

The National Football League – competition through cooperation

*– an analysis of the business model of the
National Football League*

Simon Bau Jensen

Date: 08.06.2015

Supervisor: David M. Struthers

Master's thesis

Cand.ling.merc.

Number of pages / characters: 80 / 181,883

Copenhagen Business School 2015

“Americans’ addiction to sports, with the NFL at the top, is based on the excitement generated by the potential for the unexpected great play which can only happen with honest competition”

Senator Arlen Specter

Executive summary

National Football League er verdens største amerikansk fodboldliga, og den største sportsliga i USA. Med en omsætning på omtrent \$8 milliarder og de højeste sports seertal i USA, udkonkurrerer NFL klart sine nærmeste konkurrenter i NHL, NBA og MLB. Dette speciale analyserer baggrunden for NFLs store succes ved at kortlægge og analysere NFLs forretningsmodel, ved at besvare følgende problemstilling:

Hvad karakteriserer NFLs forretningsmodel og hvordan bidrager den til ligaens store kommercielle succes.

Ved hjælp af en grundlæggende forbrugeranalyse, tages der udgangspunkt i NFL's to primære typer af forbrugere med hver sin tilgang til spillet. Den første gruppe er holdenes fans, som ønsker at se deres hold vinde, og samtidig er forholdsvis loyale kunder. Den anden type forbrugere er dem som søger underholdning i sporten og som ønsker tætte kampe med nervepirrende afslutninger. