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Competitive Balance and Team Payroll: The Case of Major League Baseball

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Abstract. I examine the connection between Major League Baseball (MLB) team payrolls and team success. Previous studies attempted to quantify the effect that increased spending has on success. In 2000 MLB commissioned a study of competitive balance. The Blue Ribbon Panel concluded that MLB had lost its competitive balance and measures were needed to save "America's pastime." Since 2000 new data has become available. I have used the new data to update the Blue Ribbon Panel's study. I show that the dominance of the high-spending teams in the 1990s did not continue, and that competitive balance exists in MLB.

I. Introduction

Major League Baseball (MLB) has become more than a game. It has evolved into a big business. "America's pastime" is now played by highly-paid athletes employed by large revenue-generating clubs. Every fan begins each season hoping that this will be the year that his team is crowned World Series champion. The problem for many teams is that they are competing against teams that have payrolls many times larger than their own. MLB has made some effort to control team spending with a "soft" cap and revenue sharing. The next contract negotiation between the player's union and the owners will occur in December 2011 and has renewed interest in the economic state of MLB, especially the disparity in payrolls and revenue sharing. MLB operates more efficiently when the league is competitively balanced. Many experts have argued that baseball has recently entered a time of competitive imbalance resulting from a growing payroll gap. I conclude that MLB is a competitive and balanced league.

II. The Theory of Competitive Balance

Interest is competitive balance in sports has been around for sometime. Simon Rottenberg first introduced it in a 1956 publication, writing:

> The nature of the industry is such that competitors must be of approximately equal "size" if any are to be successful. A more or

> less equal distribution of talent is necessary if there is to be uncertainty of outcome; and the uncertainty of outcome is necessary if the consumer is willing to pay admission to the game (Rottenberg 1956, 242-246).

Since Rottenberg, economists have developed numerous models to measure competitive balance. The general definition of competitive balance is "a market situation where no firm is too big and has an unfair advantage" (Lexicon Financial Dictionary Online). Using the general definition and Rottenberg's theory of competitive balance, many have concluded that baseball no longer exhibits a product that has the characteristics of competitive balance.

The issue of competitive balance and increased spending is a relatively recent concern for Major League Baseball. The trend of increased team payrolls emerged during the 1990s and was disturbing for those inside the game, the commissioner, owners, outside observers, the media, and fans. Many within baseball believed that competitive imbalance is caused by the growing payroll disparity between large and small-market teams. Competitive balance is vital to the success of MLB and its loss would be detrimental to the future of baseball. If fans perceive competitive imbalance they will not "buy" the product of baseball (O'Reilly et al. 2006, 257).

O'Reilly, Kaplan, and Nadeau (2006) write,

> At its core level, the success of professional sport franchises is built on the relationship they have with their fans. No fan wants to see his or her team lose. One could even argue that many of these fans will not spend their entertainment dollars on a team that habitually loses. This argument has spawned much discussion on competitive balance or parity as it is sometimes called, and is reported to be one of the main reasons why the subject has received considerable attention from the media, the fans, the owners and the management of professional sports teams, elected government officials, and researchers (2006, 257).

As O'Reilly, Kaplan, and Nadeau wrote, competitive balance and payroll disparity have been important to the academic community. Much of the literature published on the topic was a response to the findings of MLB's own investigation into the league's balance of competition.

In the aftermath of the 1994-95 work stoppages and the success of the New York Yankees in the 1990s, baseball's commissioner, Bud Selig, grew concerned about the direction baseball was heading. Selig launched an independent investigation into the effect team payrolls had on the competitive balance in baseball. This investigation is more commonly referred to as the Blue Ribbon Panel. This report, The 2000 Blue Ribbon Panel Report, by Levin, Volcker, Mitchell, and Will, reemphasized the sentiment of Simon Rottenberg's 1956 publication. The authors expressed concern about the current state of competitive balance in baseball, finding that the trend of increased payroll disparity was harming the game. The panel arrived at four conclusions and made recommendations for reform to increase the competition in the league. The four conclusions were:

1. Large and growing revenue disparities exist and are causing problems of chronic competitive imbalance.
2. These problems have become substantially worse during the five complete seasons since the strike-shortened season of 1994, and seem likely to remain severe unless Major League Baseball ("MLB") undertakes remedial actions proportional to the problem.
3. The limited revenue sharing and payroll tax that were approved as part of MLB's 1996 Collective Bargaining Agreement with the Major League Baseball Players Association ("MLBPA") have produced neither the intended moderating of payroll disparities nor improved competitive balance. Some low-revenue clubs, believing the amount of their proceeds from revenue sharing insufficient to enable them to become competitive, used those proceeds to become modestly profitable.
4. In a majority of MLB markets, the cost to clubs of trying to be competitive is causing escalation of ticket and concession prices, jeopardizing MLB's traditional position as the affordable family spectator sport.

