

Did the Players Give Up Money to Make the NBA Better?

Exploring the 2011 Collective Bargaining Agreement in the National Basketball Association

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Abstract

The NBA and its players union reached a new collective bargaining agreement in 2011. As a result of this agreement, the players will now be receiving less money. The NBA argued that a pay cut for the players was necessary to make the league better. More specifically, the NBA argued that if the players accepted less money, more teams could afford to field competitive teams. Therefore, competitive balance would improve, demand for the sport would increase, and ultimately the players would be better off. Although the NBA did get the players to accept less money, the empirical evidence—from published research—casts significant doubt on the story the NBA told its players.

Keywords: NBA, collective bargaining, competitive balance

Introduction

Strikes and lockouts have become commonplace in professional North American sports throughout the past 30 years. From 1981 to 2011, eight different labor disputes have interrupted a regular season in Major League Baseball (MLB), the National Football League (NFL), the National Hockey League (NHL), and the National Basketball Association (NBA).

As the following table indicates, each of these leagues has experienced two disputes since 1981. The nature of the events has also changed over time. The first four on the list involve players' strikes, or labor disputes where the workers walk off the job. The last four are labeled "lockouts," or labor disputes where the owners do not allow the workers to report.

Table 1: Three Decades of Labor Disputes in North American Sports

League	Year	Event	Games Lost
Major League Baseball	1981	Player Strike	712
National Football League	1982	Player Strike	98
National Football League	1987	Player Strike	56
National Hockey League	1994	Player Strike	442
Major League Baseball	1994-95	Lockout	920
National Basketball Association	1998-99	Lockout	424
National Hockey League	2004-05	Lockout	1230
National Basketball Association	2011	Lockout	240

Whether the dispute takes the form of a strike or lockout is important in terms of the negotiations between the parties. This point is explained below. For now, though, we want to note that these events happen in sports far more often than they happen in non-sports industries.

To put what we see in sports in perspective, let us consider the frequency of work stoppages in non-sports industries.¹ The United States Department of Labor tells us that about 16 million workers are covered by a union contract.² There are approximately 4,000 unionized athletes in MLB, the NFL, the NBA, and the NHL (Berri, Brook, & Schmidt, 2006). From 1981, these workers in sports were involved in eight labor disputes. If non-sports workers had the same number of disputes (given the number of people in the unions), we would have seen about 32,000 labor disputes since 1981. But the number of disputes that have occurred outside of sports is only 1,222.³ This means that workers in sports are about 26 times more likely to be involved in a labor dispute.

So why do these events happen so often in sports? The obvious answer is that a relatively small number of players and owners are arguing over relatively large sums of money. According to Forbes.com, the NBA in 2009–10 earned \$3.8 billion in revenue.⁴ In 2009–10, the NBA's 30 franchises only employed 442 players on the court.

And these small groups of people have substantial bargaining power. NBA players are quite unique and hard to replace. Consequently, the players have monopoly power in the labor market.

Ownership, though, is not without power of its own. Although players can play in other markets, no league in the world can match the salaries paid by the NBA. And that means the owners have substantial monopsony power.

When a monopoly confronts a monopsony in the market place, the outcome—as standard labor theory teaches—can only be decided via bargaining. Often, as we have seen, that bargaining process results in the loss of games.

Financial Origins of the 2011 Labor Dispute

Historically, though, this has not been the outcome in the NBA. The NBA reached its first agreement with its players in 1970.⁵ A new agreement was then reached in 1973, 1976, 1980, 1983, 1988, 1994, and 1995. Unlike their counterparts in the NFL, NHL, and MLB, these agreements were all reached without a loss of regular season games.

In 1998, though, the NBA's history of relative labor peace ended. A lockout cost each team 32 regular season games. But the final agreement, reached in 1999, created the

first cap on individual salaries in one of the major North American professional sports league (i.e., MLB, the NFL, the NHL, and the NBA).⁶

In 2005, the NBA and its union reached another agreement without the loss of any games. Although this agreement was relatively easy to reach, the NBA claimed in 2011 that this agreement was quite flawed.

According to the NBA, the league lost money in every year from 2005 to 2011 (NBA, 2011). This argument, though, seems hard to believe since one suspects the NBA could project revenues and costs in 2005–06 (or in the season immediately following the agreement). According to Forbes.com, the NBA collected nearly \$3.7 billion in revenue in 2005–06. Of this amount, \$766.67 million came from the national TV contract (“NBA TV Contracts,” n.d.).⁷ Another \$996.6 million came from regular season gate revenue.⁸ The remainder of league revenue comes from such sources as local broadcast rights, playoff game receipts, exhibition game receipts, stadium concessions, parking, etc. In 2005–06, these other sources of revenue were about \$1.935 billion.

