2004

Comparing marketing policies in Nippon Professional Baseball and the National Fooball League: Lessons for Japanese sports teams

Noboru Oshima

COMPARING MARKETING POLICIES IN NIPPON PROFESSIONAL BASEBALL AND THE NATIONAL FOOTBALL LEAGUE: LESSONS FOR JAPANESE SPORTS TEAMS

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Business Administration

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by

Noboru Oshima

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Approved by:

[redacted]

Eric Newman, Ph.D., Chair, Marketing — 5/26/04 Date

[redacted]

Lee Hanson, Ph.D.

[redacted]

Vic Johar, Department Chair, Marketing

ABSTRACT

This paper compares the effectiveness of marketing policies in the U.S. National Football League (NFL) and Nippon Professional Baseball (NPB). Marketing policy recommendations are developed for the NPB to help it regain popularity in Japan.

ACKNOWLEDGMENTS

The author would like to express his appreciation to Dr. Newman, Dr. Hanson, and Dr. Johar, Marketing Department Chair, and everyone else who supported me.

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CHAPTER ONE

BACKGROUND

Introduction

The purpose of chapter one is to summarize the project. This chapter explains the purpose, scope and significance of the study, its limitations, and its organization and methodology.

Purpose of the Project

This study compares the U.S. National Football league (NFL) and Nippon Professional Baseball (NPB). Football and baseball are different sports, but there is a similarity. Both leagues have been the most popular professional leagues in each country for a long time. However, they achieved success through different marketing and management approaches. This is a very interesting difference, and my question is: "which marketing policy methods are more efficient and will sustain competitiveness in the long run?" The goal of the study is to develop recommendations for the rebuilding of NPB's popularity in terms of marketing policy practices after the efficiency of both leagues is analyzed.

Significance of the Project

Identification of long-term marketing policy effectiveness in major professional sports leagues in different countries can potentially help improve both domestic and international appeal of sports leagues and effectiveness of their management. While the main audience for this study is managers working in sport industries, readers who work in other industries may benefit from learning how to encourage a change from non-loyal customers to loyal customers, one of the central challenges for the NPB.

Assumptions

This study hypothesizes that:

- Rich teams tend to be more advanced or successful because they can hire superior players with higher salaries.
- Owners think that a higher team winning rate is in direct proportion to higher salary rates for players.
- Fans want their favorite teams to become champions, or at least have some wins in a highly competitive season.

- Some fans in a league may lose their interest when one team is so strong they can easily estimate results and determine that other teams can't win.

A higher winning rate for a team encourages fans to watch more games on TV or visit a stadium more often. Rich teams are more attractive to fans, and in turn tend to be successful teams because they can hire superior players in terms of higher salaries. Some owners believe that if they hire high-salary players, they have a better chance to win a champion flag (Kiku, 1993). In other words, owners think that a higher winning rate is in proportion to higher salaries.

Some fans feel very strong loyalty for a team, but there are many more who have little loyalty toward either teams or the league (NPBPA, 2001). Many fans naturally want a favorite team to get a championship or good results in a highly competitive season (Ihara, 1992). Some lower-loyalty fans will leave a team when it doesn't have good results for a long time, but other fans in a league may lose their interest when one team is so strong that

they know it will win and rivals won't. Fans want to feel excitement about a league and a team.

Chapters two and three explore whether and to what extent these hypotheses are valid.

Limitations

The principal limitation of this study is that data of team total salaries in the NPB exist for only six years (1999-2004), in contrast to NFL data which are available for 1990-2001. This prohibits year-to-year comparison between Japanese and U.S. teams, although trend comparisons are provided. Additionally, some companies and teams in the NPB did not officially announce their profits and expenditures. This study evaluated the final revenues, wins, and customer results in each season as there were no relevant data except for the final results.

Definition of Terms

The following terms are defined as they apply to the project.

Nippon Professional Baseball (NPB) - This organization was established on December 26th, 1934. There now are two leagues, the Central and the Pacific. Each league has six teams. The Pacific league has a designated

hitter, like the American league in Major League Baseball. The Central doesn't use a DH. Formal and short names of teams are presented in Appendix A.

U.S. Major League Baseball (MLB) - There are 30 teams organized in the American league and the National league.

The National Football League (NFL) - The NFL was established in 1920. All total there are 32 teams in the league. Formal and short names of teams are presented in Appendix B.

Free Agency (FA) - A player who has belonged to a Japanese team in nine years can select another team. This right gives players leverage in negotiating salary and benefits.

Game Gap(s) - Game gap is the Japanese term for "games behind" in the United States. Game gap refers to the number of games behind the leading teams are the other teams in the league. Determined by the following calculation:

{(Numbers of winning games for team A- numbers of winning games for team B) +(Numbers of losing games for team B -numbers of losing games for team A)}/2. This calculation does not include tie games.

Blackout Rule - Rule that prohibits broadcasting in a 75-mile radius around a stadium if all tickets aren't sold out within 72 hours before the game starts. Unlike the NFL, the NPB doesn't currently have a blackout rule.

Organization of the Thesis

This project is organized in four chapters. Chapter one explains the purpose and background of the project. Chapter two discusses the NPB and NFL. Porter's "Diamond" model of industry analysis is used to compare the two professional leagues. Chapter three discusses the analysis and procedures used. Chapter four presents the results of the analysis and recommendations for the NPB. Appendices for the study are as follows: Appendix A: List of NPB Teams Appendix B: List of NFL Teams Appendix C: Salary and Income Data for the NPB and MLB Appendix D: NPB Visitors Appendix E: Relationship Between TV Ratings and Game Gaps Appendix F: NPB Team Results Appendix G: Salaries in the NPB Appendix H: Revenues in the NPB Appendix I: Visitors and TV Ratings of the NFL Appendix J: Salaries in the NFL Appendix K: Results of Correlation Analysis for the NPB

Appendix L: Results of Correlation Analysis for the NFL Data.

Most of the information and data used in this study come from published secondary sources. For data, well-known and reliable web sites, such as the National Football League Players Association's (NFLPA), and NFL Japan are used. For NPB, its official site and the NPB Players Association official websites provided most information. All web sites consulted are listed in the references.

CHAPTER TWO

INDUSTRY ANALYSIS OF THE NIPPON PROFESSIONAL BASEBALL AND THE NATIONAL FOOTBALL LEAGUE

Introduction

This chapter presents an analysis of the NPB and NFL. It explains why a Japanese Baseball league (NPB) and an American football league (NFL) were selected for comparison. To evaluate the two leagues, the chapter uses a framework for comparing industries from different countries developed by Professor Michael Porter of Harvard University (Porter, 1990) Data utilized include number of visitors, TV ratings, team results, salaries, and team revenues in NPB and NFL. Finally, this chapter discusses critical management and marketing issues faced by NPB.

The Nippon Professional Baseball and Major League Baseball

Baseball is a very popular sport in both Japan and the United States. While it might thus seem natural that this study would analyze the NPB and U.S. MLB, the two national sports leagues have very similar problems related to salary gaps, team revenue, and competitive balance among teams.

In the MLB, the top 10 % of players shared 60% salaries in the league (Jewell, 2001). Figure C1, Appendix C, shows the salary gaps in MLB. As can be seen, gaps between minimum payment and maximum salaries on teams were getting larger between 1990 and 2001. Some rich teams, especially the New York Yankees (NYY), paid athletes more, but teams in poor financial condition couldn't do that (Gillard, 1996).

Regarding income, Figure C2 in Appendix C shows MLB minimum, average, and maximum income in each year. As this figure shows through the declining approximation line of average income, income in MLB teams was getting worse (Leeds & von Allmen, 2002; Sheehan, 1996; and Zimbalist, 1994). Table C1 in Appendix C shows that about 42.6% of MLB teams had negative income during the 1990-2003 seasons. In the 2002 and 2003 seasons, over 50% of the teams had negative income. The average income in those seasons was respectively -1.3 and -1.9 million dollars.

As noted above, profitable teams in the MLB could hire superior players to increase game performance and team profitability, but poor teams couldn't. As a result the competitive balance within the league collapsed, with just a few teams doing well and the others poorly. The N.Y.

Yankees in the east area of the American league had been regional champion for four consecutive years (2000-2004 seasons). Other winning teams in the region kept the same rank over four years. For example, the Red Sox were second, the Blue Jays third, the Orioles fourth, and the Devil Rays fifth (TSP 21 Sports).

A somewhat similar situation is seen in the NPB. According to Nippon Professional Baseball Theory, NPB corporations owning NPB teams considered the teams to be a media for advertisement, and didn't really care about a team's profitability (Kiku, 1993 and Mizuno, 2002). Given this attitude, because of the YG's tremendous power in the league, it has been hard to achieve drastic reform (Mizuno, 2002 and Kobayashi, 2002). Masaru Ikei, author of Reviving Japanese Baseball, criticized owner corporation management methods of NPB teams and YG's disproportionate success in terms of profits (Ikei, 2004). Like MLB and the NFL, the NPB substantially depends upon broadcasting prices. If NPB teams increase the prices their financial situation will be improved, thus a successful team like YG they sees little value in lowering advertising its rates.

NPB statistics for salary gap and revenues are similar to those for MLB. These data are shown in Figure

G1, Table G1 Appendix G, and Table H1, Appendix H, although salary gaps and revenue gaps in NPB are discussed in more detail in chapter two. As can be seen from the data, salary gaps in the NPB's Central league were getting larger because of YG's aggressive payments to players. Total salaries in the Yomiuri Giants (YG) were the greatest in the Central league during the study period (1999-2004). Moreover, YG players' average salary in 2003 was 59,730,000 JPY ($542,359)*, while the lowest team players' average salary that year was 26,540,000 JPY ($240,988). For revenue, unbalanced situations in the NPB were more critical than these in MLB. The revenue of the YG in 2000 was 2,979 million JPY ($27 million), while the revenue of the lowest team in that year was 122 million JPY ($1.1 million). YG accounted for about 55% of the revenues of the Central league in 2000.

The NPB and MLB thus were in a problematic situation, one that was causing them to lose the balance of competitiveness as leagues, with too few teams doing well enough to keep the leagues attractive in the future. The question was, how could they improve the situation? Herein

* $1=110.13JPY MSN Japan Money 4/29/2004

was the motivation for this study's decision to compare the NFL and NPB. The NFL might offer some management solutions because it is the most popular and successful sports league in the U.S. Unlike both the NPB and MLB, salary gaps, revenues, and competitive balance within the NFL are much more evenly spread among teams, as can be seen in the Figures J1 in Appendix J.

According to Karl W. Einolf, author of Is Winning Everything? "MLB franchises, with little revenue sharing and no salary cap, tend to be less efficient than NFL franchises. Big spending and inefficient MLB franchises tend to come from large media markets while this is not the case in the NFL" (Einolf, 2003)

Professional baseball and football, while different sports, share certain similarities in marketing and management which might permit successful practices to be applied from football and baseball. Accordingly, this study chose to examine whether what works well in football might be applied in baseball to make it more successful.

Unique Factors in Professional Sports Marketing

Professional sports industries are unusual in terms of competitiveness and their attractiveness to fans.

Unlike industries such as automobiles, professional sport leagues don't involve just one-to-one competition among businesses. While teams compete with each other, their league is a kind of company in competition with other leagues. If there is a very strong team in a league that overshadows others, the league can lose its attractiveness to customers. Because fans can estimate the results easily- i.e. the dominant team is going to win- they can lose interest in the league and its other teams (Sugimoto, 1997 and Kobayashi, 2002). Therefore, maintaining a high level of team competition is very important to sustaining league attractiveness and profitability. Individual teams are better off if they have strong rivals, as is the league.

Each professional league uses many methods to promote higher competition among teams. These are addressed in the following sections, using the framework for industry analysis developed by Michael Porter.

Situation of the Nippon Professional Baseball and the National Football League

Factor Conditions in the Nippon Professional Baseball and the National Football League

"Factor conditions" refers to basic inputs and resources needed for all teams to compete in an industry. In the context of this study, stadium access is one of the key factor conditions.

