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WHAT KIND OF EFFECTS HAD THE GLOBAL ECONOMIC CRISIS ON THE ATTENDANCE OF THE NBA GAMES?

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Abstract: The global economic crisis of 2008 had effects on the world at all levels of life. It caused serious problems and difficulties in professional sports as well.

In my paper I will try to show what kind of effects the global economic crisis had on one of the best organised championships of the world. What effects it had on attendance? How this influenced the prices of the tickets to the matches? I am going to show those marketing and financial steps, which were made by the championship's leader corp and the teams participating in it.

I think the teams could moderate their losses by making different special offers, drafting new players and being opened for the foreign countries, I think this will lead to an increase in attendance in the next few years.

Finally, I will try to make a future forecast of attendance.

Key words: global economic crisis, NBA, basketball, attendance

Introduction

History of NBA

The evolution of basketball can be associated with the US. In 1891 James Naismith, tutor of YMCA teachers' training college, got the task from his professor to create an indoor, exciting and sport ability improving game.

The NBA itself was formed in 1949 as a combination of the former BAA and NBL leagues. (ROSEN, CHARLEY, 2009)

A great development started from the 1961-62 season, when the combat of two amazing teams, the Boston Celtics and the Los Angeles Lakers started. Beside these two teams such talented legends like Bill Russel, Wilt Chamberlain and Oscar Robertson were on the court. Later, between 1961 and 1970 the league was broadened with nine new teams.

Between 1967 and 1976 the NBA had a rival, the so called ABA league. The ABA put the stress on the offensive show and grained ground in the cities where there were no NBA team or only for a short time. Admittedly, this championship was spectacular and the crowd liked it. However, they were unable to make a contract with TV channels, so in 1976 the league stopped. Four teams and the players moved to the NBA. To tell the truth, the league acquired good teams, good players and real show.

From 1979, a new Celtics-Lakers fight started, or we can say that the fight of the two genius, Magic Johnson and Larry Bird. Between 1979 and 1988 the Lakers won five times, while the Celtics three times in the finals. The golden age

started in 1984, when players like Michael Jordan, Charles Barkley and Hakeem Olajuwon were chosen from the most powerful draft of all time. In Barcelona Olympic Games in 1992, people could face the strength of these players in the legendary Dream Team's victories.

Between 1991 and 1996 the Chicago Bulls won four championships, while twice the Houston won with Olajuwon and Clyde Drexler in the line-up. Meanwhile, souvenirs having the players' names and the teams' logos on them had created an annual 3.1 billion income by 1996.

In 1999 Michael Jordan retired. There have been great players in the league since then, however they are not as great stars as were Magic, Jordan or Bird. In the last 10 years the league has become international. Plenty of foreign players have arrived into the league. (Kosarlabda.co.hu, 2010) After this short summary of history, from which it is visible that this championship is a really popular and well-operating organisation, let us have a look at the effects of the 2008 global economic crisis on this powerful championship, and on the attendance of the games.

The global economic crisis of 2008

As a matter of fact, the whole crisis started on the North American real estate market, where banks allowed more and more risky credit borrowing for making larger income. (Simkovic, 2009) Later most of the people were unable to redeem their credit making the firms on the real estate market fall into decay, and due to this the firms pulled the creditor

banks and insurance companies as well. Needless to say, if one of the most powerful countries of the world economy gets into trouble, it also has effect on the other regions, so the bankruptcy of American banks pulled the other parts of the world as well. The crisis required strict changes in economic politics from most of the countries.

Materials and Methods

The main question was, what kind of effects had the global economic crisis on the attendance of the NBA games. During the test I used the data of the North American sport statistics.

Results and Discussions

The effect of the crisis on attendance of NBA games

In the 2006–2007 season the league came out with the highest annual average number of visitors, that is 17,757 visitors per game. But how was this number changing during the crisis?

As you can see in the next chart, the decrease of NBA attendance is demonstrable on the whole.

The first chart shows the change of average number of visitors between 2006 and 2008. It is visible from the chart, that there was a significant change in the number of visitors in the two seasons. Only four teams could raise their attendance during the crisis. In case of the ceasing Seattle team, and the freshly starting Oklahoma team we cannot compare to previous attendance data. On the one side, the greatest fall was at Sacramento team, where the decrease was 10.5 per cent, while on the other side there was a 15.1 per cent increase at New Orleans team. There were emotional and sport reasons of this raise. After the demolition of Hurricane Katrina the local people took all the opportunity that meant the public togetherness to them, and the team played better due to the new players too. This was true even when the team played two years in Oakland because of the demolition of Hurricane Katrina, and they only moved back to New Orleans after that.

The decrease of attendance and the problems of the sponsoring firms brought many teams to grief. In February 2009, the league borrowed a credit of 200 million dollars from two American banks as a remedy to help teams which got into financial problems. Fifteen teams checked in for the credit, but neither of the teams could get more than 13,33 million dollars.

In order to decrease costs the NBA had to make steps in the Association itself, so 80 workers were fired from the League Centre. The league also developed the advertisement opportunities of firms dealing with gambling and alcoholic drinks. More of these products were advertised, which also generated a significant income. At the same time, they also tried to be opened for the world. The NBA is planning to bring not only preseason, but official season games to Europe as well, like NFL did. That is why the Spanish BBVA Bank became the new sponsor of NBA in 2010. At the same time the Asian region and more exactly China, as the biggest possible market

Table 1: Change of Average Number of Visitors between 2006 and 2008

Team	2007–2008	2008–2009	Change (%)
Detroit Pistons	22,076	21,932	−0.7
Chicago Bulls	21,987	21,134	−4
Portland Trailblazers	19,550	20,508	+4.8
Dallas Mavericks	20,286	20,016	−1
Utah Jazz	19,907	19,901	−0.1
Cleveland Cavaliers	20,465	19,724	−3.6
New York Knicks	19,115	19,144	+0.2
Los Angeles Lakers	18,997	18,997	0
Toronto Raptors	19,435	18,966	−2.4
Golden State Warriors	19,630	18,945	−3.5
Boston Celtics	18,624	18,624	0
Oklahoma City Thunder		18,597	
Phoenix Suns	18,422	18,422	0
San Antonio Spurs	18,564	18,004	−4.5
Miami Heat	19,463	17,793	−8.5
Houston Rockets	17,524	17,344	−1
Denver Nuggets	17,364	17,054	−2
Orlando Magic	17,301	16,849	−3.8
New Orleans Hornets	14,181	16,754	+15.1
Atlanta Hawks	16,280	16,563	+1.4
Washington Wizards	17,962	16,508	−7.2
Los Angeles Clippers	16,888	15,598	−7.2
Milwaukee Bucks	15,595	15,200	−2.1
Philadelphia 76ers	14,870	14,790	−0.1
New Jersey Nets	15,656	14,762	−4.5
Minnesota Timberwolves	14,476	14,115	−1.8
Charlotte Bobcats	14,717	14,065	−3.5
Indiana Pacers	12,221	13,777	+9.2
Memphis Grizzlies	12,770	12,608	−0.2
Sacramento Kings	14,150	12,332	−10.5
Seattle Supersonics	13,355		

(source: espn.go.com, personal editing)

cannot be left out of course. By drafting Chinese players the NBA teams earned a great income from merchandising in China. Beside of this, there are examples of team sponsoring as well. Enough if we think about the contract, which was made between Cleveland and Tsingtao, the biggest beer producer of China. (Sportsmarketing.hu, 2009)

We can see now, that the fight has become on more stages as a remedy to the shortage caused by the crisis.

Average attendance

In the previous point we examined the change of attendance in the two years of the crisis. Now let's examine a longer period, from 2006–2007 season, so before the crisis, to 2009–2010 season, so after the moderation of the crisis. In this next chart we are going to examine these four years' data.