In 2004–05, these same numbers were \$3.617 billion in league revenue; drawn from the national TV contract (still valued at \$766.67 million), regular season gate revenue (\$972.1 million), and other revenue sources (\$1.879 billion). So revenue in 2004–05 and 2005–06 were quite similar.

On the cost side, the primary expense is players. The CBA explicitly stated that salaries and benefits paid to players could not exceed 57% of revenue.

In sum, it looks like both revenue and cost numbers could be easily projected for the entire league. Despite these numbers, the NBA claimed that they were losing money in 2005–06. If that was the case, though, why was the agreement in 2005 so easily reached?

It should be noted that in the *New York Times*, Nate Silver disputed the NBA’s claims (Silver, 2011). Silver’s analysis, based on data from Forbes.com, indicated that the NBA was profitable after the 2005 CBA was enacted. The NBA officially disputed Silver’s analysis, but failed to release objective numbers that contradicted Silver’s analysis (NBA, 2011).

One should also note that Joe Lacob, who bought the Golden State Warriors in 2010, seemed to dispute the NBA’s official position in an interview with Tim Kawakami (Kawakami, 2010). Kawakami asked Lacob if he expected to make money as an owner of the Warriors. Before we review his answer, let us note that the Warriors have only had two winning seasons since 1994, and the team had only made the post-season once in that time period. So Lacob was not purchasing a very successful NBA team. Despite this record, here was Lacob’s answer:

Oh yes. This is an incredible business opportunity. ...Look, sports franchises appreciate 10% a year on average over three decades, the last three decades. There’s no reason to think this won’t appreciate in value. So that is the least of my worries.

Clearly Lacob thought owning an NBA team—even a very bad NBA team—was not a losing proposition.

Nevertheless, since we do not have access to the NBA’s actual financial statements, we cannot see whether or not their claims of financial losses have (or do not have) merit. We can, though, address another claim the league made.

The NBA's Competitive Balance Problem

The NBA also claimed that they needed a new labor agreement to address the league's competitive balance problems.⁹ Although we are unable to confirm the NBA's claims with respect to financial losses, the claims with respect to competitive balance are supported by the numbers.

For example, since 1980—when Magic Johnson and Larry Bird entered the league—the NBA has had only nine franchises win the 32 possible NBA titles.

Table 2 puts this in perspective. The other major North American sports leagues have had a much more equal distribution of titles. Both the NHL and NFL have had 15 different franchises take the league title since 1980, and 20 different baseball teams have taken a World Series title.

Table 2: Distribution of Champions in the Major North American Sports Leagues

League	Different Champions since 1980
NBA	9
NHL	15
NFL	15
MLB	20

In these other leagues, the most titles any team has won since 1980 is five (New York Yankees in MLB, San Francisco 49ers in the NFL, and Edmonton Oilers in NHL). In contrast, the LA Lakers have won 10 titles since 1980.

Beyond the distribution of titles, one can also see clear differences when we take a more sophisticated approach. Roger Noll and Gerald Scully devised a measure of competitive balance that compares the actual standard deviation of winning percentage to the standard deviation we would see if the league was balanced. For this ratio, a value of 1.0 indicates a league that is balanced.

As Table 3 indicates, no league achieves a ratio of 1.0.

Table 3: Competitive Balance in the Major North American Sports Leagues

League	1980 to present	31 years prior to 1980
NBA	2.81	2.35
NHL	1.74	2.08
AL	1.76	2.04
NL	1.66	1.91
NFL	1.50	1.51

Although no league is perfectly balanced, we do see that balance has improved in both hockey and baseball. And the NFL remains—both before 1980 and after 1980—a very balanced league. In contrast, the NBA was the most imbalanced before 1980, and since this time, the level of balance has actually declined.

If we look at the average Noll-Scully since 1980 (Table 4), we fail to see any evidence that balance in the NBA is improving. So despite the NBA invoking caps of individual salaries and payroll, the disparity in the league persists.

Table 4: Competitive Balance Over Time in the NBA

Years	Noll-Scully
2005-2011	2.82
2000-2005	2.64
1995-2000	3.10
1990-1995	2.90
1985-1990	2.81
1980-1985	2.61

How can the NBA's persistent competitive imbalance be explained? The league seems to argue that the key issue is the disparity between large and small market teams—hence the need for better caps on payroll and higher luxury taxes.

Another explanation, though, has been offered in the economics literature. As noted above, competitive balance in baseball has clearly improved. This result was explained by Schmidt and Berri (2003) by appealing to the work of evolutionary biologist Stephen Jay Gould.

Gould was interested in why the 0.400 hitter had vanished in baseball.¹⁰ People had argued that this had happened because players had declined in ability over time. Gould argued that the opposite was likely to be true.

Gould's argument begins by noting two features with respect to the distribution of athletic talent:

- first, athletic talent is normally distributed, with the very best athletes in the right tale of the distribution.
- second, there is a biomechanical limit to the athletic ability of human beings. No matter how much a person trains, a human being will never run 100 meters in five seconds or be able to leap 20 meters in the running long jump.