Nippon Professional Baseball Ballparks

Japan is very small nation where land tends to be very expensive. Although the country has a very convenient public transportation system which reduces problems of shortage of parking space, unfortunately Japanese ballparks still have parking problems. While most ballparks have parking lots, because of high land costs they are not large enough. Tokyo Dome, the Yomiuri Giants' home stadium, has only 710 parking spaces even though the total capacity of visitors in the stadium is about 46,000. Hanshin Koshien ballpark, the Hanshin Tigers' home stadium, doesn't have any parking space at all. As a result, almost all ballparks ask visitors to use public transportation instead of their cars (NPB Official, 2004). Most ballparks have two to three train or bus stops nearby, but stations have to accommodate huge crowds after

games and thus are over taxed. This is especially so with Hanshin Koshien, which has only one station and no parking.

What these transportation and parking problems mean is that NPB games have attendance problems because of the difficulty fans have getting to them.

National Football League Stadiums

In contrast, stadiums where NFL teams play have large parking lots (NFL Official, 2004). Some stadiums in big cities recommend that visitors use public transportation, but they also usually can handle cars, whatever their problems of traffic jams and parking space problems.

In light of the greater parking capacity of NFL stadiums, the challenge for the NPB is to find ways that might make it easier for local fans to get to stadiums. Although solutions are inherently limited, there may be some actions the NPB and teams can take. These are discussed in the final chapter.

Demand Conditions in the Nippon Professional Baseball and the National Football League

"Demand conditions" refers to the nature of demand exerted by fans. This study examined complexity of demand in terms of variety of ticket options. If demand is very

wide and sophisticated, it may offer many choices for leagues to meet demand.

Nippon Professional Baseball Visitor Demand

NPB fans have widely varying demands, with many willing to pay for even the most expensive season tickets. Ballparks offer many types of tickets to meet this varying demand. Basic tickets have several price ranges in individual tickets, group discounts, and season tickets. Each team has a different price range. YG has the most expensive individual reserved seat, priced at 5,900 JPY ($53). HC offers the cheapest, priced at 3,200JPY ($29). In general (and unsurprisingly), a stadium or dome ballpark in a big city charges higher prices, while a stadium in a relatively small city or without a dome sets cheaper prices (NPB Official, 2004).

For seasonal tickets, there are many choices, with price ranges being wider than individual tickets (NPB Official, 2004). In many cases, those who bought expensive season tickets used them for business purposes. Although offering the lowest individual price, the HC has a pretty expensive season ticket: 1,092,000 JPY ($9,916). The HC also offers the cheapest one, 73,500 JPY ($667). Because it is the most popular team in Japan, the Yomiuri Giants

has relatively high-priced season tickets. The most expensive tickets consistently sell out early on.

Individual and season tickets are very basic, but there are some unique tickets in the NPB. For example, tickets are available for school trips. There is a ticket with dinner. There is a book of tickets. There is a ticket with free beer. There is a ticket with a one-day free train pass, which lets a visitor go sightseeing in the daytime, then watch a game in the evening (NPB Official, 2004).

National Football League Visitor Demand

In contrast with the NPB, tickets in the NFL are categorized more by seat zones. Usually there are about eight zones, where a ballpark in the NPB has around five to eight zones. Fans in the NFL want to watch from a good view point, and are particular about view. They will check view from a seat though internet. Also like the NPB, NFL fans tend to purchase better seats even though expensive. They are very loyal customers, and are willing to pay for it.

There are four basic NFL ticket selections: individual, season, permanent seat license, and group ticket. The price range of individual tickets is from $25

to around $75. Individual tickets are more expensive than tickets in the NPB. However, the price of an NFL season ticket is cheaper than that of the NPB.

The permanent ticket offered by the NFL is unique; no NPB team offers it.

In summary, fans in both the NPB and the NFL are willing to pay for even the most expensive seats. Fans in the NFL tend to be particular about the view from seats, while fans in the NPB tend to be particular about additional services rather than view.

Firm Strategy and Rivalry in the Nippon Professional Baseball

General Information on the Nippon Professional Baseball

There are twelve professional baseball teams in Japan, organized in two leagues: the Central, and the Pacific. There are no playoff games in the NPB. Each league champion meets in the Nihon series, which is held to a maximum of seven games.

Team Ownership Corporations

Nippon Professional Baseball (NPB) teams are owned by parent companies of different kinds. In the Central league, the Yomiuri Giants are owned by the Yomiuri media

conglomerate. It also owns the Nihon TV station in Tokyo and can network games throughout Japan. The Yakult Swallows are owned by the Yakult Corporation, a yogurt and health drink producer. The Chunichi Dragons are owned by the Chunichi media group in Nagoya, while the Hanshin Tigers are owned by Hanshin Railways. The Hiroshima Toyo Carp gets a lot of its capital from the Toyo tire company, while some of it is also held by the city of Hiroshima. The Yokohama Bay Stars had been owned up until 2003 by Maruha, a Japanese fishery company, but now the team is owned by TBS, a Tokyo based TV station (NPB Official, 2004).

In the Pacific league, the Seibu Lions are owned by the Seibu Department store chain. The Osaka Kintetsu Buffaloes are owned by the Kintetsu group company. The Fukuoka Daiei Hawks are owned by the Daiei supermarket chain, the Chiba Lotte Marines by the Lotte conglomerate (originally from Korea), and the Hokkaido Nippon Ham Fighters are owned by Nippon Ham, a Japanese meat products firm. The Orix Blue Wave is owned by Orix, a financial services company based in Tokyo (NPB Official, 2004).

Unlike American professional leagues, some NPB teams do not mention their home town; Yomiuri and Yakult, Chunichi, Hanshin, Seibu, Orix are examples. A major reason that a team does not use its hometown name stems from an ownership company's concept of the team. As noted previously, some companies may not expect monetary revenue from their baseball team; they consider the team as a medium of advertisement (Harada, 1999; Ikei, 2004 and Shinchosha, 2000).

Income and Owners

There is no sharing of revenues among NPB teams. Unlike the NFL, all teams earn revenues and profits by themselves. In general, the Central league is more popular than the Pacific league, and in the Central league the Yomiuri Giants have huge revenues relative to other teams. The owner of the team tends to have a strong voice, a situation which is similar to the N.Y. Yankees. Unlike both MLB in the U.S. and the NFL, the NPB does not contract broadcasting rights with broadcasting companies for the league. Each team makes individual contracts with TV stations. As a result, popular teams, especially the Yomiuri Giants, can sell broadcasting rights at a higher price, but unpopular teams can't.

Nippon Professional Baseball Foreign Player Limitation

Teams are allowed to have up to four foreigners on the roster, two position players and two pitchers. The NFL and MLB don't have this limitation.

Visitors in the Nippon Professional Baseball

Figure D1 and Figure D2 in Appendix D show the percent share of visitors in the Central and Pacific leagues. Table D1 and Table D2 in Appendix D show total numbers of visitors in both leagues. These data reveal some interesting trends.

In the Central league, the Yomiuri Giants (YG) had disproportionate market share. Visitors to YG accounted for a 26%-29% share of the league total. If all teams in the Central had had equal share, they would have averaged about 16.7% (100% divided by six teams). YG accounted for 173% (29% divided by 16.7%).

In the Pacific league, visitors to the Fukuoka Daiei (FD) increased its share to about 30%, however, the share of the Nippon Ham Fighters (NF) declined from 26% to 13%. The FD is the only professional baseball team in Kyusyu. Because the Kyusyu area was weak in terms of business opportunities, the team was expected to improve the local

economic situation when Daiei purchased it from Nankai Railway and moved its home area to Fukuoka, Kyusyu. To increase the team's attractiveness, the former owner of the FD hired famous Seibu Lions players through trades. NF didn't have good results for a long time, and some famous players who took their Free Agent right left the team. For such reasons, the popularity of NF was declining.

Needless to say, the Central league had more visitors than the Pacific league, but the Yomiuri Giants (YG) unduly supported the Central league's popularity. If the YG had not belonged to the Central league, the league wouldn't have gotten the numbers it did.

In the Pacific league, total visitors of the FD accounted for around 30% of the Pacific league, and the number was larger than that of the YG in the Central. However, total visitors in the other teams in the Pacific were smaller than numbers for the Central teams. Therefore, total visitors in the Pacific in 2002 were 9,710,000, while those of the Central were 13,244,000.

Relationship between Television Ratings and Visitors

Figure E1 in Appendix E shows the relationship between TV ratings of YG and the game gaps between the

league champion and the number two ranked team during the research period. Game gap is the Japanese term for "games behind" in the United States. Game gap refers to the number of games behind the leading team are the other teams in the league.

Smaller game gaps meant a more competitive season. In general, YG's TV ratings were getting worse. However, three linked factors that might improve TV ratings and visitors are seen in Table E1 (Visitors and ranks) in Appendix E and Figure E1 (TV rating and gaps).

First, people tended to watch games and visited a ballpark when their favorite team had a chance to be a league champion (Sugimoto, 1997). Second, small gaps made people more interested in games and the league. Third, people visited a ballpark when the favorite team ranked better than its position in the previous year. Years 1994 and 1991 were good examples. The Yomiuri Giants (YG) was the league champion in 1994, and the game gaps were only two games. YG fans paid more attention. As a result, the highest TV rating was recorded. Interestingly, if a favorite team became champion through big game gaps, its TV rating wasn't as high. The reason was that fans lost interest (Sugimoto, 1997). In 1991 the game gap was small,

but the YG did not have enough of a chance to become league champion. So, YG fans did not watch games, and TV ratings declined.

What these trends indicate is that there are many "floating" fans who watch games only if a relatively favorable team may be a league champion. They don't have strong loyalty for a particular team (NPBPA, 2001). The implication for the NPB is that it must create a more exciting season through greater competition among teams. Higher competitiveness keeps the typical low-loyalty Japanese fan more interested in a league and more likely to watch more games or visit ballparks (Ihara, 1992). In addition, if the NPB is able to offer exciting game seasons, low-loyalty fans may eventually become loyal fans. Promoting and maintaining high levels of competitiveness among teams is thus a very important marketing factor for NPB.

Team Results in the Nippon Professional Baseball

The Nippon Professional Baseball (NPB) has not had equal team competitiveness for some years. Both leagues were dominated by a couple of teams. As seen in Table F1, Appendix F, in the Central league the YG and the Yakult Swallows (YS) had high the highest probability of being

number one (35.7%). By contrast, the Hanshin Tigers (HT) was a very weak team, with a probability of 57.1% of ranking sixth (Bottom).

In the Pacific league, the Seibu Lions (SL) was the highest-ranked team during the study period (57.1 probability of being number one). In comparison, the Fukuoka Daiei (FD) had a 21.4% probability of being league champion. The Lotte Maries (LM) and the Nippon Ham Fighters (NF) had zero probability of being league champion.

Table F2, Appendix F, shows ranking of teams in the Nippon series championship for both leagues. The SL was a high-ranked team in the Pacific league, winning eight league championships in 14 years, but it was very difficult for them to win the Nippon series. In part this was because the Pacific league overall was at a lower level than the Central league (Shinchosha, 2000). The probability of a Central league team winning the Nippon series was about 60%, while the probability of a Pacific league champion was about 40%.

The NPB lacked strong competitiveness not just within one league, but within both.

Salaries in the Nippon Professional Baseball

Figures G1 and G2, Appendix G show the total salary gaps in the Central and Pacific leagues, while Tables G1 and G2 in Appendix G show average salaries. Central league players earned higher salaries than Pacific league players except in 1997.

As mentioned earlier, the Central league was more popular and had more visitors than the Pacific, even though the league was dominated by the Yomiuri Giants (YG). Needless to say, the YG had the greatest profits, leading in turn to salaries for YG players that were much higher than for any other teams. The YG spent about twice as much on salaries as other teams to keep its superior competitiveness and win championships. The YG tended to hire FA players, whose bargaining power helps explain why so many players got more than 100 M JPY ($908,017). Also, the YG hired players who were categorized in the second highest salary group (see Figure G3 and Figure G4 in Appendix G). These YG policies caused higher standard deviations in this league, as shown in Table 1 below.