(Levin et al., 2000, 1)

The Blue Ribbon Panel's report also stated that competitive balance could be maintained when the ratio between the highest team payroll expenditures the lowest team payrolls is 2:1. In the years following the strike the gap grew to 3:1 (Ross 2002, 1677). The report reiterated what commissioner Bud Selig, the media, and fans saw during the reign of the

1990s Yankee dynasty, "money matters."

The growing disparity in team payrolls, exacerbated by large-market, high spending franchises, has been used by MLB to explain the loss of competitive balance and need for change in baseball (Levin et al. 2000, 1). MLB took these findings seriously and began to reevaluate the direction the game was heading. A more in-depth analysis of the Blue Ribbon Panel's report and findings will be presented later in the paper. Since this report was released experts have tried to determine the true impact of team payrolls on team performance and competitive balance. It is necessary to understand the history of baseball's labor market to understand the present issue.

III. The Historical Events Leading to The Blue Ribbon Panel

Major League Baseball has been a staple in America for over a century. The league has experienced its share of disagreement between the owners and the players. The recent competitive balance did not occur overnight. There were events in the preceding decades that led to the payroll disparities of the 1990s.

Prior to 1976 there was not a free labor market for players. When a player signed with a team the player would stay with that team for the rest of his career, or until his skills diminished to the point that they provided no benefit to the team. A team could also trade a player to another team if it chose. The restrictive nature of the early labor market in baseball often meant players were paid below their level of marginal productivity. The team held all of the power and the players were at the mercy of the owners. When free agency was introduced, players were able to move from team to team, thus increasing competition for their services and driving salaries up. However, even after the introduction of free agency in 1976, which increased the freedom of the labor market, team payrolls and player salaries remained relatively similar. Free agency would seem to be the point at which competitive balance would have started to disappear.

Fort and Quirk (1995) studied the impact of the freer labor market on game outcomes and found no connection between the advent of free agency and a change in competitive balance, but Quirk and Fort did find that free agency had lead to the increase in payroll disparities. Bob Costas also noted that, "Free agency—at least at first—actually enhanced competitive balance and improved the game, added some excitement and life to it. During that period of time did the Yankees win? Did the Dodgers win? Yes and yes. But Cincinnati also was a dominant team, and Kansas City was a perennial power, one of the strongest teams in baseball for more than a decade" (Costas 2000, 37). Free agency was a significant event that led to players receiving increased salaries at the expense of owners. Players would be dealt a significant blow to their salaries in the next decade.

During the 1980s the payroll disparity had yet to reach the level it has in more recent times because in the 1980s, collusion played a major role in keeping player salaries depressed. Collusion by the owners started in the 1985 season when top-level free agents were not offered contracts by any franchise except the one that had previously employed them. Owners made backroom agreements with one another and agreed not to negotiate with players from teams other than their own. A court determined that MLB owners were guilty of colluding and keeping player salaries depressed during a three-year period (1985-87). The owners settled the collusion cases for $280 million with the Major League Baseball Players Association (MLBPA) (Schwartz and Zarrow, 5).

The lucrative broadcasting deal with CBS of $4 billon dollars over the 1989-93 seasons also contributed to an explosion in salaries. During the CBS deal player salaries and team payrolls increased at unprecedented rate. The owners were also benefiting from increased revenue from the television contract. The success and riches shared by owners and players was relatively short lived. This television deal was a disaster for CBS and when the agreement expired CBS did not renew the deal or negotiate a new one. This created a problem for the league. The injection of money disappeared and the owners were faced with the realities of uncontrolled spending during the life of the deal (Costas 2000, 19). MLB owners grew anxious with the direction of salaries, which brought about one of baseball's darker days. The 1994-95 work stoppage appears to be the point that players gained control and the free market of baseball rewarded players in the form of lucrative contracts. The 1994 season ended without a World Series and the work stoppage lasted into the following season.

The exact cause and the details of the 1994-95 strike are numerous and complex in nature. For the purposes of this paper the strike will be regarded as an event that had great consequences and launched great debate. Measures were taken during the collective bargaining agreements

(CBA) negotiations between the players union and the owners after the strike to impose some spending controls on teams. As mentioned earlier a "soft" cap, or a luxury tax, was implemented with the intention of narrowing the gap. This spending threshold taxes teams that exceed a set limit has done little to diminish the spending of large market teams, most notably the New York Yankees whom have had to pay into the tax pool nearly every year (Vrooman, 13).

In the years following the 1994-95 strike a dynasty emerged. Located in the largest market, the New York Yankees spent more money, acquired more top talent than other teams, and experienced more success than any other franchise during this time period (Sanderson and Siegfried, 1). This resulted in their dominance of the postseason during the five-year period following the strike. During the five-year period that the Blue Ribbon Panel focused on, the playoffs were dominated by teams near the top in total team payrolls. 158 playoff games were played during this time, no of which were won by teams from the bottom half of payrolls. Not only were these teams not winning playoff games, teams from the bottom half in payroll were not well-represented in October baseball. Only three playoff spots out of 48 went to teams from the bottom half of payrolls (Zimbalist 2001, 55). Most research done on competitive balance and team payrolls was a direct response to what happened in the years after the 1994-95 strike. The perception that only those with money had a legitimate chance of winning in the postseason gained traction with the trend that emerged in the post-strike years and the 1990s did nothing to disprove the notion (Costas 2000, 185-188).

The most recent MLB season would indicate that Levin et al. (2000), Costas (2000), Zimbalist (2001) and others were correct in their assumptions that increased payrolls have negatively affected competitive balance in baseball. The 2009 season ended with the New York Yankees winning the World Series trophy again, the twenty-seventh time in franchise history this has occurred. A total team payroll of $201,449,189 backed this team, which was the highest team payroll in all of baseball (USA Today). Compared to the year preceding the 1994-95 work stoppages, the numbers show that payrolls increased at an increasing rate in the following years. In the last full season before the work stoppage of 1994-94 the highest team salary was that of the Toronto Blue Jays at $45,747,666 (USA Today). After controlling for inflation during this time span the 2009 Yankees payroll was still around three times that of the 1993 Toronto Blue Jays. Both the Blue Jays of '93 and the Yankees of

'09 ended their seasons by earning the title of World Series Champions (ESPN).

After MLB's release of this Blue Ribbon Panel's findings a large amount of literature emerged in an attempt to explain the current state of competitive balance. The conclusions these reports arrived at were numerous and opposing. There has yet to be an irrefutable discovery as to whether team payroll disparities have a damaging effect on competitive balance. This paper will look at a selection of the literature to better understand the two sides of the argument. This summary of literature on the topic of team payroll and competitive balance is far from exhaustive, but allows for better understanding of the approaches, arguments, and conclusions.

IV. Literature Review

A. COMPETITIVE IMBALANCE EXISTS

Since the publication of the Commissioner's Blue Ribbon Report there has been extensive economic research that has found team payrolls statistically significant in explaining an imbalance in MLB. Some have taken a less complex, qualitative approach in observing the loss of competitive balance trend in baseball. These publications have also used a variety of models to show the statistical significance of team payroll on team performance. While the Blue Ribbon Report focused solely on the postseason and World Series won others have employed models to show the correlation between payroll and regular season success. Much debate has emerged from these papers and a consensus has yet to be agreed upon.

Like the approach of the Blue Ribbon Panel, Andrew Zimbalist in *Competitive Balance in Major League Baseball,* used payroll quartiles to show competitive balance in baseball during the same 1995 to 2000 time period. The 2001 publication arrived at the same conclusion the Blue Ribbon Panel reached. Zimbalist also pointed out that by 2000 teams in the top quartile were spending 3.5 times more than teams in the bottom quartile, received more playoff spots than bottom half payroll teams, and won all World Series championships during this time period (Zimbalist 2001, 55-58). Zimbalist also concluded that there was a strong correlation between team payroll and win/loss percentages in the five-year period, but not in the ten seasons from 1985 to 1994.

Bob Costas, an American broadcaster, released *Fair Ball: A Fan's*

Case for Baseball in 2000. In the pages of *Fair Ball* Costas pointed out similar findings that Zimbalist and the Blue Ribbon Panel arrived at. The qualitative observations during the seasons following the strike led Costas to argue that baseball had lost its balance. A sport dominated by the Yankees and large market teams during the 1990s brought out arguments for change in baseball by Costas. Like the Blue Ribbon Panel (2000) and Zimbalist (2001), Costas believed proactive evaluation of the economic structure of baseball and payroll reform was necessary to keeping baseball successful. The flaw in much of Costas' argument is that his claims are not backed by any real data or empirical evidence. The 1990s were a small sample size, and like Berri et, al. (2006) pointed out about the Blue Ribbon Panel's report the five-years following the 1994-95 strike cannot be used to express any long term link between team payroll and team success in the long run (Berri, et al. 2006, 34-36).

However, as recently as September 2009, other literature expressing observations like Costas's emerged. Tom Van Riper, writer for Forbes, expressed concern over the direction MLB was heading with regards to the disparity in spending by teams. Van Riper wrote, "Minnesota and Tampa Bay, last year's (2008) American League champs, have enjoyed various levels of success with low payrolls in recent years…But the A's have been back to the playoffs just once since 2003" (Van Ripe 2009, 1). While small-market, low payroll teams can experience success in the short-run, Van Riper argues that long run, sustained success is left to those with high payrolls.

There has been empirical research conducted that is in agreement with the observations of Costas (2000), Zimbalist (2001), the Blue Ribbon Panel (2000), and others. Economists Frederick Wiseman and Sangit Chatterjee (2003) used data from 1985 to 2002 to study the link between team payroll and regular season success. They concluded that increased payrolls are increasing on-field success. The study showed that the difference in regular season wins between teams in Payroll Quartile I and Payroll Quartile IV was greater in the most recent period, 1998 to 2002, than in the earlier periods 1985-1990 and 1991-1997 (Wiseman and Chatterjee 2003, 3).

Daniel Mizak and Anthony Stair (2004) used a measure of inequality called the Index of Dissimilarity (ID) and found empirical evidence similar to that of Wiseman and Chatterjee (2003). In addition to the ID, Mizak and Stair used a single regression model to isolate payroll impact on competitive balance. The model showed increased payroll disparity in the years after the introduction of free agency and a future trend toward a larger win gap as a result of increasing disparity in team payrolls. Their models showed a connection toward a league where increased payrolls resulted in increased successes.

Schwartz and Zarrow (2008-09) concluded that team payrolls are strongly related to the amount of regular season wins a team obtains. The graphs produced by Schwartz and Zarrow show that during the mid to late-1990s, MLB was competitively imbalanced and payrolls had more effect on team success than in the other periods observed. Each time period observed in this paper also showed a statistically significant relationship between team payroll and team wins. The authors conclusion of the results presented the argument that a 162 game season diminishes the randomness of outcomes and increased payrolls will lead to increased winning by teams (Schwartz and Zarrow 2008-09, 12). Like previous empirical papers and observations on the issue Schwartz and Zarrow present evidence that at some level payroll is an indicator of success.

During the years following the work stoppage, a team with one of the highest yearly payrolls win four out of five World Series. That led Costas (2000), Zimbalist (2001), and MLB's Blue Ribbon Panel (2000) to conclude that competitive balance was lost. Their observations during the 1990s were tested empirically in later publications and the argument held up statistically. There is agreement throughout the literature that team payroll has an effect on team success and that small-market, low payroll teams can experience success in the form of periodic postseason berths, but sustained success is left to those willing to pay for it. At some level, the increased spending by large-market teams has diminished small-market opportunities and has ultimately hurt competitive balance in baseball. The 1990s may have been a short period of imbalance, but many feared that the emerging trend and erosion of the America's pastime would continue.

B. BALANCE STILL EXISTS

Not every insider, expert, fan, or model agrees that competitive balance is an issue in MLB or that team payrolls have affected the game negatively. Like those that have argued that baseball has a problem, a number of qualitative and empirical papers have emerged arguing that baseball is balanced.

Berri, Schmidt, and Brook (2006) wrote extensively about MLB competitive balance and the impact of team payrolls on success. Since most of the interest into the issue was sparked by a relatively short period, the authors expanded the timeline and examined the changes baseball has experienced over a longer amount of time. The New York Yankees dynasty in the 1990s initiated baseball's investigation, but the 1990s were not the first decade that the New York Yankees experienced great success. The authors showed a decade-by-decade breakdown of the Yankees World Series championships. The Yankees were not only the most successful franchise of the 1990s, but they have experienced success for most of MLB's history. The 1920s, 1930s, 1940s, 1950s, and the 1960s saw the Yankees win multiple championships. During these time periods the Yankees won 20 World Series championships, far more than any other team this time period (Berri et al. 2006, 28). This proved that the 1990s was not the first decade the New York Yankees dominated.

They also used the same approach that the Blue Ribbon Panel had, focusing on a more recent five-year period, and arrived at a different conclusion. The results did not show the same level of Payroll Quartile I success that the Blue Ribbon Panel time period had. This caused the authors to conclude that the trend of the 1990s had not continued into the 2000s.

Sanderson and Siegfried (2003) arrived at similar results to Berri, et al (2006). Sanderson and Siegfried (2003) used an expanded observation period and compared the twenty seasons of 1981 to 2001 with the seasons of 1961 to 1980. 1981 to 2001 seasons ended with more teams playing in and winning the World Series than in the earlier time period. This was a significant finding because payrolls were not thought to affect team success prior to the late 1980s (Sanderson and Siegfried 2003, 28). The results of Sanderson and Siegfried's approach showed that the size of the sample matters. This is one of the stronger arguments against the Blue Ribbon Panel's results. As most economists know, the size of the sample matters greatly in presenting strong conclusions.

Competitive Balance in Professional Team Sport: The Case of Major League Baseball by Norm O'Reilly, Alan Kaplan, and John Nadeau arrives at a conclusion that team payrolls have not affected competitive balance recently. In fact, MLB is entering a time of increased competition. The authors reach this conclusion through the introduction of new models, two of interest to this paper. The two approaches were the gap assessment and the concentration of champions. The Gap Assessment model attempts to show a historical trend toward a more competitive league. The results are in agreement with the authors' initial hypothesis. Major League Baseball, while experiencing fluctuations, is moving toward a more competitively balanced league.

In the second model, the concentration of champions, the primary focus is the postseason. The concentration of champions model results can be compared to the Blue Ribbon Panel's findings. While not concerned with team payrolls, per se, the Panel's claim that competitive balance has disappeared is challenged. In this model, ten-year periods throughout history are used to show the number of different champions for each decade. This metric can take on values from 0.1 to 1.0. If a decade's results were 0.1, it would represent one team winning all of the championships, whereas 1.0 represents ten different teams winning during the decade. The findings show that since 1965 baseball has experienced a greater number of teams winning World Series championships than the years before 1965. (O'Reilly, et al. 2003, 261-265). However, the concentration of championships does not take into account payroll quartiles of winning teams. Using the results of both of these models the conclusion was that the trend is flowing toward a more competitively balanced time period. O'Reilly, Kaplan, and Nadeau (2003) present strong evidence that strengthens the argument that baseball does not currently have a competitive balance problem.

Schmidt and Berri (2001) in *Competitive Balance and Attendance* also concluded that baseball is experiencing increased competitive balance. The authors used the Gini coefficient to measure the inequality of payrolls and concluded, "Contrary to popular opinion, the findings reported here generally indicate that the 1990s was the most competitive decade in major league baseball's history. Although the gap between the rich and poor teams in baseball may be widening, this has yet to significantly affect the level of competitiveness on the field" (Schmidt, Berri, 163).

Zyman (2005) ran Douglass-Cobb regressions on winning percentages and found similar results. They suggest that team payroll is not a strong indicator of potential success. Zyman concluded that "the measure of team salary are not what cause teams to have an advantage, in terms of winning, in a given season. All the regressions run using 1995 to 2004 data find the salary of the team to be statistically insignificant, and other variables are much more important in determining the success of a team" (Zyman 2005, 24). Zyman does note that the five-year period of 1995 to 1999 showed competitive imbalance that more recent data indicates improved competitive balance.