Given these observations, one can expect that there would not be a large difference in the talent level of the very best athletes. And if the population were large enough, the ability of the best players in a league (who would be up against the limits of human ability) to distinguish themselves from their peers or perform at a level that is well above average would diminish. In other words, as Gould argues, the 0.400 hitter—or a hitter well above average—would vanish.

This argument can also be applied to the study of competitive balance in a league. Imagine a league that drew upon an underlying population that was quite large. In such a world, many teams in the league would have access to one of these “very best athletes.” Therefore, if the underlying population were large enough, most teams would be quite similar and a league would be relatively balanced. In contrast, if the population were smaller, then the supply of the very talented would be much smaller. Consequently, such a league would not be as balanced because some teams would have some of the “very best athletes” and other teams would have to employ lesser talents.

To test this hypothesis, Schmidt and Berri (2003) examined the link between the dispersion of wins in Major League Baseball and both the pace of racial integration and the rate at which teams in the league employed foreign talent. As the work of Gould would argue, when the underlying population expanded, the data indicated that com-

petitive balance in baseball improved. Furthermore, Schmidt and Berri (2003) failed to find an impact on competitive balance from the introduction of the rookie draft in the 1960s or the introduction of free agency in the 1970s.

More recently, Schmidt and Berri (2011) found that expansions in the underlying talent pool had improved competitive balance in the NHL. And factors such as salary caps, payroll caps, and luxury taxes in the NHL, NFL, and NBA had no impact on the level of competitive balance.

So why is the NBA so imbalanced? Berri et. al. (2005) offered an argument consistent with Gould's work. Specifically, the NBA suffers from a "short supply of tall people." The average height in the NBA is around 79 inches. Such a height, though, is quite rare in the general population. Consequently, the underlying population the NBA draws upon is quite small. That means that the NBA is going to have a persistent problem with competitive balance and there is not much the owners can do to change this reality.

The Owners Win but the Early Returns Refute Their Story

Again, Schmidt and Berri (2011) failed to find evidence that institutions such as a luxury tax, salary cap, or a payroll cap would impact competitive balance. Nevertheless, owners in sports frequently trumpet these institutions—which clearly transfer money from the players to the owners—as essential to improving the level of balance in a sport.¹¹

Although this research on competitive balance clearly explains why the NBA is persistently imbalanced, it was clearly ignored in the negotiations between owners and players. And when the dust cleared, it was clear the owners' story had won the day.

The NBA, in the name of competitive balance, argued that something needed to be done to help out the small-market teams in the league. And the something the league focused upon was lowering the pay to the players.

Table 5 reports some of the basic details of the new agreement, as well as some details of the 2005 CBA that this agreement replaces (Coon, 2011b):

If we look back at the 2005 agreement, we see that the NBA already had restrictions on the amount of money the owners could pay

- all players in the league,
- all players on a team,
- a single player on a team, and
- players drafted in the first round of the annual draft.

To put these restrictions in perspective, consider the amount of money the owners paid the players in 2010–11. According to the *SportsBusiness Journal* (Lombard, 2011), basketball-related income (BRI) in 2010–11 was \$3.817 billion. The 2005 CBA gave the players 57% of this total, so the players were paid \$2.176 billion. Again, as noted above, this figure was capped. Players could not be paid more than 57% of BRI.

Studies by Berri, Brook, and Schmidt (2004) and Berri and Schmidt (2006) have indicated that players are primarily paid to produce wins. And because players are only paid for regular season performance, one can look at how many wins each player produced and determine how much each player should have earned given how much the league had agreed to pay its players.

Table 5: Key Players Spending Features of the 2011 NBA Collective Bargaining Agreement¹²

Agreement Feature	How this was with 2005 CBA	How this is with 2011 CBA
Revenue Split (or league payroll cap)	Players receive 57% of basketball related income. ¹³ An escrow system is employed to ensure that players do not receive more than the percentage agreed upon in the CBA.	Players receive between 49% and 51% of Basketball Related Income
Team Payroll Cap¹⁴ <i>Note: the NBA has a soft cap, which means there are number of exceptions that allow teams to exceed this cap.¹⁵</i>	In 2005 the team payroll cap was \$49.5 million. This gradually increased to \$58.0 million for the 2010-11 season.	Team payroll cap for the 2011–12 season remains at \$58.0 million. ¹⁶
Luxury Tax	Teams paid \$1 in luxury tax for each \$1 the team was over the luxury-tax threshold	For 2011–12 and 2012–13, the 2005 luxury tax rules still hold. In the latter years of the agreement, the payment increases with each \$5 million over the threshold. Repeat offenders pay at an even higher rate. ¹⁷
Individual Salary Cap¹⁸	If a player was a “Bird free agent”, ¹⁹ the player could sign a contract of six years with raises of 10.5% per year. A player who is not a Bird free agent could only sign a five-year contract with 8% raises. This means teams could pay more to their own free agents. There is also a maximum salary possible of 25%, 30%, or 35% of the team’s salary cap. The percentage depends on years of service.	Maximum length of contract has been reduced to five years for Bird free agents and four years for everyone else. Raises are also smaller, with Bird free agents eligible for 7.5% raises and other players only eligible for 4.5% raises. The maximum salaries are the same, except for players coming off of rookie contracts. Previously, these players could earn 25% of the salary cap. Now these players can earn 30% of the salary cap.
Rookie Scale Salaries	Players taken in the first round of the draft are signed according to a rookie salary scale that essentially fixes the player’s wages. For 2005–06, the first pick in the draft was given a first-year salary of \$3.6 million. ²⁰ This contract ran for two years, with team options for the third and fourth season.	Initially rookie scales are frozen at essentially the 2010–11 level. When league revenues rise, these will increase.

To illustrate, the NBA consists of 30 teams playing an 82-game regular season. So in a regular season, the teams combine to win 1,230 games. Since the league paid the players \$2.176 billion in 2010–11, one can argue that the league paid \$1.769 million

per win in 2010–11. A player like Chris Paul, though, produced 18.4 wins.²¹ So if the New Orleans Hornets had to pay Paul for each win—according to the average amount the league had agreed to pay for each win—then Paul would have been paid \$32.64 million in 2010–11. The 2005 CBA, though, restricted the amount of money the Hornets could pay Paul. And as Table 6 illustrates, that means the Hornets received Paul’s production in 2010–11 at more than a 50% discount.

Table 6: Actual Salary vs. Expected Salary in 2010-11 Top 10 players in Wins Produced in 2010-11

Name	Team	Wins Produced	Actual Salary ²²	Expected Salary Given Wins Produced	Amount Underpaid
Chris Paul	New Orleans	18.4	\$14,940,153	\$32,639,775	\$17,699,622
Dwight Howard	Orlando	18.4	\$16,647,180	\$32,553,386	\$15,906,206
Kevin Love	Minnesota	18.2	\$3,638,280	\$32,263,018	\$28,624,738
LeBron James	Miami	17.2	\$14,500,000	\$30,451,927	\$15,951,927
Dwyane Wade	Miami	14.9	\$14,200,000	\$26,280,906	\$12,080,906
Pau Gasol	LA Lakers	14.8	\$17,823,000	\$26,200,569	\$8,377,569
Steve Nash	Phoenix	12.7	\$10,310,938	\$22,422,351	\$12,111,413
Landry Fields	New York	12.5	\$473,604	\$22,152,625	\$21,679,021
Rajon Rondo	Boston	12.4	\$9,000,000	\$21,895,796	\$12,895,796
	AVERAGES	15.5	\$11,281,462	\$27,428,928	\$16,147,466

A similar story could be told of the other leading producers of wins in 2010–11. Had each of these players been paid the league average rate for wins in 2010–11, each player would have been paid substantially more money. But restrictions on the maximum salary each veteran received and the pay that could go to rookies (an issue for Kevin Love), allowed teams to employ these players at a substantial discount.

What this means is that before the 2011 CBA was enacted it was clear that teams—whether in large or small markets—would have no problem employing the primary producers of wins in the league. This point can be easily illustrated with the story of LeBron James.²³

James began his career with the Cleveland Cavaliers in 2003–04. Across the next seven seasons LeBron produced 107.4 wins and was paid \$62.0 million. This works out to about \$577,000 per win. The team was also successful, averaging 54.4 regular season wins from 2005–06 to 2009–10 and advancing to the NBA Finals in 2006–07. These were easily the best five seasons in franchise history.

In the summer of 2010, though, LeBron signed with the Miami Heat. This move was made despite the fact the Cavaliers—according to the 2005 CBA—could offer more money than the Heat. Furthermore, given LeBron’s production and the maximum salary allowed by the 2005 CBA, Cleveland would still have earned a substantial profit on LeBron’s production had he re-signed (and continued to produce on the court). Nevertheless, LeBron took his talent to Miami.

The next season, the Cavaliers had their worst season since the year before LeBron arrived; the Heat advanced to the NBA Finals. Although the fortunes of both teams cannot be tied entirely to the presence (or absence) of LeBron, he clearly had a significant impact on the observed outcomes of both teams.

The story told by the NBA, though, seems to contradict the LeBron story. The NBA contended that the players needed to take a substantial pay cut in 2011 so that small-market teams could contend. But the LeBron story indicates that the ability to pay “stars” is not holding the Cavaliers back. What holds the team back is the willingness of the star to play in Cleveland (a fact the CBA did not address).