Table 1. Central League Standard Deviation in Total Salaries

Central	1999	2000	2001	2002	2003	2004
SD	5.0	7.0	9.5	8.0	7.4	15.3

(NPBPA, Nippon Professional Baseball Players Association)

The Yakult Swallows (YS) had the same likelihood as the YG of becoming Central league champion, but the team adapted a different recruitment strategy. The YS tended to hire players who were categorized in the second to the fourth highest salary groups. In the Pacific league, although the Seibu Lions (SL) and the Fukuoka Daiei (FD) paid higher salaries than other teams, each team's average salary in each year was relatively equal, as seen in Figure G5, Appendix G. Therefore, standard deviation of salaries in the Pacific league was much smaller than in the Central (see table 2 below).

Table 2. Pacific League Standard Deviation in Total Salaries

Pacific	1999	2000	2001	2002	2003	2004
SD	3.3	2.7	3.5	4.6	3.1	2.6

(NPBPA, Nippon Professional Baseball Players Association)

In conclusion, the Yomiuri Giants (YG) hired a high proportion of FA players and high salary players to get the Central league championship. In contrast, the Yakult Swallows (YS) didn't aggressively hire FA players, and hired the second to fourth highest categorized players. Because of YG's hiring practices, the Central league's standard deviation in total salaries was large. It could well grow bigger if the NPB allowed the YG to keep that strategy. In the Pacific league, there was just a small wage difference among teams.

Revenues in the Nippon Professional Baseball

Table H1 in Appendix H shows team profits from 1991 to 2000. As can be seen, the YG had the greatest profits by far. Table H2 shows the proportion of league revenues claimed by the YG during 1991-2000. The average percentage for YG over the few years was 54.2% from 1991 to 2000. The YG dominated the league in terms of revenue, which was why it could spend a lot to hire expensive players.

The ultimate reason why the YG had such huge profits was TV broadcasting. The Nippon Professional Baseball (NPB) doesn't see itself as a league in the same way as the NFL. As stated, it doesn't share profits among teams. The YG sold its broadcasting rights for 50 M JPY-80 M JPY

($454,000-$726,414). The estimated price of league broadcasting except for YG games was just 10 M JPY ($90,800). Broadcasting rates were at least five times greater for YG games versus non-YG games.

Conclusions about the Nippon Professional Baseball

The Central league was more popular than the Pacific league in terms numbers of visitors. However, the Central league depended on the YG to generate its fan base. The question was why other teams allowed that situation? The answer was actually quite simple. Other teams also depended on matches against the YG. All other teams had many visitors when they competed against the YG. If the YG moved to the Pacific league, other Central teams would not keep their current revenues.

There were fewer differences among teams in the Pacific league, but they didn't get profits. As noted however, owner companies didn't expect teams to make large profits. They considered the teams as just a way to advertise (Kiku, 1993).

Firm Strategy and Rivalry in the National Football League

General Information in the National Football League

The NFL has been the most popular professional sport league in the U.S for 38 years. The NFL now has 32 teams organized in two leagues. To avoid excessive player salaries, the NFL adapted a salary cap in 1994. Also, the organization has shared profits from national broadcasting rights equally among teams. These two policies have not been adapted by the NPB.

Philosophy of the National Football League

According to the NFL Japan official website, George Halas, former owner of the Chicago Bears and a major contributor to the development of the NFL, viewed the league as a wheel. The teams are spokes, while the organization is the rim of the wheel. One spoke might be weak or broken, but if the rim is intact, it will protect the whole wheel. This idea was a basic principal when the NFL was established in 1920. It contributed to the NFL's tremendous success. Following this idea, the NFL shares revenues from TV broadcasting rights, sponsors, NFL merchandise, and admission tickets.

Visitors and Television Rating

Figure I1 shows the relationship between total visitors and TV ratings. Although TV ratings were not stable, total number of visitors tended to increased.

For TV ratings in 2002, the number was the biggest among U.S major sports programs such as NASCAR (5.7% of viewers), NBA (2.9%), and MLB (2.5%). The average TV for sports events rating in the prime hours was 7.1%. The NFL TV rating (9.4%) in 2002 was above 32% on average (Associated Press New York, 2003). The gaps between the NFL's TV rating and the average TV rating in prime hours were the largest within the past five years.

National Football League Team Results

Salary caps played an important role in team winning ratios. Before salary caps were imposed, the average winning ratio of all NFL teams was 50.0%. After the salary cap it was 49.4%. The Standard deviation before the salary cap was 14.9, while the number after the salary cap was 9.4. This smaller number meant that the dispersion of the average rate of team wins was closer than it had been before. Thus the salary cap helped promote more equal team competitiveness. In fact, 13 teams achieved improved winning ratios after the salary cap.

The salary cap also helped close the gaps between leagues. Before the salary cap, the National Football Conference (NFC) champions were the Super Bowl winners from 1990 to 1993. Actually, NFC champions continually won the Super Bowl from 1994 to 1997, but after that year the American Football Conference (AFC) champions won four times until 2002. An NFC champion won the Super Bowl one time between 1998 and 2002 (NFL Japan, 2004).

National Football League Salaries

Figure J1, figure J2, and Table J1 show NFL salaries and standard deviations. Table 3 shows the salary cap limitation. The main purposes of the salary cap are to avoid sudden salary rises and keep competitive balance among teams (Heller, 2000 and NFL Japan). The theory of the salary cap makes sense, but the theory and actual management of salary caps are quite different because of teams' salary strategies. The NFL managed salary caps well between 1994 and 1996. In 1997, the salaries of the Arizona Cardinals and the New Orleans Saints were lower than other teams. That's why a higher standard deviation was recorded. In 2002, some teams- i.e. the Denver Broncos and the Green Bay Packers-paid above the salary cap limit, while the Dallas Cowboys and the Washington Redskins

didn't pay much over. The largest standard deviation was registered during this period. The salary cap limits were gradually raised, but because of team salary strategies, there were some salary gaps among teams.

Table 3. Salary Cap Limit in the National Football League ($ million)

	94	95	96	97	98	99	00	01	02
SC Ltd	34.6	37.1	40.7	41.5	52.4	57.3	62.2	67.4	71.1

(NFLPA, National Football League Players Association)

National Football League Revenues

All teams had positive operating income, but some teams had huge profits, while for others they were smaller. For instance, the Washington Redskins earned $87.8 million, while the Atlanta Falcons got only $400,000 (Ozanian, 2003). But despite the revenue gaps among NFL teams, all shared large profits from national broadcasting.

Conclusion

As stated previously, one of the most important factors in keeping fans interested in the NPB was to keep teams competitive. If fans can expect a favorite team to

be a champion, they are more likely to maintain motivation to support the league. The question then is, how can teams reduce competitive gaps? This needs not only a team effort, but a league effort as well. Team competitiveness stems from three factors: current team competitiveness, future team competitiveness, and the team's profitability (Ohde, 1999). In the NFL, if a team hires many FA players and exceeds the salary cap limit, it will give up some draft selection rights, and it pays a penalty fee which reduces its revenues. As a result, the team may increase current team competitiveness but it risks having problems with future team competitiveness and revenues (Ikei, 1993). This creates an incentive for the more successful teams to avoid paying excessive salaries and monopolizing the best draft talent. As a result, less successful teams have greater access to new talent, which in turn helps all teams be more competitive.

The NPB in contrast allows ordinary business practices in which each team looks out for itself only, with the result that only the YG has had large profits. This situation will not be good for the league in the future if it continues.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter explains how the data employed in the study were selected, and analyzed. Correlational analysis was used. This method is very simple, but it is the best way to understand the relationship between two variables.

Development

Sources

The payroll data used in this study came from the Nippon Professional Baseball Players Association (NPBPA) and the National Football League Players Association (NFLPA).

Data on team performance and league status came from the website of the Japanese Professional Baseball History Inquiry Club, and from TSP21 sports. The Japanese Professional Baseball History Inquiry Club is a website that gathers information from formal published books and magazines. TSP21sports is a general information website that covers not only sports including the NPB and the NFL but also business, entertainment, and online shopping.

Design

The design of this methodology compared the salaries and winning ratios of teams in the NPBA. As outlined in chapter one, the assumption was that a team would have more chance to be a league champion or achieve a higher winning ratio if it paid higher salaries to hire superior players. A related assumption was that higher-skilled players got higher salaries.

Study Period

This study could not compare the same time period for the NPB and the NFL. NPB and the NFL salary data covered five years. Other data for team results in both leagues covered 12 years.

Data Analysis Procedures

This study checked the efficiency of salary and winning rate by using the Pearson correlation coefficient. With its this measure, the range of r is from 1 to -1. 1 means a perfect positive correlation, while -1 means a perfect negative correlation. ±0.0 to ±0.2 means no correlation; ±0.2 to ±0.4 means relatively weak correlation, ±0.4 to ±0.6 means relatively strong correlation, ±0.6 to ±0.8 means very strong correlation,

correlation). Fans of the YG tended to visit the stadium whether or not the team had a good winning ratio. For less successful teams such as the Hanshin Tigers (HT) and the Yokohama Bay Stars (YB), winning was very important for game attendance. Weak teams tended to have strong positive correlation between winning ratio and total numbers of visitors. Those two teams had a lot of floating fans, ready to abandon them if they didn't win.

In the Pacific league, there were no negative correlations among teams. The relationship of the correlation of winning/visitors and average winning ratio was different from the tendency in the Central league. Strong teams with a higher winning ratio got larger numbers.

Correlation Analysis for the National Football League

Results of analysis of NFL data are shown in Table L1, Appendix L. 69% of NFL teams (22 teams) had positive correlations. The average correlation coefficient for salary and winning rate was 0.20. This suggests that in general there was no strong association between salaries and winning rate.

The average of the AFC was 0.22, while that of the NFC was 0.18. The AFC had 10 positive correlation teams and five negative teams. The NFC had 11 positive teams and five negative teams. From the point of view of management efficiency in terms of winning rate and salary, the AFC and the NFC team owners were no difference.

CHAPTER FOUR

RESULTS, DISCUSSION, AND RECOMMENDATIONS

Introduction

This chapter discusses the results of the analysis of the NPB and the NFL and presents recommendations for NPB management. In general, it can be said that the NPB and the NFL both had high popularity, but the NFL had more effective management methods. The basic conclusion of the study is that the NPB should consider adapting a real franchise approach like the NFL and should change its draft system. Eventually the NPB should share some profits to improve revenue gaps. Finally, the organization should adapt salary caps to help increase individual team competitiveness.

Summary of Findings

- The NFL used its budget more efficiently than the NPB.

In general, there were no strong correlations between winning rates and salaries. Higher salaries don't increase an owner's odds of winning a league championship. Owners should take note of this.

- The competitiveness of NFL teams was higher than that of NPB teams.

A few strong teams in the NPB had high winning rates, YG and SL being the best examples. In contrast, in the NFL, because of the salary cap team competitiveness improved over time as 13 teams increased their winning rates. In addition, even teams with low winning rates in a season had a chance to be Super Bowl champion.

Regarding the draft system, the NFL had a more reasonable system than NPB's. Weaker teams had a right to select players in first drafts. This system increased the level of team competitiveness because a superior rookie could wind up playing on a weaker team.

The draft system in the NPB was adapted to keep high levels of competitiveness among teams when it was started. However, there were some illogical changes. The NPB allowed university players to choose their preferred teams after it adapted the FA right. High school players did not have the right of nomination, and some players entered into a university solely to be able to choose their preferred teams. As the result, rich and popular teams could hire superior players.

- Both the NPB and NFL had revenue gaps.

Teams in the NPB didn't share profits. Teams in the NFL shared broadcasting rights and some profits. However, there were big profit gaps among teams. Because of big revenue gaps, only rich teams in the NPB could spend the money to increase their current and future competitiveness. Rich teams in the NFL spent money to improve current team competitiveness, but they may have problems for future team competitiveness because of the salary cap. If they continue to exceed salary caps and lose drafts as a result, they may be less able to pick talented rookies in the future (NFL Japan, 2004).

- Visitors tended to visit a stadium when a NPB team had a high winning rate in an exciting season.