Only 2 teams out of the 30 could continuously produce increase in attendance during the four years. The other teams sometimes lost and sometimes won visitors in the last four

Table 2: Change of Average Number of Visitors between 2006 and 2010

Team	2006/2007 2006–2007	2007/2008 2007–2008	2008/2009 2008–2009	2009/2010 2009–2010
1. Chicago Bulls	22,252	21,987	21,197	20,725
2. Detroit Pistons	22,076	22,076	21,877	18,751
3. Cleveland Cavaliers	20,436	20,465	20,010	20,562
4. Dallas Mavericks	20,351	20,286	20,042	19,994
5. Miami Heat	19,720	19,463	18,229	17,730
6. Utah Jazz	19,566	19,907	19,903	19,378
7. L.A. Lakers	18,985	18,997	18,997	18,997
8. New York Knicks	18,805	19,115	19,287	19,501
9. San Antonio Spurs	18,654	18,564	18,269	18,089
10. Phoenix Suns	18,422	18,422	18,422	17,648
11. L.A. Clippers	18,421	16,888	16,170	16,343
12. Washington Wizards	18,372	17,962	16,612	16,204
13. Toronto Raptors	18,258	19,435	18,773	17,897
14. Golden State Warriors	18,104	19,630	18,942	18,027
15. New Orleans Hornets	17,833	14,181	16,968	15,130
16. Sacramento Kings	17,317	14,150	12,571	13,254
17. Denver Nuggets	17,230	17,364	17,223	17,995
18. Orlando Magic	17,094	17,301	17,043	17,461
19. New Jersey Nets	16,925	15,656	15,147	13,103
20. Boston Celtics	16,843	18,624	18,624	18,169
21. Houston Rockets	16,545	17,524	17,482	16,528
22. Portland Trailblazers	16,360	19,550	20,524	20,497
23. Milwaukee Bucks	16,186	15,595	15,389	15,108
24. Minnesota Timberwolves	15,998	14,476	14,505	15,101
25. Oklahoma Thunder	15,955	13,355	18,693	18,003
26. Atlanta Hawks	15,594	16,280	16,748	16,545
27. Charlotte Bobcats	15,549	14,717	14,526	15,824
28. Indiana Pacers	15,359	12,221	14,182	14,202
29. Philadelphia 76ers	14,843	14,870	15,802	14,224
30. Memphis Grizzlies	14,654	12,770	12,745	13,485

(source: espn.go.com, personal editing)

years. Of course, this is influenced not only by the global economic crisis, but how efficient the team is, the price of tickets and the draft of players.

Needless to say, the teams were also trying to tempt more and more people to visit the matches by giving special offers. These offers targeted mostly families. As an example, at Memphis Grizzlies team the family ticket cost 48 dollars in the 2007–2008 season, which included four tickets, drink and hot-dog. By the 2008–2009 season teams offered even lower-priced special tickets, for example at Atlanta Hawks team a single ticket cost 37 dollars, which included limitless hot-dog, twist, popcorn and Coca-Cola product consumption. Despite of the fact that the average price of a ticket is 100 dollars at Los Angeles Lakers' stadium, these are very visitor-friendly

offers. In 2009–2010 season there were 300,000 more tickets available at a price of 10 dollars or less, than in the previous season. So it is visible, that not only the league, but the teams are doing everything possible to keep visitors. (Team marketing report, 2007)

Having a look at the present, in the Memphis Grizzlies' Super Saver offer tickets for home games can be bought for 5 dollars, except for the matches against the two star teams, the Miami and the Lakers.

With hard work and great efforts the teams and the league could succeed in avoiding a drastic decrease of attendance in the stadiums, and despite of the crisis they managed to stabilize the situation. This is supported by the data of the last four years' average attendance.

Average attendance in the last four years:

2006/2007-17757 visitor

2007/2008-17396 visitor

2008/2009-17520 visitor

2009/2010-17149 visitor

Ticket prices

Ticket prices were already mentioned, but this chart shows us the change of average ticket price in the last four years.

If we examine the NBA Average Ticket Price at the bottom of the chart, we can see that tickets were the most expensive in the 2007–2008 season. At this time the effects of the crisis could be experienced. Later in the next two years the prices continuously fell, because the teams realised that it is worth offering tickets at lower prices and this way more people went to the stadiums. Of course we can see different tactics in the chart, but mainly the prices were kept in the same level, or were even decreased. Data of the teams with the highest and the lowest average price are highlighted, from which it can be determined, that there is a huge gap between the teams of Lakers and Hornets.