Again, though, the NBA’s story carried the day. And the imagined plight of the small market team wasn’t just addressed in the 2011 CBA. The NBA also instituted a new revenue sharing scheme.

The revenue sharing system will not be fully implemented until the 2013-14 season.²⁴ At that time, a small-market team could receive up to \$16 million in revenue. To put that number in perspective, the salary cap in 2011-12 was \$58 million per team. So via revenue sharing, the small market team could receive more than 25% of its salary cap from other franchises.

This system is a dramatic change from what occurred in the past. Historically the NBA has not shared regular season gate revenue. And although some revenue sharing existed, the most a team could receive was only \$5.8 million.

Given the new CBA (which gave further restrictions to player salaries) and the new revenue sharing agreement, small-market teams clearly came out ahead. Will this cause competitive balance to change? The early returns are not encouraging.

On December 8, 2011, the NBA officially ratified the CBA with the players. On that same day, a trade involving the New Orleans Hornets, Houston Rockets, and Los Angeles Lakers was vetoed by the NBA (Beck, 2011). The trade involved several players, but the key feature of the transaction was that Chris Paul would be moving from New Orleans (a small market in the NBA) to Los Angeles (the second largest market in the NBA).

Table 7: The Value of Chris Paul

Season	Chris Paul’s Wins Produced	Actual Team Wins	Percentage of Wins From Paul
2005-06	14.8	38	39.0%
2006-07	11.4	39	29.1%
2007-08	22.0	56	39.3%
2008-09	23.3	49	47.6%
2009-10	9.9	37	26.7%
2010-11	18.4	46	40.1%
TOTALS	99.8	265.0	37.7%

The NBA was able to veto this trade because the NBA actually had taken ownership of the New Orleans Hornets in 2010. Had the NBA approved this trade then on the very day that the new CBA was approved—an agreement that was supposed to allow small market teams to become more competitive—a small-market team would have sent its very best player to a large-market team.

To understand the implications of this rejected deal, we need to briefly note the career productivity of Chris Paul (Table 7).

In Paul's six seasons he produced nearly 100 wins for the team, or more than 1/3 of the team's total regular season wins. In 2007-08, 2008-09, and 2010-11, Paul led the entire NBA in Wins Produced. So Paul was clearly a very productive star player. And had he departed the Hornets for the Lakers, one could expect the Hornets (a team that had never even advanced to a conference finals in the playoffs) to get worse and the Lakers (a franchise that had won 16 championships) to get better. In sum, this trade would have allowed a large-market team to improve at the expense of a small-market team. That would have directly contradicted the supposed purpose of the agreement.

After this trade was rejected, the NBA did allow the Hornets to send Chris Paul to the Los Angeles Clippers. So Paul did end up in Los Angeles after all. But the Clippers, despite playing in a very large market, have never been successful. Since arriving in Los Angeles in 1984, the Clippers have only won more than half their games twice and only advanced out of the first round of the playoffs once. With Chris Paul, though, the Clippers—who won only 39% of their games in 2010-11—won 62% of the first 60 games in 2011-12.²⁵ Meanwhile, the Hornets (without Chris Paul) only won 30% of their first 60 games in 2011-12. Such a mark was the third worst in franchise history.

Losing Paul, as expected, made the Hornets much worse and the team that acquired his services much better. And again, the new CBA was supposed to help small-market teams keep their stars. Clearly that did not happen in this case.

Once again, given the cap of player salaries, it seems clear that the 2011 agreement was not necessary. At least, not if the purpose was to make sure small-market teams could afford productive stars. If you were an owner, though, and you were interested in capturing more revenue, than this agreement clearly works. In other words, the players clearly lost.

Why Did the Players Lose?

That leads us to wonder, what could the players have done differently? And the answer to that question requires that we briefly explore why the players lost.

Michael Leeds and Peter von Allmen (2008) have noted how the bargaining power of labor and management changes at different points of the season. Players have the most bargaining power toward the end of the season. This is because the players are only paid for the regular season and the owners earn a substantial portion of their revenues in the playoffs. Therefore, a player strike before the post-season is the most effective.

In contrast, the owners have an incentive to lock the players out in the off-season. Given the pattern observed with respect to labor disputes, where owners have been locking out players in North American sports leagues (see Table 1), it is clear that owners have learned. And the NBA in 2011 was no exception.

Once the players passed on the opportunity to strike in April of 2011 (right before the 2011 playoffs began), the bargaining power in these negotiations passed to the owners, who took full advantage of this power by locking the players out in the summer of 2011.

