns totals per season and ISO by age. The numbers show that the MLB has returned to normal after a decade of the Steroid-Era. Statistics of 2012 are very similar to those of the late 80’s and early 90 before the Steroid-Era. This is important for my paper as it proves that the “Clean Sports Act” has been successful in eliminating almost completely the use of PEDS. With this being said, it can be inferred that PEDs are now less of a risk variable that could affect my data or sample size in terms of calculating statistics, which could alter the contract structure (better stats generally mean a better contract offer). (Current Climate or Gap)

Posting System. (2016, January 8). Retrieved November 15, 2016, from http://www.baseball-reference.com/bullpen/Posting\_System

In the article, Baseball Reference explains how the Japanese and Korean “Posting System” works. The posting system is probably another explanation as to why Japan offers lower contract values. How the Posting system works is that for a team to negotiate with a player from another team, they must first pay a posting fee, or a release clause. This system protects the team from losing said player. When the feed is paid (it can reach up to $20 million) then the team has one month to negotiate with the player and reach an agreement. This is interesting to me as I had never really understood the posting system. It is a good, rational concept that can be applied to this contract structure to protect the team from losing said player in the future. It can also bring said team a huge bonus to its payroll. This is a concept that should be considered and contemplated when creating said contract. (Current Climate or Gap)

Gaines, C. (2011, April 6). Take a Close Look at an Actual Major League Baseball Contract. Retrieved November 15, 2016, from http://www.businessinsider.com/uniform-major-league-baseball-contract-2011-4#-2

Gaines breaks down how a current MLB contract looks like. He also explains the more difficult ideas or terminology that is present in the contract. The contract not only contains value and duration; it includes a player’s ethics and responsibility section and a club`s ethics and responsibility section as well as basic do’s and don’ts at the clubhouse. This is interesting to me as it gives me a basic idea of what a contract should look like if I decide to create and attach the whole document. This will give me the basics to generate my own and clear any doubts of how contracts should look and work. (Current Climate or Gap)

Podhorzer, M. (2016). *Projecting X 2.0* (2nd ed.). Smashwords.

In *Projecting X 2.0*, Podhorzer includes a step-by-step guide on how to project player statistics for an upcoming season. This is the first book that lets fans generate their own stat predictions. The book breaks down statistics from their most complex formulas and making them easy to understand for a regular baseball fan. This will now enable fans to become experts themselves and not entirely rely on what sport media tells them. This is very interesting for me as I will be able to generate the predicted stats for the player in the new created contract. Overall the methods are easy to follow and can be easily reproduced if the criteria in the book is followed. It is also the first book that breaks down all available baseball statistics into one reading. (Current Climate or Gap)

Collective Bargaining Agreement (CBA). (2012, December 12). Retrieved November 15, 2016, from http://mlb.mlb.com/pa/pdf/cba\_english.pdf

This is the MLB’s contract agreement with the MLB Player’s Association (MLBPA). This is the basic contract that represents and compromises the interests of both the league and the players. This basically discusses current contract structures and an overall ethics compromise of how both parties should act. This document also includes regulations on Maximum and Minimum Salaries per year, and player eligibility. This is the new contract agreement that covers from 2011 to 2017, changes the structure of contracts. This is crucial for my research as it will not only help me determine certain things on contract structure, it will also help me determine the size of my sample. With the guidelines of player eligibility, I will be able to determine which players I will use in for my data collection, this will help me to accurately represent the MLB players. (Historically Significant)