The salaries agreement and attendance linear forecast

The biggest challenge of the present for the National Basketball Association is not the increase of attendance, but the consensus on salaries with the players union. As in many other North-American leagues, salary cap is used in the NBA as well. With this they can maximise the money that can be spent on salaries in a team. In contrast with NFL, NBA is using a so called soft cap, in which the salary cap can be increased by means of special rules. But this time the league wants to decrease these opportunities drastically. Eventually, the 2011–2012 season was not a complete one due to the long-lasting negotiations, which led to a 66 games season instead of 82. But the negotiations between the two sides did not last as long as to seriously influence the league's financial operation.

By using the data given so far, the following forecast can be made on attendance.

Teams on the first three pictures could increase attendance despite of the crisis, and the linear forecast trend line has the

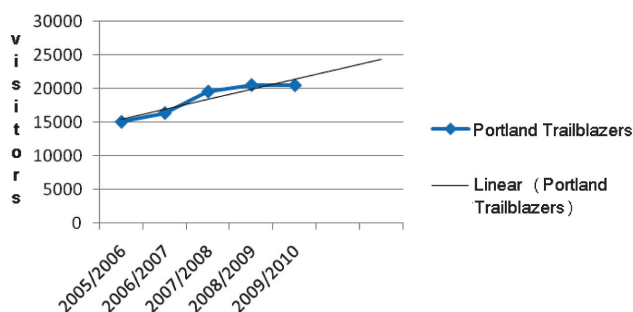
Table 3: Change of Ticket Prices between 2006 and 2010

Team	Av. Price of Ticket 2006–2007	Av. Price of Ticket 2007–2008	Av. Price of Ticket 2008–2009	Av. Price of Ticket 2009–2010
1. L.A. Lakers	89.24\$	93.25\$	93.25\$	95.25\$
2. N.Y. Knicks	70.51\$	70.51\$	68.04\$	88.66\$
3. Boston Celtics	65.43\$	68.55\$	68.55\$	68.55\$
4. Chicago Bulls	63.00\$	64.25\$	64.25\$	64.25\$
5. New Jersey Nets	60.98\$	54.98\$	44.51\$	40.50\$
6. Dallas Mavericks	60.56\$	62.10\$	51.52\$	49.45\$
7. Sacramento Kings	59.80\$	59.80\$	57.50\$	51.80\$
8. Miami Heat	58.55\$	58.55\$	58.55\$	60.50\$
9. Phoenix suns	58.26\$	64.16\$	64.16\$	62.50\$
10. L.A. Clippers	57.00\$	54.50\$	53.50\$	51.47\$
11. Cleveland Cavs	56.10\$	55.95\$	55.95\$	52.28\$
12. Toronto Raptors	55.11\$	45.31\$	49.32\$	
13. San Antonio Spurs	51.45\$	56.37\$	55.47\$	56.34\$
14. Milwaukee Bucks	47.64\$	47.86\$	46.00\$	46.00\$
15. Detroit Pistons	47.50\$	47.50\$	47.50\$	42.76\$
16. Portland Trailblazers	47.34\$	61.21\$	63.05\$	50.62\$
17. Denver Nuggets	44.29\$	47.30\$	47.30\$	47.30\$
18. Philadelphia 76ers	43.00\$	43.00\$	43.00\$	41.00\$
19. Indiana Pacers	42.39\$	41.09\$	30.02\$	29.13\$
20. Houston Rockets	41.98\$	43.40\$	42.87\$	41.41\$
21. Utah Jazz	41.31\$	43.90\$	43.90\$	41.47\$
22. Minnesota Timberwolves	39.37\$	36.26\$	34.50\$	31.50\$
23. Orlando Magic	38.46\$	40.30\$	40.30\$	43.00\$
24. Atlanta Hawks	38.00\$	36.90\$	51.78\$	36.13\$
25. Memphis Grizzlies	36.82\$	24.11\$	24.10\$	23.18\$
26. Seattle Supersonics/ Oklahoma Thunder	35.00\$	36.35\$	45.99\$	45.99\$
27. Golden State Warriors	31.13\$	39.00\$	37.50\$	34.13\$
28. Washington Wizards	30.89\$	29.14\$	27.21\$	24.52\$
29. Charlotte Bobcats	29.10\$	33.25\$	33.25\$	29.96\$
30. New Orleans Hornets	24.58\$	25.17\$	26.75\$	29.26\$
NBA AVERAGE	48.83\$	49.47\$	48.90\$	47.66\$

(source: espn.go.com, personal editing)

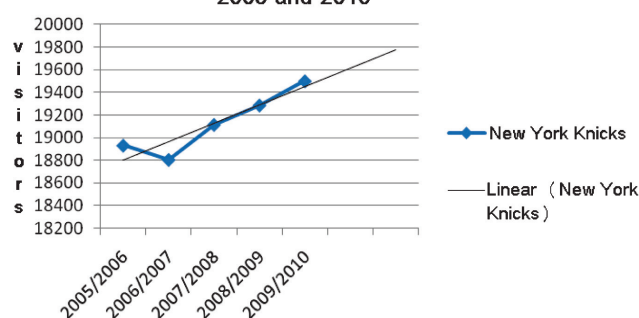
prognosis of further increase in attendance. In case of the last two pictures, though teams could raise their attendance despite of the crisis, but according to the forecast of the linear trend line a slow decrease of attendance is shown.

Attendance of Portland Trailblazers team between 2005 and 2010



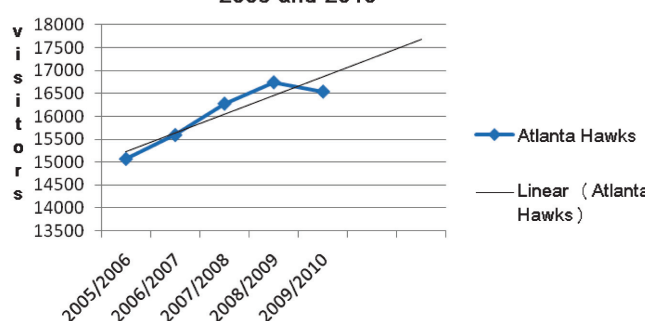
Graph 1: Attendance of Portland Trailblazers team between 2005 and 2010
(source: espn.go.com, personal editing)

Attendance of New York Knicks team between 2005 and 2010



Graph 2: Attendance of New York Knicks team between 2005 and 2010
(source: espn.go.com, personal editing)

Attendance of Atlanta Hawks team between 2005 and 2010

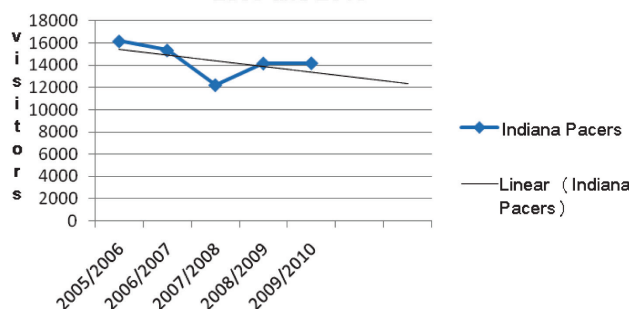


Graph 3: Attendance of Atlanta Hawks team between 2005 and 2010
(source: espn.go.com, personal editing)

These are analyses of the future, but I can't ignore the human factor. The best example of this is New Orleans team, where the franchise is connected to New Orleans till 2014 according to the contract. However, attendance of the last two years should be supervised in every second year at the end of January, and if the average attendance falls under 14,735 visitors per game then the owner is entitled to move his team.

Contrary to the forecast, a great increase occurred by January 2011 due to the campaigns organised by fans, so the attendance was adequate. Beside of this, the causes of

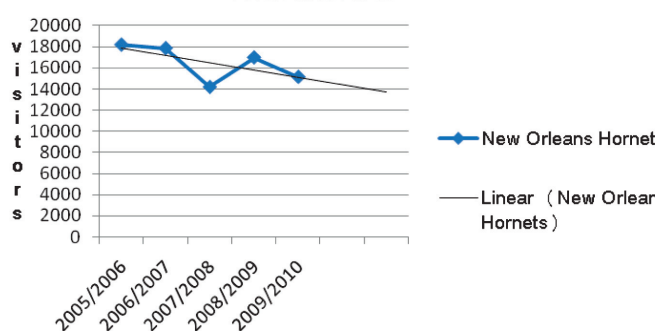
Attendance of Indiana Pacers team between 2005 and 2010