Although the power of lockouts tells part of the story of why the owners were successful, the nature of player productivity in basketball also plays a role.²⁶ To see this, let us talk briefly about the NFL and MLB. Leeds and von Allmen (2008) note that the union in the NFL is not as successful as its counterparts in baseball. For example, the

NFL has a hard payroll cap and baseball does not have any cap. According to Leeds and von Allmen, the NFL union is at a disadvantage in negotiations because the union is composed of very different members. Some players are like Peyton Manning, who is a star and plays for many years. Most other players, though, are relatively anonymous and play very short careers (on average, players only play 3.5 years in the NFL). Given these disparities, the non-stars are simply not very willing to hold out for a deal that would shorten their relatively short careers further and give more benefits to the stars.

In contrast, baseball players are more homogenous. At least, this is potentially true. Consider the story of David Ortiz. Back in 2002—or the last time baseball had a difficult labor negotiation—Ortiz was already 27 years old. At that age, one might expect Ortiz had come close to his prime. And that prime did not include a single season where he had hit 20 home runs or managed to get 500 at bats. So at his best, at the age of 27, Ortiz wasn't a star.

After this age, though, Ortiz left the Minnesota Twins and joined the Boston Red Sox. With Boston, Ortiz hit 31 home runs and finished fifth in the American League MVP voting. Across the next four seasons, Ortiz continued to produce and continued to be part of the MVP discussion. Ortiz had clearly transformed into a star player.

The Ortiz story illustrates the difference between baseball and football. In football there is a clear difference between stars and non-stars. After all, not everyone can be a star quarterback. But in baseball, anyone could become a star. That means a baseball player—even one who has not been a star so far—is probably less willing to vote for an agreement that restricts the earnings of the stars.

With these stories in mind, let us talk about the NBA. Berri and Schmidt (2010) note two important features of player productivity in basketball.

- Most wins in the NBA are produced by a minority of NBA players.²⁷ In other words, the stars really dictate outcomes. And most players are not stars.
- NBA players peak around their mid-20s. So when a player reaches 25, he essentially knows if he is a “star” or not a “star.” Again, the majority are in the latter group.

Given these two aspects of player performance, should we expect the majority of players to object when the owners propose a restriction on the earnings of the major stars? And given the unwillingness of the non-stars to hold out for the stars, it is unsurprising that the NBA is the only major sport with an individual salary cap.

In sum, the players cannot stay united, and that means the NBA owners tend to win. In other words, we should not be surprised that across the past three decades the players have agreed to a cap on league payroll, team payroll, rookie pay, and individual pay. We should also not be surprised that this union just agreed to a cut in pay.

That being said, the players might have considered two options during the 2011 negotiations. Again, to have some leverage they needed to threaten the owners' revenues. That means they could have (if they could have been unified) agreed to hold out the entire season (thus threatening playoff revenue in 2012). In a moment, we will see that this threat was made.

Before we get to that, though, let us talk about another option. The players could have seriously tried to start their own league.²⁸ With respect to the latter idea, one should note that according to the research of Rob Baade and Victor Matheson (2011), 84% of the cost of the eight arenas either built or renovated for NBA teams since 2000

has come from public funds.²⁹ Typically, we think of a firm consisting of owners who provide capital and workers who provide labor. The combination of this capital and labor creates a product that is sold, and the proceeds of these sales are then returned to the owners of capital and the workers. In the case of the NBA, though, the public is often providing the capital. And that might lead one to wonder, if the owners are not providing much of the capital, why are they necessary? In other words, why can't the players just agree to work directly for the cities that often provide much of the capital anyway?

Certainly a player's league would reduce the value of the owners' investment to nearly zero. After all, without the scarce resource that is NBA talent, few people would care to watch the teams the NBA owners possess.

Although the players did host various exhibition games and there was some talk of starting a player's league (Begley, 2011), there isn't much evidence that this talk had any impact on the negotiations.

What did seem to move the players and league to an agreement was the call by the players to decertify the union. On November 14, the union decided to decertify (Stein, 2011). Such a move allowed the players to file an anti-trust lawsuit.

Just two weeks after this move was made, the players and owners reached an agreement. Did the move to decertify resolve the lockout? It is hard to say. But one suspects it may have been important. The importance of this move was not so much the likelihood the courts would side with the players. The key issue was that this move posed a serious threat to the owners' revenues.

Remember, owners impose a lockout before the season starts because the owners' revenues are heavily weighted towards the end of the season when the playoffs begin. In contrast, player strikes tend to be at the end of the season; a time period that threatens the owners' revenues while leaving much of the players' salaries untouched.

The timing of this last dispute in the NBA coincided with the time period when owners had the most leverage. In November, though, the players indicated they were willing to engage in a lengthy court case. Consequently, this court case threatened the playoff revenues the owners were anticipating in 2012.

Hence, we should not be surprised that the owners and players agreed soon after this move from the players. In the end, the owners did not get everything they asked for at the onset. The owners initially wanted the players to accept far less than 50% of BRI. But a settlement that resulted in roughly an even split still meant that the owners after the 2011 CBA were better off than they were after the 2005 agreement.