C. ANOTHER APPROACH

Another approach that many have taken is to compare MLB to the other major sports. This allows a period of baseball to be compared to another sport to determine whether baseball is operating at a lower level of competitive balance. The National Football League (NFL) has always marketed itself as a sport with great balance. However, one essential difference exists between the NFL and MLB. The difference is the salary cap structure of each league. Baseball operates with a luxury tax for teams exceeding a set level. The NFL operates with a "hard" cap. The NFL does not allow teams to exceed the salary cap, so team payrolls are relatively similar. The hard cap resulted in the highest payroll team spending around twice the amount the lowest payroll team did. The New York Yankees had the highest payroll and the Pittsburg Pirates had the lowest. The Yankees payroll was almost six times more than the Pittsburg Pirates (USA Today). The difference between the highest payroll team and the lowest was at a similar level for each league during the 2000s, but both leagues produced the same number of champions. These are not the findings that should be found if team payrolls are strong indicators of team success.

The National Basketball Association (NBA) is another sports league of comparable size to the MLB. The NBA has also had three fewer champions during the 2000s than MLB. The NBA did have more playoff participants, but each year 16 teams make the NBA playoffs. Of these three sports leagues the MLB is the only one that operates without a hard salary cap. These other leagues do not support this claim that MLB needs a "hard" salary cap.

A significant amount of research has been conducted recently in search of a definitive answer into the level of competitive balance in baseball and the impact team payrolls has on competitive balance. As shown, the various papers on the topic have used a variety of metrics to reach a variety of conclusions. With each season that is completed increasing the sample size, more recent papers seem to indicate an increase in competitive balance. While the Yankees and other high payroll teams dominated the 1990s, the 2000s have provided baseball fans with a different story. While many papers have used empirical models to explore the conclusions of the Blue Ribbon Panel it seems only appropriate to revisit the conclusions of the report using the same approach.

V. The Blue Ribbon Report Revisited

This paper will use the approach that the Blue Ribbon Panel used and compare the results using the updated data to the period in the Blue Ribbon Report. The Report divided 28 MLB teams into four payroll quartiles. MLB expanded the league to 30 teams adding the Arizona Diamondbacks and the Tampa Bay Rays before the 1998 season. There has not been an expansion team since the 1998 season and 30 teams still make up the league.

This paper will use the payroll quartiles that the Blue Ribbon Panel used in 1998 and 1999. Payroll Quartile I will consist of the eight highest payrolls for a given year. Payroll quartile II will consist of the next seven highest team payrolls, payroll quartile III will consist of the next eight highest payrolls, and payroll quartile IV will be the lowest seven team payrolls. The Blue Ribbon Panel focused on the years between 1995 and 1999, Berri, et al. (2006) used the same approach as the Blue Ribbon Panel and updated the results with data from the years from 2000 to 2004. This paper will use the approach of these two but with data from the years 2005 through 2009. The following tables were constructed from the postseason result of baseball between the years of 1989-2009. The 1994 season, due to the work stoppage, did not have a post season and was not used in the following computations.

TABLE 1–Team Payroll and Postseason Success, 1989-1993
Table and Data from Berri, et al. 2006

	Percentage of World Series Games Won, 1989-93	Percentage of Division and League Championship Games Won, 1989-93
Payroll Quartile I	29.6	22.8
Payroll Quartile II	22.2	38.6
Payroll Quartile III	48.1	38.6
Payroll Quartile IV	0	0

The five-year period between 1989 and 1993 shows a significant amount of competitive balance in terms of the percentage of games won. Payroll Quartile III won more World Series games than any other payroll quartile. In comparing top half payrolls to bottom half payrolls the percentage of both World Series and Division and League Championship games is relatively balanced. The results show no success from the bottom payroll quartile, but overall this time period exhibits balance. This suggests that payroll matters if it falls too low.

Comparing this time period to the five-year period following the 1994-95 strike is the evidence many have used to show the loss of competitive balance. The five years before the strike were relatively balanced and teams from Payroll Quartile III were able to win almost half of the World Series games played. The five-year period after the strike shows a completely different scenario. For many that observed the trend in baseball during the 1994-99 seasons, baseball had lost its value and change was needed.

TABLE 2–Team Payroll and Postseason Success, 1994-1999
Data from Blue Ribbon Panel Report

	Percentage of World Series Games Won, 1995-99	Percentage of Division and League Championship Games Won, 1995-99
Payroll Quartile I	100.0	81.7
Payroll Quartile II	0	18.3
Payroll Quartile III	0	0
Payroll Quartile IV	0	0

Table 2 represents the data that was used in the Blue Ribbon Panel's report. As the table shows, this time period was dominated by Payroll Quartile I. It is this data that has been used as the evidence linking the impact team payrolls have on team success. As noted throughout this paper, the New York Yankees dominated the time period. The only other team to win a World Series during the late 1990s was the Florida Marlins (ESPN). The 1997 Florida Marlin team had the seventh largest team payroll when it won the World Series (USA Today).