Graph 4: Attendance of Indiana Pacers team between 2005 and 2010

(source: espn.go.com, personal editing)

Attendance of New Orleans Hornets team between 2005 and 2010



Graph 5: Attendance of New Orleans Hornets team between 2005 and 2010 (source: espn.go.com, personal editing)

increase were the New Orleans Saints early drop-out from the NFL Playoffs and the Hornets' great run in the season, where they managed to win 10 consecutive games in a row and by this set up a franchise record. So my forecast above shows a decreasing tendency, which can be true, but I can't rid the human factor.

The first three teams, Portland, New York and Atlanta are traditionally popular ones and playing quite well in the championship. Despite of the high ticket prices in New York, it is the same social rank to go to a Knicks match, like in Los Angeles to a Lakers match. In Portland and Atlanta, beside of the good performance there are medium high or lower ticket prices, so according to the forecast it is not surprising, that an increase will occur in attendance.

The forecast of Indiana Pacers team shows a decrease in attendance, despite of the fact that people love basketball in Indiana State, but the team did not manage to reach the playoffs in the last 4 seasons, and plays also ineffectually in the 2010-2011 championship. At Pacers, they try to tempt people with different special offers to their stadium. For example there is a so called "All you can eat at Monday" offer for 20 dollars, but this will be only effective, if the team plays better.

Summary

I think it is visible from the previously shown data and charts, that the global economic crisis had a sensible and demonstrable effect on NBA attendance. However, my opinion is that the league's leader corp made steps in time. By adding new sponsors, moderating costs and borrowing credit from banks the league was able to go through the hardest two years without any big problem.

Teams could moderate their losses by making different special offers, drafting new players and being opened for the foreign countries, and now it seems that if there will be an agreement on salaries, then the league will stably operate, and I think this will lead to an increase in attendance in the next few years.

Bibliography

Book:

Bill Simmons (2009): *The Book of Basketball: The NBA According to The Sports Guy*. ESPN Books. New York.

Charley Rosen (2009): *The First Tip-Off: The Incredible Story of the Birth of the NBA*. McGraw-Hill Professional. United States of America.

Articles in journal:

Michael Simkovic (2009): *Secret Liens and the Financial Crisis of 2008*. American Bankruptcy Law Journal. Vol. 83, p. 253,

Articles from electronics sources:

A 2008–2009-es gazdasági világválság
http://hu.wikipedia.org/wiki/2008%E2%80%932009-es_gazdas%C3%A1gi_vil%C3%A1gv%C3%A1ls%C3%A1g,
 2010.04.12.

Az NBA története. (2010)
<http://www.kosarlabda.co.hu/nba/nba-toertenete>, 2010.04.12.

Hang time: NBA tickets continue to catch air in 2007-08.
<http://teammarketing.com.ismmedia.com/ISM3/std-content/repos/Top/Fan%20Cost%20Index/NBA/nba%20fci%2007-08.pdf>
 2010.04.12.

NBA Attendance Report (2010)
http://espn.go.com/nba/attendance/_/year/2010, 2010.04.12.

NBA pénzügyei I. rész. (2010)
http://nba.blog.nepsport.hu/archives/2010/10/28/NBA_penzugyek_I_resz/, 2010.04.12.

NBA: 63. szezonra új régi favoritokkal és új csapattal. (2008)
<http://www.xlsport.hu/showcikk.php?scid=1011024>, 2010. 04.12.

Sports Economics: Where Have the Fans Gone? <http://spartyandfriends.com/2009/02/27/sports-economics-where-have-the-fans-gone/>, 2010.04.12.

Péter Zsédely (2009). *Két kínai céggel is üzletet kötött a Cleveland Cavaliers*.
<http://sportsmarketing.hu/2009/12/16/kinai-cegekkel-kotott-uzletet-a-cleveland-cavaliers/> 2010. 04.12.