Although we can argue that the owners won, we should not lose sight of the fact that the big winners were the owners of small-market teams. No, this agreement—as noted—will not allow small-market teams to keep players like Chris Paul. But it will allow small-market teams to earn more money, regardless of the quality of the product offered on the court.

What About the Fans?

In this entire discussion of players and owners, the role of the fan has been overlooked. Obviously, they make this entire league possible. Did the fans get anything out of this experience? Again, competitive balance is not likely to improve (although—as noted—

it is not clear that fans care). And the fans did experience a loss of games. So did fans come out of this experience less happy and less enthusiastic about the NBA product?

The early returns from Michael Heistand of *USA Today* (2011) report little evidence of a decline in fan enthusiasm. As Heistand reported after Christmas in 2011:

That the NBA's Christmas Day TV ratings were up nearly across-the-board shows pro leagues' labor disputes don't necessarily hurt fan interest.

- TNT's Knicks-Celtics (noon, ET) drew a 4.1 overnight rating—translating to 4.1% of the 56 urban markets measured for overnights. That's up 52% from comparable coverage of a Knicks-Bulls game on ESPN last year.
- ABC's Miami-Dallas (2:30 p.m. ET) drew a 5.6 overnight, up 6% from a Boston-Orlando game last year.
- ABC's Chicago-L.A. Lakers (5:30 p.m. ET) drew a 6.5 overnight, which was down 6% over Miami-Lakers last year. But Sunday's 6.5 was ABC's third-highest NBA regular-season overnight ever.
- ESPN's Orlando-Oklahoma City (8 p.m. ET) drew a 2.3 overnight—up 36% from a Denver-Oklahoma City rating last year.
- ESPN's L.A. Clippers-Golden State (10:30 p.m. ET) drew a 2.3 overnight, up 77% from a Portland-Golden State game last year.

The NBA this season, coming off its strong ratings last season, looks ready for big numbers this season. It has strong franchises and stars in major markets like Los Angeles, Chicago, Boston and a national TV draw in LeBron James' Miami team and could get a boost if the Knicks can become a winner in the USA's biggest TV market.

These results echo what was reported in Berri, Schmidt, and Brook (2006). These authors note that past strikes and lockouts in sports did not appear to impact attendance in baseball, football, hockey, and basketball. And the early returns from Christmas in 2011 indicate that NBA fans did not hold a grudge. Consequently, we should not be surprised that the thoughts of fans tend to be ignored by both players and owners in these disputes.

Concluding Observations

The 2011 agreement in the NBA was clearly a victory for the owners, especially the owners of small-market teams. The substantial restrictions on player salaries continued and were strengthened. Additionally, the players agreed to a substantial pay cut.

Did this transfer of revenue from the players to the owners make the league better? Certainly this was the owners' claim. However, although it is true the NBA is not competitively balanced, the causes of that imbalance—as demonstrated in the academic literature—were not addressed by this agreement. Furthermore, the specific plight of the small-market team that the owners cited did not exist, primarily because of the 1999 CBA that restricted the pay to the individual NBA players. In other words, LeBron James and Chris Paul did not leave small markets because the small-market teams could not afford this talent. These players simply wished to leave the small markets.

This agreement should not be thought of as something that will allow small-market teams to keep better talent. It will, though, allow small-market teams to secure more of the NBA's revenues. Small-market teams not only got the players to surrender addi-

tional money, but also managed to create a revenue sharing agreement that will transfer additional money from large-market teams to small-market teams.

These transfers, though, will not prevent stars from wishing to play in larger markets. And to the extent this matters to the league, one is left to conclude that the players' lost wages will not lead to a better product for the fans. Then again, as noted above, the fans seemed pretty happy with the NBA product before. Therefore, we should expect that the fans will continue to enjoy NBA basketball. In essence, the game wasn't really broken before this agreement was put in place. So the fact the agreement did not really change what it set out to change is not necessarily a bad outcome. At least, not from the perspective of the fans.