The table shows that no team outside Payroll Quartile I won a single

World Series game. The lower payroll teams had zero success winning playoff games during this time period. It was also during this time period that MLB experienced increased player salaries and consequently increased team payrolls. With large market teams dominating this stretch of time many believed that low-market, lower payroll teams had been pushed out of baseball's conscious. The concern MLB expressed was that in order to win a team had to pay, which many teams were unable to do.

TABLE 3–Team Payroll and Postseason Success, 2000-2004
Table and Data from Berri, Schmidt, Brook. Wages of Winning (2006)

	Percentage of World Series Games Won, 2000-04	Percentage of Division and League Championship Games Won, 2000-04
Payroll Quartile I	62.1	46.5
Payroll Quartile II	24.1	39.4
Payroll Quartile III	0	3.5
Payroll Quartile IV	13.8	10.6

Table 3 shows what Berri et al. (2006) found during the five years after the Blue Ribbon Panel Report was published. This table shows that the 1995-1999 trend of only Payroll Quartile I teams experiencing success in the postseason did not continue. Payroll Quartile I still experienced more success than other payroll quartiles, but not to the extent that the Blue Ribbon Panel Report predicted. The authors note that while 2000-04 showed increased success and representation by lower payroll teams, the wage disparity actually increased during this time period (2006, 35). It is also interesting to note that the Yankees continued to spend, but during this time period the Yankees' dominance did not continue.

TABLE 4–Team Payroll and Postseason Success, 2005-2009

	Percentage of World Series Games Won, 2005-09	Percentage of Division and League Championship Games Won, 2005-09
Payroll Quartile I	61.5	50.0
Payroll Quartile II	34.6	27.8
Payroll Quartile III	0	8.7
Payroll Quartile IV	3.9	13.5

Table 4 is the updated outcomes of the postseason over the most recent five-year time period. Postseason results were retrieved from baseball-reference.net and the payroll quartile information was acquired from USA Today's salary database. The results of the postseason reflect that while teams in the upper half of total team payroll experienced more success than teams in the bottom half there were still representation and some level of success from the bottom half teams.

Reverting back to the definition of competitive balance in the Blue Ribbon Panel's report and applying it to this stretch of time indicates that this time period exhibits a relatively competitive and balanced league. Twenty-three different teams participated in the post season during this time period, with no single team making it to the playoffs every year (baseball-reference.net). The winner of the World Series was different in each of the five-years (ESPN). While neither five-year time period, 2000 to 2004 and 2005 to 2009, show the level of success from bottom half teams in the postseason that 1989 to 1993 did, there has been an increase in both representation and the number of games won in the divisional and championship rounds. As noted earlier, MLB seems to have more balance during the decade of 2000 than the other major sports leagues. Even though perfect competitive balance has not been achieved, it is appropriate to say the Blue Ribbon Report was not correct in predicting the future and MLB seemed to be head toward balance during the 2000s.

VI. Conclusion

Each and every year, barring lockouts and work stoppages, more data emerges. This data will help MLB understand the current state of competitive balance and whether an adverse trend has emerged. This paper has shown that MLB experienced an imbalance during the 1994-1999 seasons. The time period followed one of the worse events in baseball's history, and a payroll explosion was used by many to explain the dominance of high payroll teams. Most notable of papers to emerge in the aftermath of the 1994-95 strike was on commissioned by MLB itself. The Blue Ribbon Panel's report expressed a great deal of concern with the economic and competitive state in baseball. They were most concerned with the growing payroll disparity and the impact on the lower payroll teams. After the Blue Ribbon Panel's report was released a flurry of papers emerged. These papers took positions on both sides of the argument using both qualitative and empirical approaches. Both sides have produced valid arguments, but reverting back to the definition of competitive balance that the Blue Ribbon Panel presented those arguing that balance exists seem to provide the best argument.

This paper used the same approach that the Blue Ribbon Panel did and found that while upper half payroll teams have more success, they do not dominate to the extent that the Blue Ribbon Panel predicted. It has also been shown that MLB is relatively more balanced and has produced more champions than the NFL and NBA during the 2000s. It appears that the game of baseball is relatively balanced.

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