Although some NPB teams had loyal customers, there were many thousands more floating fans. They visited a stadium when a team had a high winning rate in an exciting season. Interestingly, if a team with very high winning rate was to be a champion without strong competitive teams in a season, floating fans hardly visited a stadium.

A weak and poor team such as the LM in the Pacific league had very loyal customers, and they visited a stadium whether the LM had a high winning ratio or not.

- People required higher team competitiveness in order to maintain their interest in a league

People wanted to watch a TV program if a team had a chance to become a league champion in a competitive season. If a team was so strong that no opponent had a chance of winning, viewers, especially low-loyalty fans, would not watch a program.

- A league needed to share profits in order to maintain high team competitiveness.

Although salary and winning ratios had no strong correlation among strong teams in the NPB, there were big gaps between teams in terms of average wining ratio. Poor teams could not hire superior players. In addition, an unfair draft system prevented poor teams from increasing their current and future competitiveness. Actually, weak teams tended to have a positive correlation between salary and winning rate. If a poor team could find the funds to spend more, it would have more chance to improve its winning rate. But in the absence of increased spending,

weak teams stayed weak and non-competitive, to the detriment of the league and its popularity with the public.

Recommendations for the Nippon Professional Baseball

To improve NPB popularity, NPB managers will need to adapt five new policies. The goal is for all teams to increase their competitiveness, which in practice means to gradually reduce the influence of the Yomiuri Giants (YG).

Name Teams after Their Home City

First, the NPB needs to require that teams adapt the name of their home city, like American franchise teams. For example, the YG should be changed to the Tokyo Giants. As mentioned earlier, most visitors lived near a stadium, and their team loyalty is very strong (Usami, 2001). The NPB should seek to attract more local fans. If fans feel that team players are part of their community, they will be more likely to develop long-team loyalty to the teams (Kurosu, 1991; Ishii, 1999; Harada, 1999), as tends to be the case of fans of NFL teams. If some NPB teams refuse to adapt a city name, the owner companies should be required to pay an advertisement fee for the teams.

The purpose of identifying a team with its hometown is to expand the range of fans (Ishii, 1999). Today, most

new players. Lower-winning teams have greater likelihood of hiring desirable rookies. The draft system in the NFL enables teams with lower winning rates to have more chance of getting high-quality players to improve their future competitiveness.

Share Broadcasting Profits

After franchising and city-naming helps teams develop more loyal fans, the NPB needs to begin managing broadcasting rights like the NFL, in which it contracts all broadcasting rights including playoff and the Super Bowl with TV stations and equally shares all profits from broadcasting among NFL teams (Lee & Chun, 1996). Because YG currently earns huge profits from its TV rights, it will probably oppose this move. Persuading the Yomiuri Giants (YG) will be tough work for the NPB. The commissioner must make YG owners understand that YG's dominance has destroyed the competitive balance in the league, with the result that fans know other teams will usually lose, and that the YG will win. Consequently, many fans have little motivation to support either losing teams or the YG. If this situation continues, the YG may eventually suffer loss of fans and ultimately profits.

Long-term, it is in the YG's interest for the NPB to adapt the NFL's rules for sharing broadcast rights.

Blackout Rule and Transportation

Related to sharing broadcast rights is the need to adapt a blackout rule, as used by the NFL. The purpose of the blackout rule is to increase live attendance at games in stadiums. Full stadiums make for more exciting games for attendances, as well as more lively television and larger TV ratings.

Imposing the blackout rules means that local fans within 75 miles must go to a stadium to see games. An increase in stadium attendance would strain both the parking and mass transportation system serving stadiums. While little can be done about parking, the NPB and teams could negotiate with train and bus companies to operate special trains and buses for games to increase access to stadiums. For example, the Hanshin Tigers (HT) is likely to have the worst problem of crowding in the NPB because of no parking area at its stadium and only one train station on the Hanshin Railway. However, the Hankyu Bus and the Japan Railways West could support the Hanshin Railways with shuttle buses and extra trains. If such arrangements could be negotiated for all teams, a blackout

rule could be instituted to the benefit of NPB stadium attendance and television ratings.

Institute Salary Cap

The final need is for a salary cap. While, as seen in this study, a salary cap in the NFL did not work well in terms of reducing payrolls, it did help to promote team competitiveness. Again, the Yomiuri Giants (YG) may oppose a salary cap, but the NPB should argue that as there are no correlations between salaries and winning ratios, the YG should reconsider its current hiring policies. If the YG can be convinced of this, adapting a salary cap will not be so difficult for the NPB.

Summary

Because there are thousands of baseball players in Japan, many eager to play as professionals, and a large fan base, the NPB has the potential to keep its number one popularity in Japan. However, people now have more choices for enjoying their leisure time. Consequently the NPB's continuing popularity is not assured unless it acts to maintain its status. The argument this study is that the NPB should study the U.S. National Football League for specific lessons and marketing policies that can be

successfully adapted in Japan. These methods consist of adapting city names for teams, changing the draft system, sharing broadcasting profits, instituting a blackout rule, and instituting salary caps.

APPENDIX A

LIST OF NIPPON PROFESSIONAL BASEBALL TEAMS

YG: A team of central league in NPB. Formal name is Yomiuri Giants.

YS: A team of central league in NPB. Formal name is Yakult Swallows

CD: A team of central league in NPB. Formal name is Chunichi Dragons.

HT: A team of central league in NPB. Formal name is Hanshin Tigers.

HC: A team of central league in NPB. Formal name is Hiroshima Toyo Carp.

YB: A team of central league in NPB. Formal name is Yokohama Bay Stars.

SL: A team of pacific league in NPB. Formal name is Seibu Lions.

OK: A team of pacific league in NPB. Formal name is Osaka Kintetsu Buffaloes.

FD: A team of pacific league in NPB. Formal name is Fukuoka Daiei Hawks.

LM: A team of pacific league in NPB. Formal name is Chiba Lotte Maries.

NF: A team of pacific league in NPB. Formal name is Hokkaido Nippon Ham Fighters.

OB: A team of pacific league in NPB. Formal name is Orix Blue Wave.

APPENDIX B

LIST OF NATIONAL FOOTBALL LEAGUE TEAMS

ARI = Arizona Cardinals

ATL = Atlanta Falcons

BAL = Baltimore Ravens

BUF = Buffalo Bills

CAR = Carolina Panthers

CHI = Chicago Bears

CIN = Cincinnati Bengals

CLB = Cleveland Browns

DAL = Dallas Cowboys

DEN = Denver Broncos

DET = Detroit Lions

GB = Green Bay Packers

HU = Huston Texans

IND = Indianapolis Colts

JAX = Jacksonville Jaguars

KC = Kansas City Chiefs

MIA = Miami Dolphins

MIN = Minnesota Vikings

NE = New England Patriots

NO = New Orleans Saints

NYG = New York Giants

NYJ = New York Jets

OAK = Oakland Raiders

PH = Philadelphia Eagles

PIT = Pittsburgh Steelers

SD = San Diego Chargers

SEA = Seattle Seahawks

SF = San Francisco 49ners

STL = St. Louis Rams

TB = Tampa Bay Buccaneers

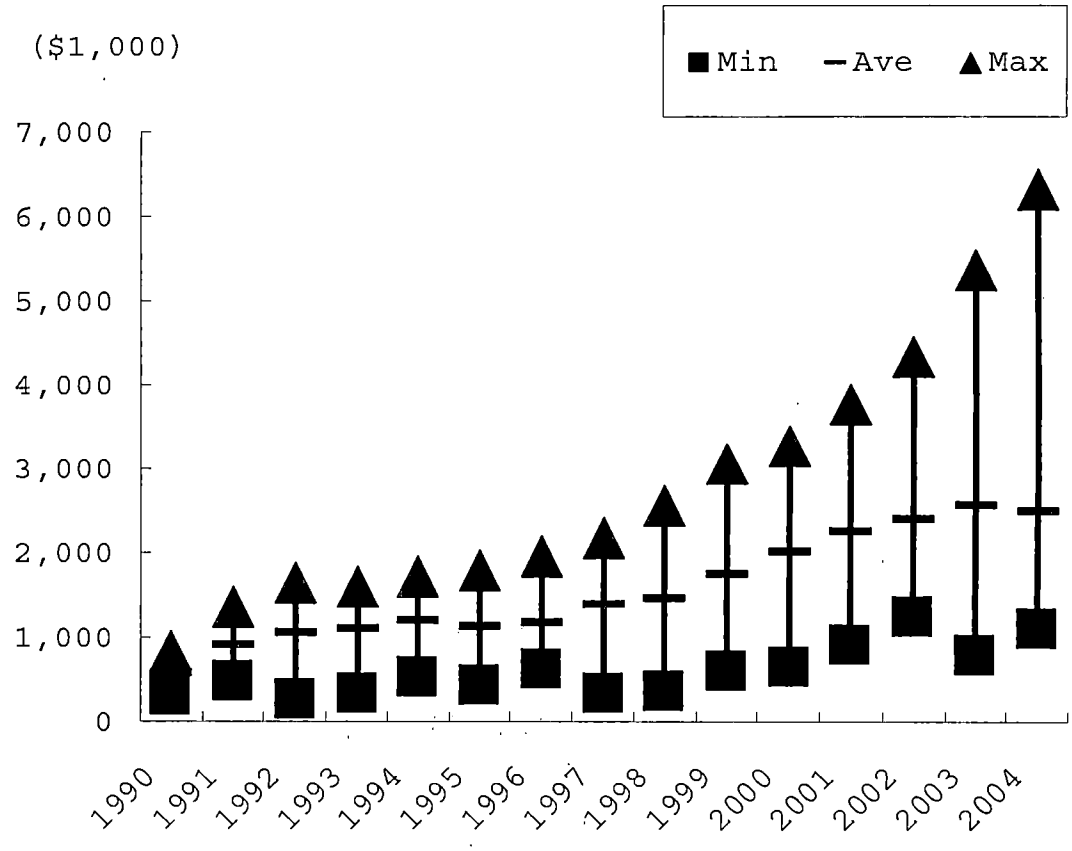
TEN = Tennessee Titans

WAS = Washington Red Skins

APPENDIX C

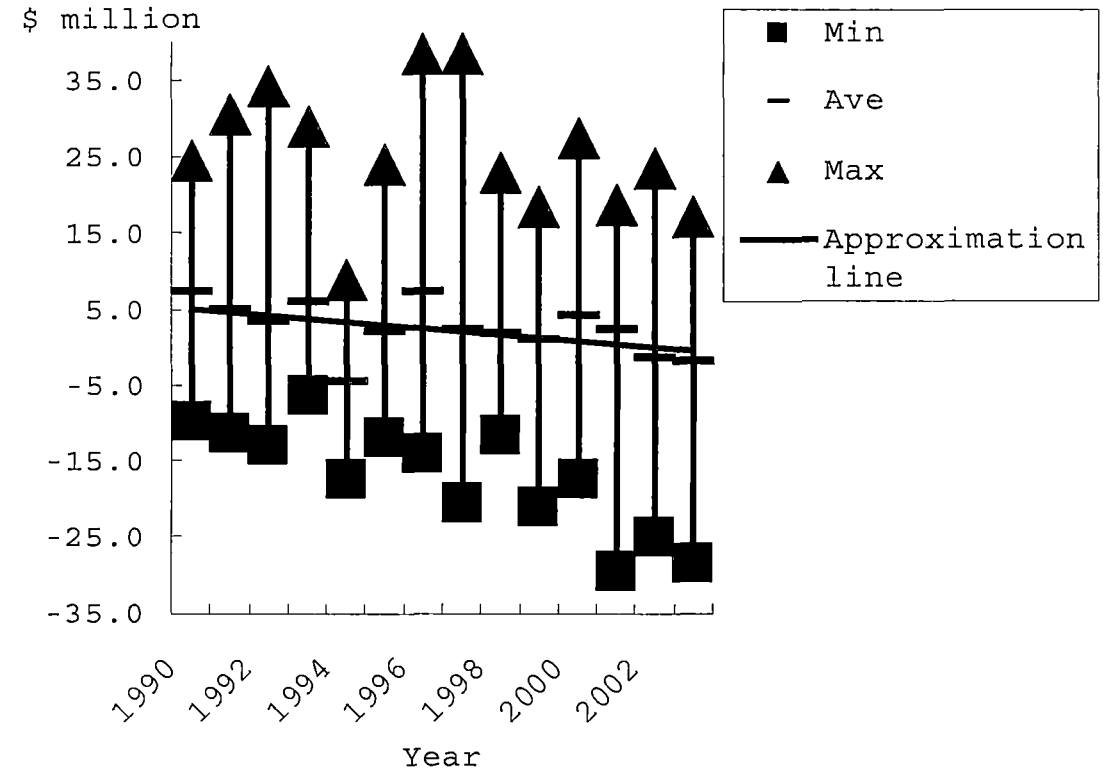
SALARY AND INCOME DATA FOR THE NIPPON PROFESSIONAL BASEBALL AND MAJOR LEAGUE BASEBALL

Figure C1 Salary Gaps in MLB



(Forbes' MLB Team Valuation)

Figure C2 Income Level in MLB



(Forbes' MLB Team Valuation)

Table C1 Percentage of Negative Income MLB Teams

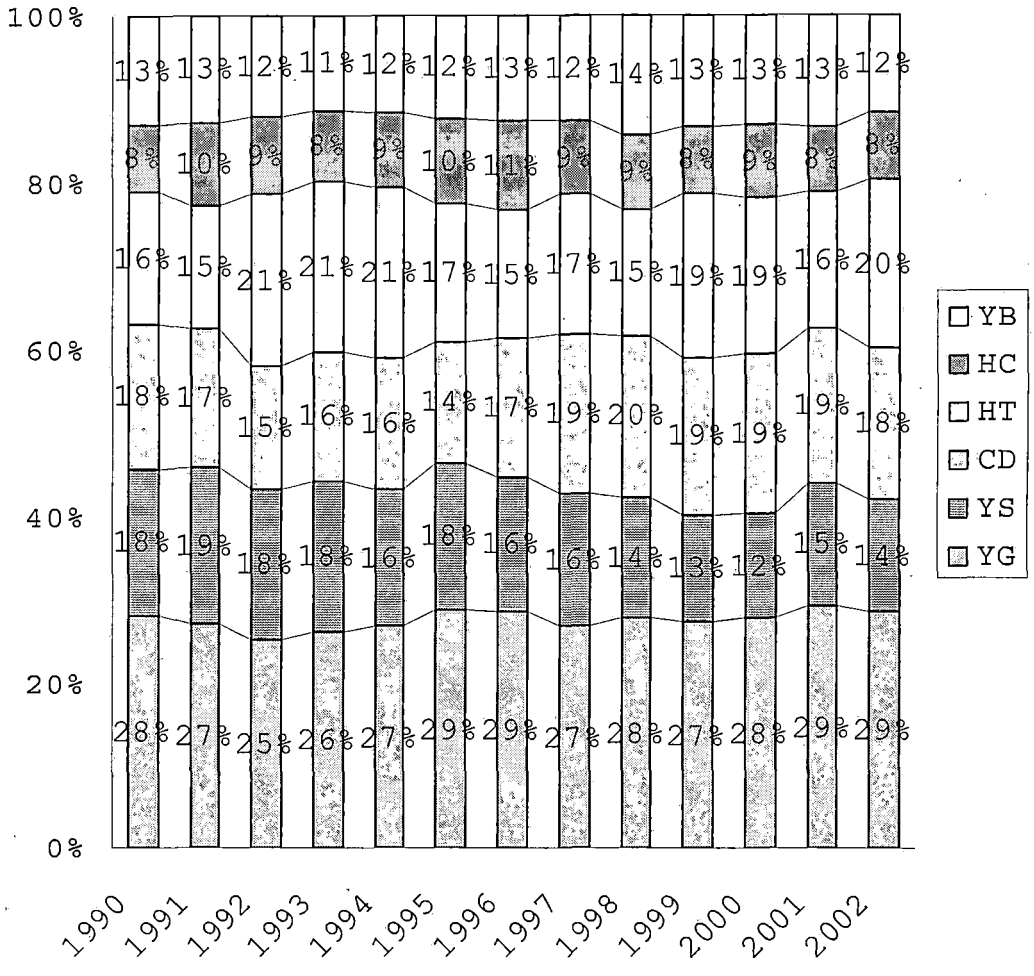
Negative income teams	1990	1991	1992	1993
	19.2%	46.2%	50.0%	28.6%
Negative income teams	1994	1995	1996	1997
	71.4%	46.4%	28.6%	39.3%
Negative income teams	1998	1999	2000	2001
	46.7%	43.3%	36.7%	33.3%
Negative income teams	2002	2003	Average	
	53.3%	53.3%	42.6%	

(Forbes' MLB Team Valuation)

APPENDIX D

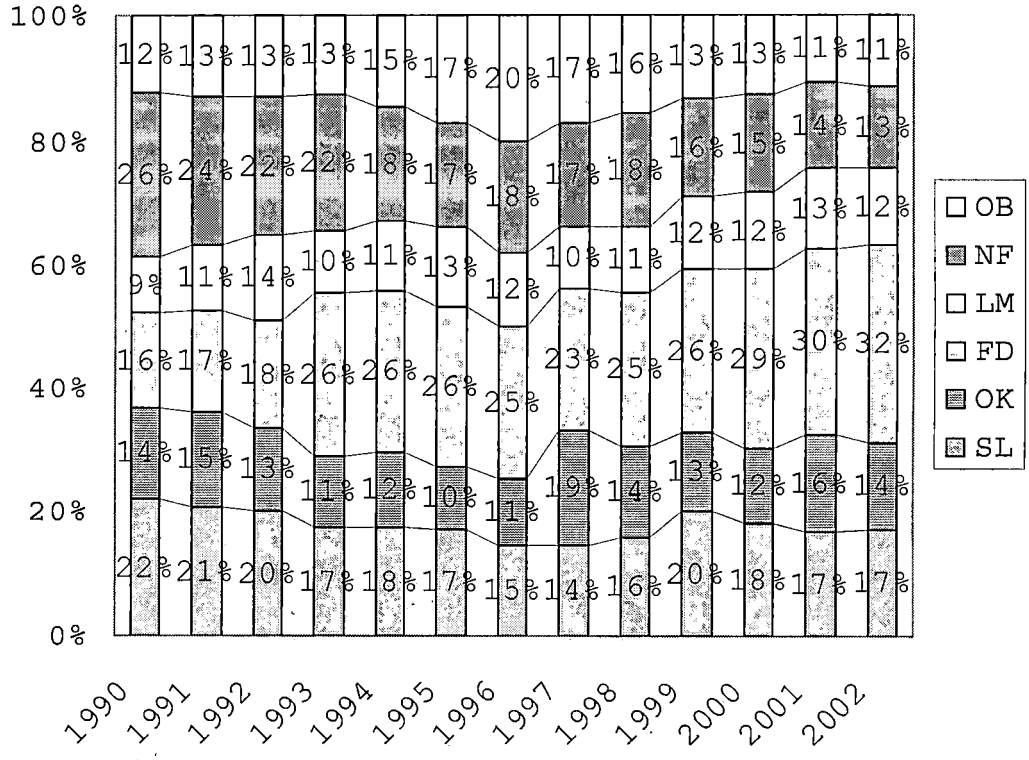
NIPPON PROFESSIONAL BASEBALL VISITORS

Figure D1 Individual Team Proportion of League Stadium Audiences in the Central League



(Japanese Professional Baseball History Inquiry Club)

Figure D2 Individual Team Proportion of League Stadium Audiences in the Pacific League



(Japanese Professional Baseball History Inquiry Club)

Table D1 Total Visitor Numbers in the Central League (1,000)

	1990	1991	1992	1993	1994	1995
YG	3,386	3,378	3,500	3,537	3,540	3,555
YS	2,114	2,311	2,477	2,409	2,153	2,183
CD	2,112	2,090	2,081	2,090	2,063	1,787
HT	1,894	1,820	2,853	2,768	2,704	2,073
HC	959	1,220	1,252	1,116	1,150	1,245
YB	1,555	1,572	1,678	1,520	1,530	1,502
Total	12,020	12,391	13,841	13,440	13,140	12,345

	1996	1997	1998	1999	2000
YG	3,494	3,645	3,634	3,645	3,604
YS	1,963	2,117	1,856	1,716	1,595
CD	2,079	2,608	2,537	2,541	2,480
HT	1,860	2,268	1,980	2,601	2,413
HC	1,294	1,163	1,140	1,067	1,109
YB	1,533	1,683	1,857	1,770	1,673
Total	12,223	13,484	13,004	13,340	12,874

	2001	2002
YG	3,762	3,784
YS	1,860	1,797
CD	2,421	2,404
HT	2,077	2,678
HC	1,000	1,046
YB	1,680	1,535
Total	12,800	13,244

(Japanese Professional Baseball History Inquiry Club)

Table D2 Total Visitor Numbers in the Pacific League (1,000)

	1990	1991	1992	1993	1994
SL	1,913	1,981	1,907	1,624	1,688
OK	1,238	1,419	1,280	1,068	1,133
FD	1,346	1,573	1,677	2,462	2,525
LM	786	1,021	1,305	930	1,086
NF	2,274	2,250	2,112	2,021	1,721
OB	1,052	1,230	1,241	1,186	1,407
Total	8,609	9,474	9,522	9,291	9,560

	1995	1996	1997	1998	1999	2000
SL	1,661	1,295	1,448	1,385	1,834	1,744
OK	967	967	1,866	1,250	1,155	1,148
FD	2,493	2,207	2,307	2,163	2,390	2,786
LM	1,270	1,064	1,002	946	1,070	1,192
NF	1,597	1,600	1,678	1,572	1,416	1,475
OB	1,658	1,796	1,712	1,345	1,206	1,223
Total	9,646	8,929	10,013	8,661	9,071	9,568

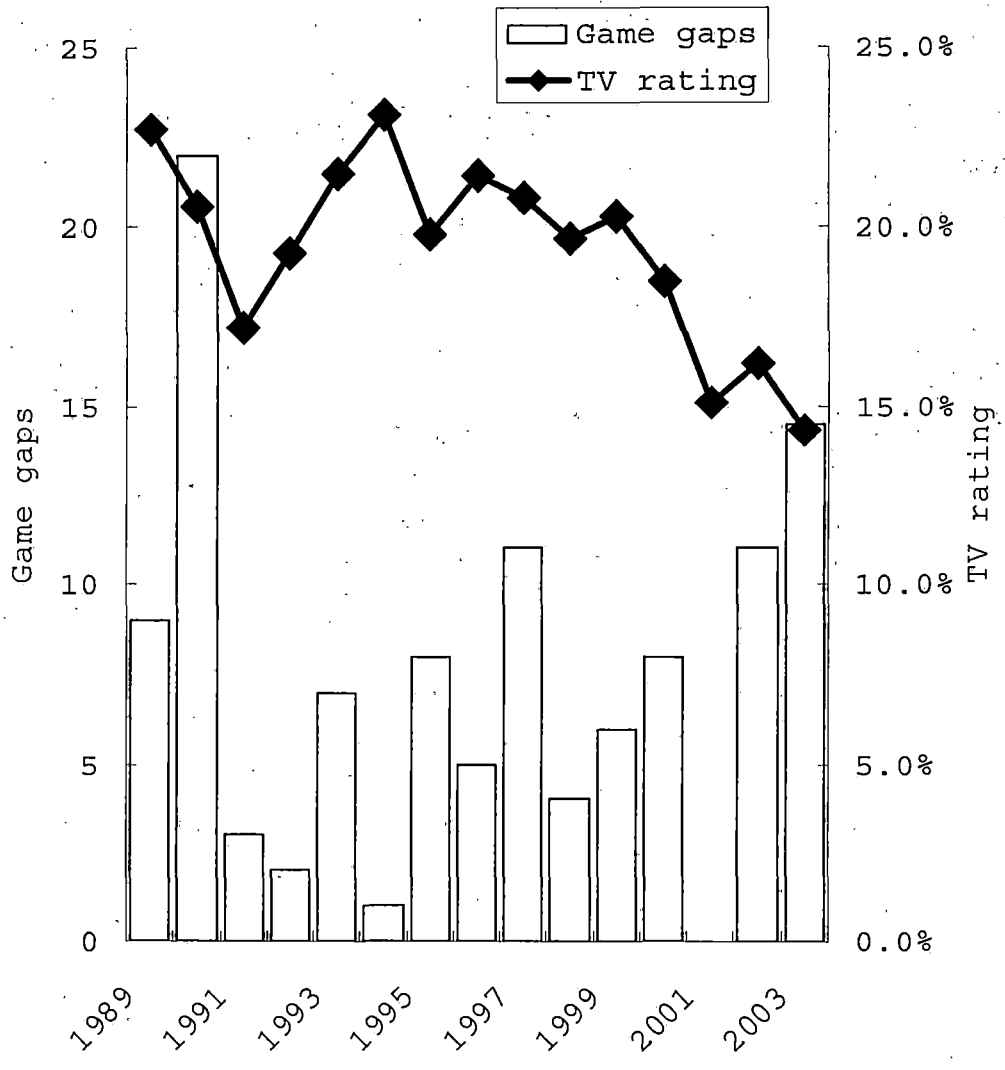
	2001	2002
SL	1,694	1,682
OK	1,593	1,350
FD	3,050	3,109
LM	1,301	1,210
NF	1,376	1,260
OB	1,073	1,099
Total	10,087	9,710

(Japanese Professional Baseball History Inquiry Club)

APPENDIX E

RELATIONSHIP BETWEEN TELEVISION RATINGS AND GAME GAPS

Figure E1 Relationship between TV Ratings and Game Gaps



(Video Research Ltd.)
(Nippon Professional Baseball Official Site)

Table E1 Total Visitor Numbers with Ranks (1,000)

	1990	Rank	1991	Rank	1992	Rank	1993	Rank
YG	3,386	1	3,378	4	3,500	2	3,537	3
YS	2,114	5	2,311	3	2,477	1	2,409	1
CD	2,112	4	2,090	2	2,081	6	2,090	2
HT	1,894	6	1,820	6	2,853	2	2,768	4
HC	959	2	1,220	1	1,252	4	1,116	6
YB	1,555	3	1,572	5	1,678	5	1,520	5
Total	12,020		12,391		13,841		13,440	

	1994	Rank	1995	Rank	1996	Rank	1997	Rank
YG	3,540	1	3,555	3	3,494	1	3,645	4
YS	2,153	4	2,183	1	1,963	4	2,117	1
CD	2,063	2	1,787	5	2,079	2	2,608	6
HT	2,704	5	2,073	6	1,860	6	2,268	5
HC	1,150	3	1,245	2	1,294	3	1,163	3
YB	1,530	6	1,502	4	1,533	5	1,683	2
Total	13,140		12,345		12,223		13,484	

	1998	Rank	1999	Rank	2000	Rank	2001	Rank
YG	3,634	3	3,645	2	3,604	1	3,762	2
YS	1,856	4	1,716	4	1,595	4	1,860	1
CD	2,537	2	2,541	1	2,480	2	2,421	5
HT	1,980	6	2,601	6	2,413	6	2,077	6
HC	1,140	5	1,067	5	1,109	5	1,000	4
YB	1,857	1	1,770	3	1,673	3	1,680	3
Total	13,004		13,340		12,874		12,800	

	2002	Rank
YG	3,784	1
YS	1,797	2
CD	2,404	3
HT	2,678	4
HC	1,046	5
YB	1,535	6
Total	13,244	

(Japanese Professional Baseball History Inquiry Club)

APPENDIX F

NIPPON PROFESSIONAL BASEBALL TEAM RESULTS

Table F1 Probability of Team Ranking in the Central League (Place 1-6)

Central order (1990-2003)

Possibility	1	2	3	4	5	6
YG	35.7%	20.0%	30.8%	14.3%	0.0%	0.0%
YS	35.7%	6.7%	7.7%	42.9%	7.1%	0.0%
CD	7.1%	46.7%	7.7%	7.1%	14.3%	14.3%
HT	7.1%	6.7%	0.0%	14.3%	14.3%	57.1%
HC	7.1%	13.3%	23.1%	14.3%	35.7%	7.1%
YB	7.1%	6.7%	30.8%	7.1%	28.6%	21.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pacific order (1990-2003)

Possibility	1	2	3	4	5	6
SL	57.1%	20.0%	21.4%	0.0%	0.0%	0.0%
OK	7.1%	20.0%	28.6%	15.4%	7.1%	21.4%
FD	21.4%	13.3%	7.1%	15.4%	21.4%	21.4%
LM	0.0%	6.7%	0.0%	23.1%	42.9%	28.6%
NF	0.0%	20.0%	7.1%	30.8%	28.6%	14.3%
OB	14.3%	20.0%	35.7%	15.4%	0.0%	14.3%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(Nippon Professional Baseball History Inquiry Club)

Table F2 Nippon Series and League Championships

	# of NS	Central League champion	% of NS
YG	3	5	60.0%
YS	4	5	80.0%
CD	0	1	0.0%
HT	0	1	0.0%
HC	0	1	0.0%
YB	1	1	100.0%
Total	8	14	57.1%

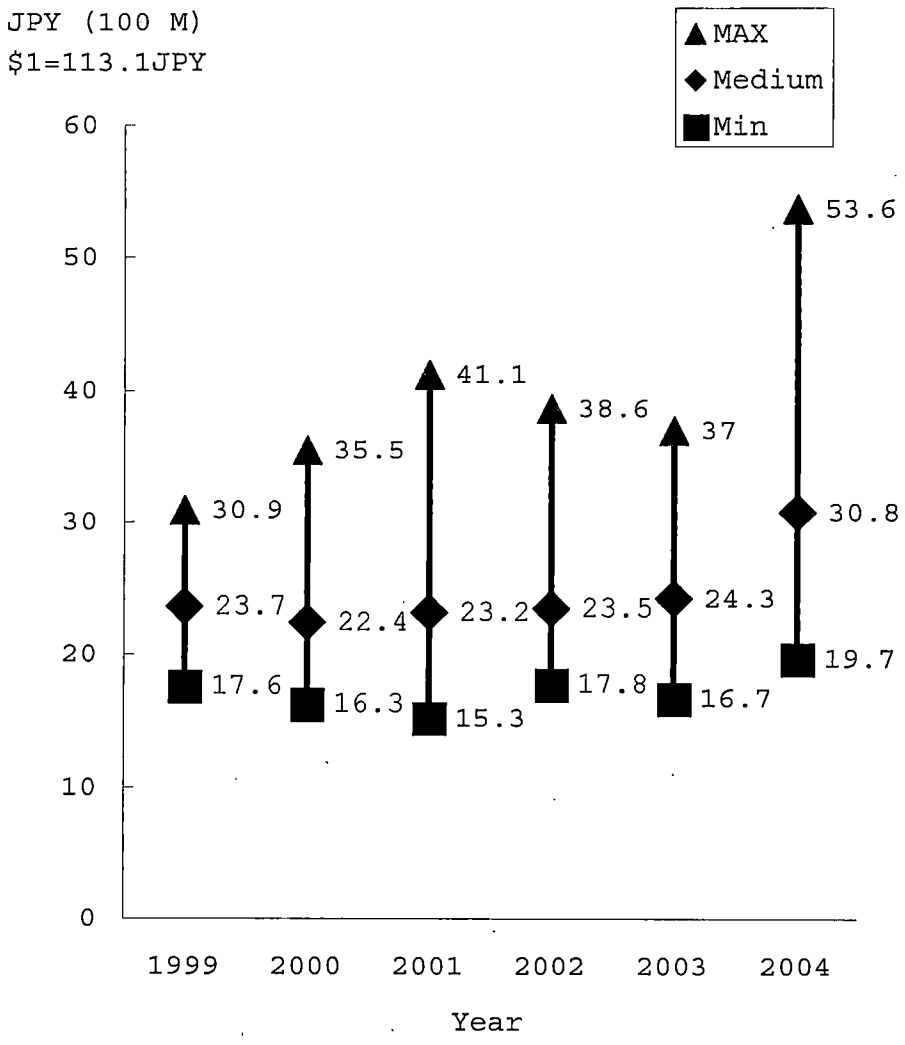
	# of NS	Pacific League champion	% of NS
SL	3	8	37.5%
OK	0	1	0.0%
FD	2	3	66.7%
LM	0	0	0.0%
NF	0	0	0.0%
OB	1	2	50.0%
Total	6	14	42.9%

(Official Baseball Guide: NPB Official Records)

APPENDIX G

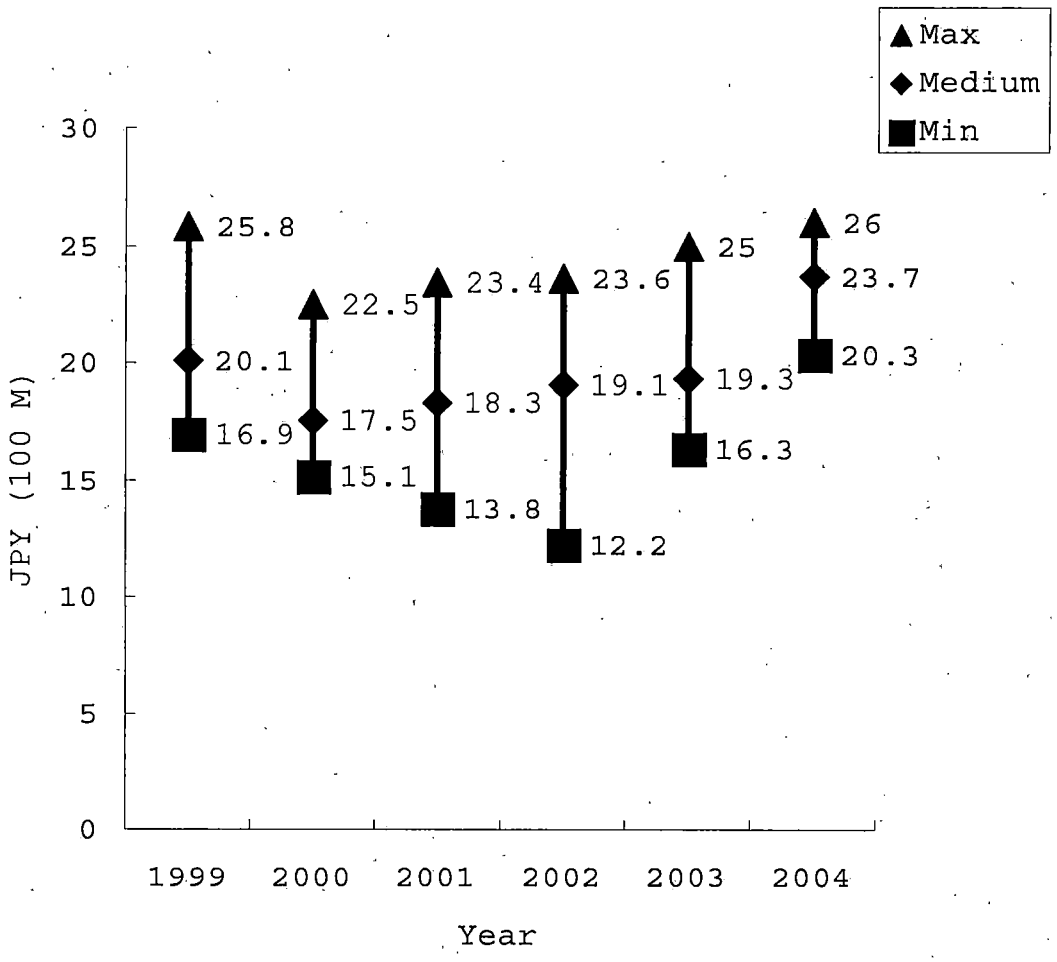
SALARIES IN THE NIPPON PROFESSIONAL BASEBALL

Figure G1 The Salary Gaps in the Central League



(NPBPA Nippon Professional Baseball Players Association)

Figure G2 The Salary Gaps in the Pacific League



(NPBPA Nippon Professional Baseball Players Association)
$1=110.13JPY (MSN Japan Money 4/29/04)

Table G1 Average Salary in the Central League
(10,000 JPY)

	1997	1998	1999	2000	2001	2002	2003
YG	4,306	4,275	4,572	5,457	6,431	6,128	5,973
YS	2,621	2,835	3,047	3,228	3,276	3,329	3,233
CD	2,993	2,759	3,300	3,822	4,095	4,147	4,275
HT	2,215	2,589	2,591	2,828	2,433	2,820	3,333
HC	2,877	3,037	2,675	2,622	2,749	2,841	2,654
YB	2,361	3,083	3,929	3,414	3,267	3,386	3,706
Ave	2,896	3,096	3,352	3,562	3,709	3,775	3,862

(NPBPA Nippon Professional Baseball Players Association)
$1=110.13JPY (MSN Japan Money 4/29/04)

Table G2 Average Salary in the Pacific League

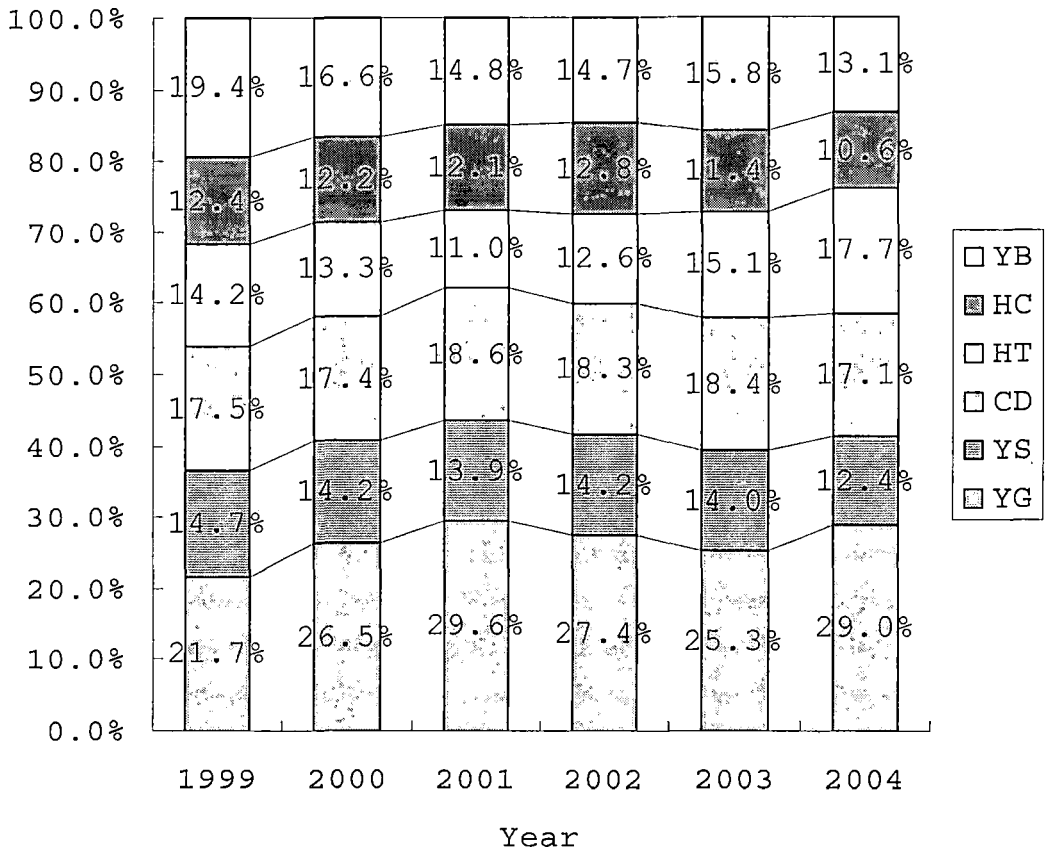
(10,000 JPY)

	1997	1998	1999	2000	2001	2002	2003
SL	3,204	3,536	3,743	3,688	3,650	3,722	4,099
OK	2,794	2,641	2,585	2,437	2,746	3,548	3,189
DF	2,768	3,199	3,042	2,945	3,462	3,683	3,309
LM	2,437	2,616	2,797	2,867	2,895	2,785	2,819
NF	2,985	2,915	2,709	2,675	2,986	2,799	2,889
OB	3,339	3,188	3,504	3,242	2,424	2,102	2,667
Ave	2,921	3,016	3,063	2,976	3,027	3,107	3,162

(NPBPA Nippon Professional Baseball Players Association)

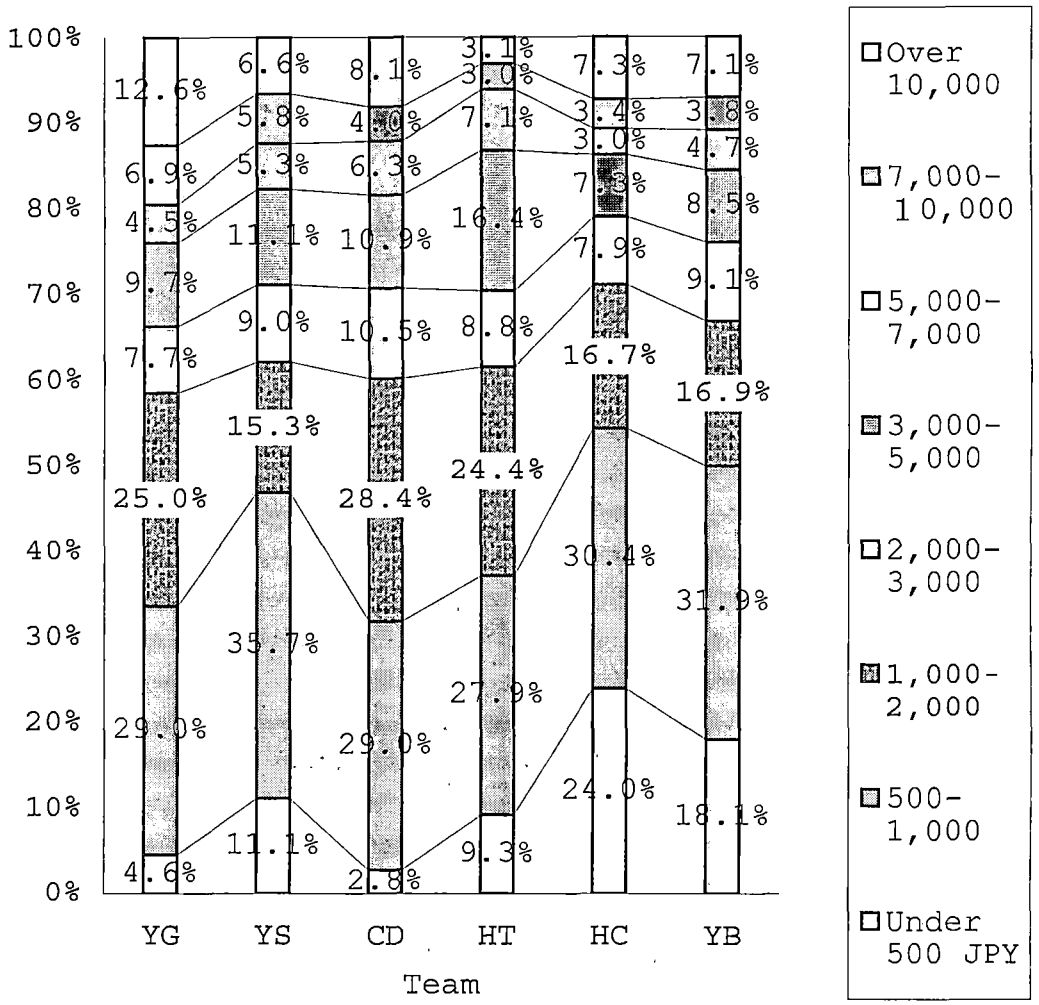
$1=110.13JPY (MSN Japan Money 4/29/04)

Figure G3 Proportion of the Central League Salaries by Team, 1999-2004



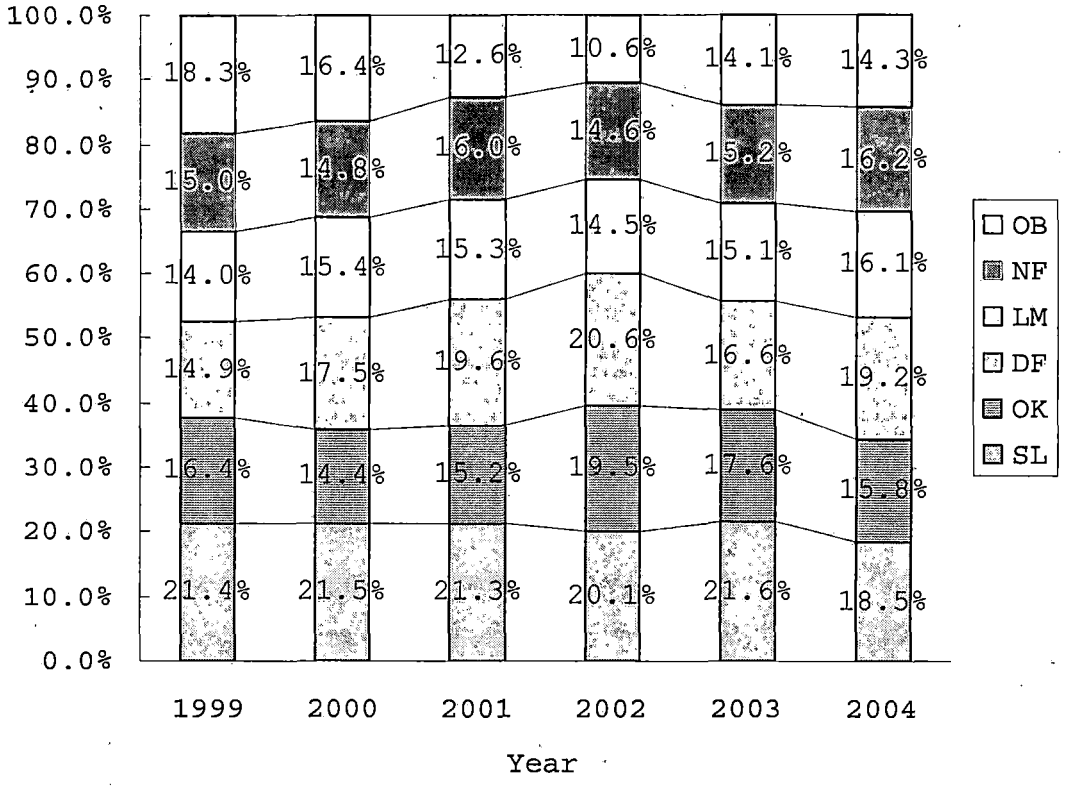
(NPBPA Nippon Professional Baseball Players Association)

Figure G4 Salary Distribution in the Central League Teams (10,000 JPY)



(NPBPA, Nippon Professional Baseball Players Association)
$1=110.13JPY (MSN Japan Money 4/29/04)

Figure G5 Proportion of the Pacific League Salaries by Team, 1999-2004



(NPBPA, Nippon Professional Baseball Players Association)

APPENDIX H

REVENUES IN THE NIPPON PROFESSIONAL BASEBALL

Table H1 Revenues in the Central League Teams
(1 million JPY)

	91	92	93	94	95
YG	3,833	2,246	2,687	732	5,081
YS	608	831	644	289	44
CD	625	655	528	551	331
HT	120	67	69	504	532
HC	202	912	812	575	357
YB	359	317	985	517	176
Total	5,747	5,028	5,725	3,168	6,521

	96	97	98	99	2000
YG	4,847	4,225	5,498	3,532	2,978
YS	471	non	279	non	non
CD	non	non	2,294	1,793	992
HT	112	151	non	652	833
HC	678	693	258	649	122
YB	125	non	289	392	565
Total	6,233	5,069	8,618	7,018	5,490

(Ranking of Corporation Tax)
$1=110.13JPY (MSN Japan Money 4/29/04)

Table H2 Proportion of YG Revenues in the Central League, 1991-2000

	91	92	93	94	95	96
YG	3,833	2,246	2,687	732	5,081	4,847
Total	5,747	5,028	5,725	3,168	6,521	6,233
YG share	66.7%	44.7%	46.9%	23.1%	77.9%	77.8%

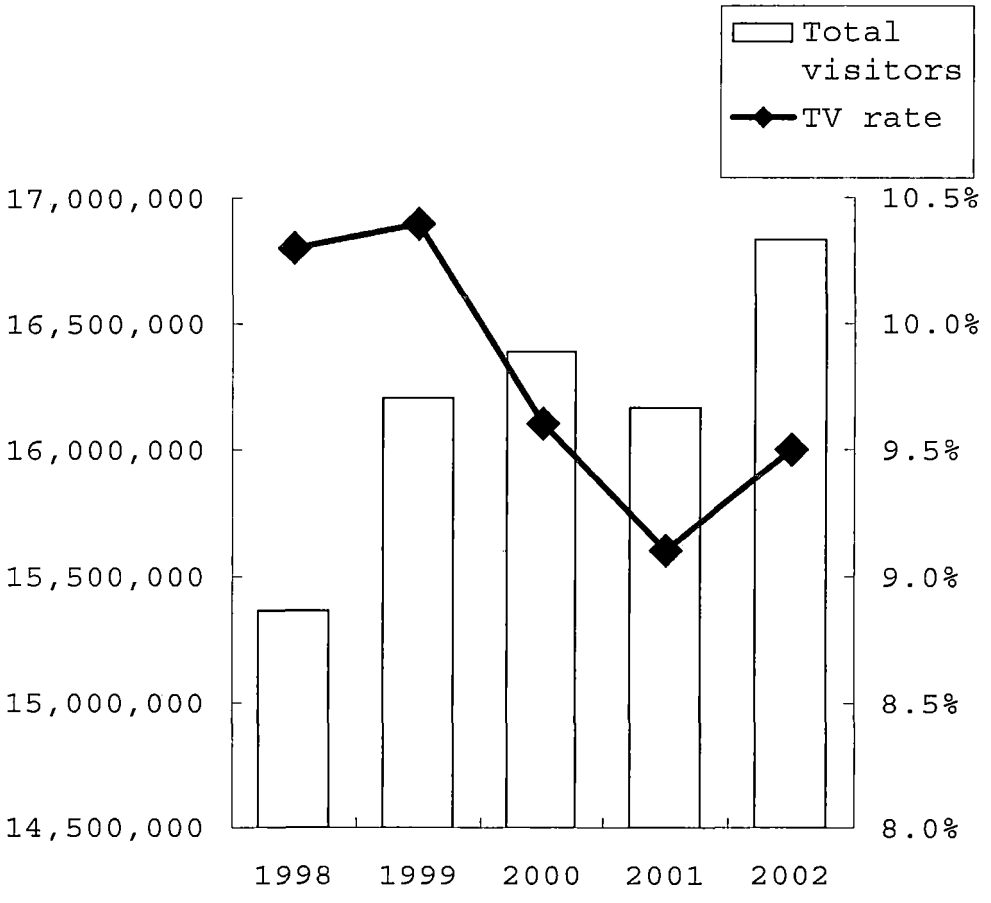
	97	98	99	2000
YG	4,225	5,498	3,532	2,978
Total	5,069	8,618	7,018	5,490
YG share	83.3%	63.8%	50.3%	54.2%

(Ranking of Corporation Tax)

APPENDIX I

VISITORS AND TELEVISION RATINGS OF THE NATIONAL FOOTBALL LEAGUE

Figure I1 TV Ratings and Visitors in the NFL

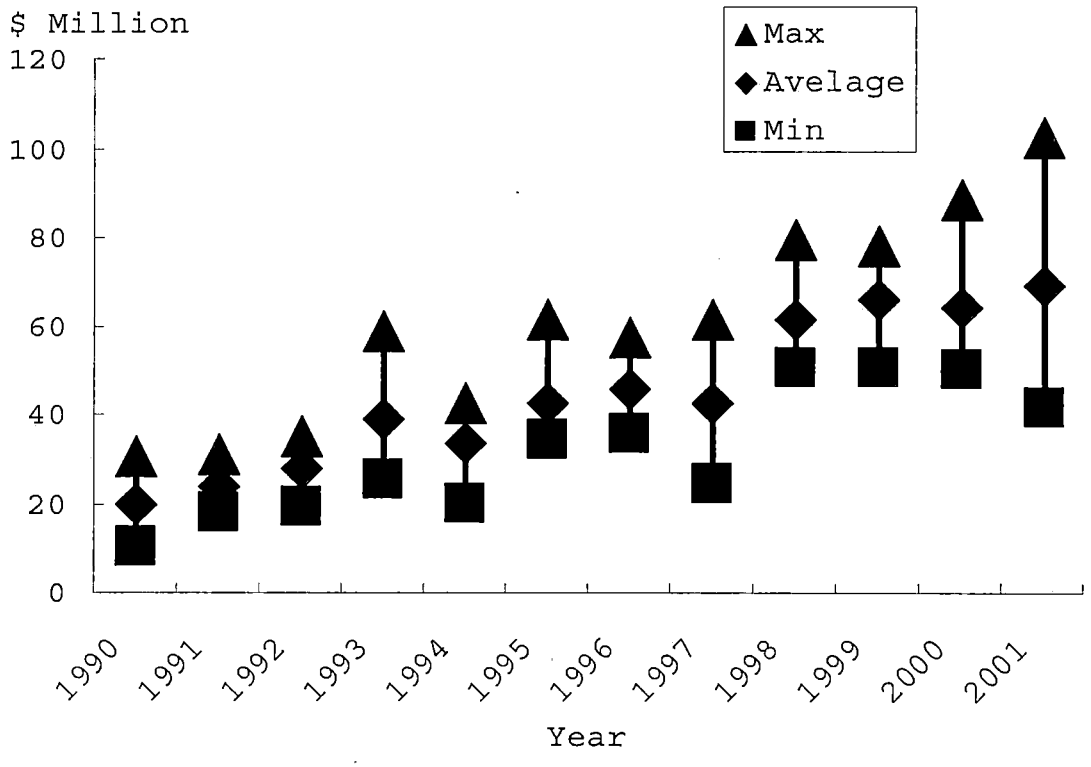


(NFL Japan)

APPENDIX J

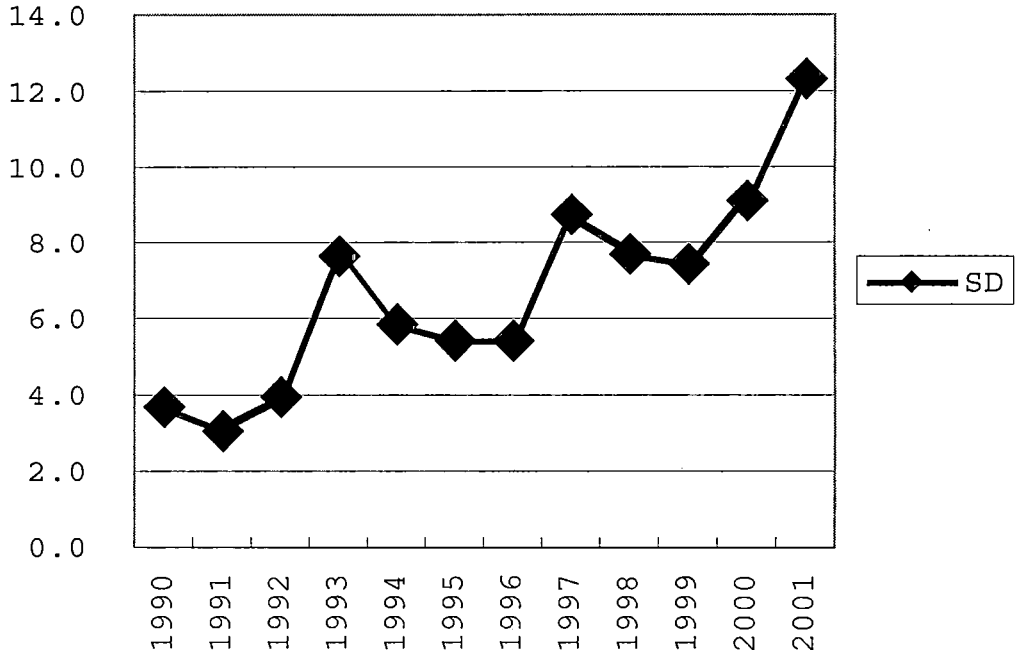
SALARIES IN THE NATIONAL FOOTBALL LEAGUE

Figure J1 Salary Gaps in the NFL



(NFLPA, National Football League Players Association)

Figure J2 Standard Deviation of NFL Salaries, 1990-2001



(NFLPA, National Football League Players Association)

APPENDIX K

RESULTS OF CORRELATION ANALYSIS FOR THE NIPPON PROFESSIONAL BASEBALL

Table K1. Correlation Coefficients for Salary and Winning Ratio in the Central League

Team	Correlation
YG	0.06
YS	-0.29
CD	-0.21
HT	0.68
HC	-0.55
YB	0.33

(Nippon Professional Baseball History Inquiry Club)

Table K2 Correlation Coefficients for Salary and Winning Ratio in the Pacific League

Team	Correlation
SL	-0.05
OK	0.22
FD	-0.72
LM	0.64
NF	-0.7
OB	0.47

(Nippon Professional Baseball History Inquiry Club)

Table K3 Correlation Coefficients for Visitors and Winning Ratio in the Central League

Team	Win/visitor	Ave win
YG	-0.06	55.0%
YS	0.35	52.8%
CD	0.28	50.9%
HT	0.82	44.4%
HC	0.47	49.4%
YB	0.72	47.4%

(Nippon Professional Baseball History Inquiry Club)

Table K4 Correlation Coefficients for Visitors and Winning Ratio in the Pacific League

Team	Win/visitor	Ave win
SL	0.68	57.6%
OK	0.49	51.2%
FD	0.66	48.0%
LM	0.43	45.6%
NF	0.14	46.7%
OB	0.61	51.0%

(Nippon Professional Baseball History Inquiry Club)

APPENDIX L

RESULTS OF CORRELATION ANALYSIS FOR THE NATIONAL FOOTBALL LEAGUE

Table L1 Correlation Coefficients for Salary and Winning Ration in the NFL

Team	Correlation
ARI	0.80
ATL	-0.37
BAL	0.91
BUF	0.59
CAR	-0.63
CHI	0.64
CIN	-0.60
CLB	0.65
DAL	0.63
DEN	-0.42
DET	0.45
GB	0.02
IND	0.84
JAX	-0.06
KC	-0.74
MIA	0.74
MIN	0.78
NE	-0.20
NO	0.01
NYG	0.71
NYJ	0.10
OAK	0.86
PH	0.04
PIT	0.31
SD	0.16
SEA	0.00
SF	-0.51
STL	0.81
TB	-0.07
TEN	0.15
WAS	-0.37
Ave	0.20

(TSP 21 sports)(NFLPA)

	Teams	Share
Positive correlation	22	69%
Negative correlation	10	31%

Table L2 Comparison AFC and NFC

AFC	Correlation	NFC	Correlation
NYJ	0.10	PH	0.04
NE	-0.20	NYG	0.71
MIA	0.74	WAS	-0.37
BUF	0.59	DAL	0.63
OAK	0.86	SF	-0.51
DEN	-0.42	SEA	0.00
SD	0.16	STL	0.81
KC	-0.74	ARI	0.80
TEN	0.15	TB	-0.07
IND	0.84	ATL	-0.37
JAX	-0.06	NO	0.01
PIT	0.31	CAR	-0.63
CLB	0.65	GB	0.02
BAL	0.91	MIN	0.78
CIN	-0.60	CHI	0.64
		DET	0.45
Ave	0.22	Ave	0.18

Number of teams in the AFC

Positive correlation	10
Negative correlation	5

Number of teams in the NFC

Positive correlation	11
Negative correlation	5

(TSP 21 sports)
(NFLPA)

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