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Endnotes

- ¹ The following analysis replicates the work of James Quirk and Rodney Fort (1999, p. 68). Their comparison of labor disputes in sports to disputes in other American industries looked at only 10 years (1987–1996). Over this time period, sports were 50 times more likely to have a work stoppage. The Quirk-Fort study was also replicated in Berri, Schmidt, Brook (2006), which considered stoppages from 1981 to 2004. The Berri et al. study found that workers in sports were 25 times more likely to be involved in a labor dispute.
- ² For the number of workers in unions, see “Economic News Release: Union Members Summary” (2012).
- ³ For the number of labor disputes, see “Economic News Release: Table 1” (2012).
- ⁴ See Badenhansen, Ozania, & Settimi (2011). This is the last year for which data is available.
- ⁵ The history of the NBA's Collective Bargaining Agreement can be found at Larry Coon's website (<https://webfiles.uci.edu/lcoon/cbafaq/salarycap.htm>). Coon's website also provides an immense amount of detail about these agreements.
- ⁶ The NBA was also the first league to place a cap on individual team payrolls (often called a “salary cap”). This cap was put in place for the 1984-85 season. Larry Coon also notes that the league briefly had a cap in 1946–47 (when the league was created).
- ⁷ The NBA had a national television contract that began in 2002. This six-year agreement was valued at \$4.6 billion, or \$766.67 million per year.
- ⁸ This is found by multiplying attendance by weighted average price. One can find past data on ticket prices at Rodney Fort's Sports Business Data Pages (www.rodneymfort.com/SportsData/BizFrame.htm). Fort's data runs to 2008–09 (and ultimately came from the Team Marketing Report). Data for 2009–10 (also from the Team Marketing Report) can be found at www.team-marketing.com/public/files/2010_NBA_FCI.pdf. Attendance data can be found at espn.go.com/nba/attendance.
- ⁹ There were a number of stories in the press that indicated the owners' focus on competitive balance. The following article is a good example of these sort of stories: “Does Money Really Matter Most in NBA Lockout?” This article went so far as to argue that the NBA preferred competitive balance over profits. Although that statement is a bit strong, it is clear that the owners were focused on the balance in the league during the negotiations of the 2011 CBA.

¹⁰ The last hitter to have a batting average over 0.400 was Ted Williams, in 1941.

¹¹ One should understand that there is not much evidence that changes in competitive balance dramatically impact league attendance. Two studies of note were offered by Humphreys (2002) and Schmidt and Berri (2001). Each study found that moving from the most competitive position in the data set to the least competitive would only be expected to decrease league attendance by about 4,000 fans per game in baseball.

¹² These details come directly from Coon (2011a) and Coon (2011b)

¹³ According to Larry Coon's Salary Cap FAQ, basketball-related income includes items such as gate receipts (exhibition games, regular season games, and post-season games), broadcasting rights, parking, and concessions (among other items). See webfiles.uci.edu/lcoon/cbafaq/salarycap.htm#Q13 for a complete listing.

¹⁴ In addition to a payroll cap, there is also a payroll minimum. As Coon (2011) reports, for the 2005 CBA, teams had to pay 75% of the salary cap. This percentage was increased to 85% in the first two years of the 2011 CBA (and at least 90% after those first two years).

¹⁵ See Coon (2011a) for a list of these exceptions.

¹⁶ This figure was noted by an official press release from the NBA (see www.nba.com/2011/news/12/08/labor-deal-reached/index.html)

¹⁷ As Coon (2011a) reported, "Starting in 2012–13, teams pay an incremental tax that increases with every \$5 million above the tax threshold (\$1.50, \$1.75, \$2.50, \$3.25, etc.). Teams that are repeat offenders (paying tax at least four out of the past five seasons) have a tax that is higher still—\$1 more at each increment (\$2.50, \$2.75, \$3.50, \$4.25, etc.)."

¹⁸ There are also veteran minimum salaries. According to Coon (2011), these are not scheduled to change with the 2011 CBA. See Coon (2011a) for a list of these minimum salary levels.

¹⁹ According to Larry Coon's Salary Cap FAQ, the Larry Bird Exception allows teams to exceed the salary cap to re-sign their own veterans. This was put in place so that the Boston Celtics could re-sign Larry Bird in the 1980s.

²⁰ According to Larry Coon's Salary Cap FAQ, teams can sign players at 80% to 120% of the scale figure. For the scale for all first-round picks, see www.nbpa.org/sites/default/files/EXHIBIT B.pdf

²¹ As detailed in Berri (2008), the number of wins a player produces can be ascertained from the box score statistics tabulated by the NBA. This model built upon earlier work—see Berri and Brook (1999), Berri (1999), and Berri and Krautmann (2006). For the details of this calculation, refer to Berri (2011d)

²² Player salary data taken from Bender (n.d.)

²³ This story about LeBron James originally appeared at the Freakonomics blog—see Berri (2012)

²⁴ For details of this plan, see Lombard (2012).

²⁵ According to NBAGeek.com Chris Paul was worth about 1/3 of these wins.

²⁶ This story was originally told at the Freakonomics blog. See Berri (2011b).

²⁷ This was seen in the discussion of Chris Paul and the other leading producers of wins in 2010–11. More broadly, about 20% of the NBA players in 2010–11 produced about 70% of the league's wins.

²⁸ Two articles actually called for players to start their own league. One appeared at Forbes.com—see Anderson (2011). The other appeared at the Huffington Post—see Berri (2011a).

²⁹ In March of 2012, the city of Sacramento agreed to build a new arena for the Kings. The price tag of the arena is \$391 million, with \$255.5 coming from public sources—the trend of the public picking up most of the tab of these arenas continues. See Associated Press (2012).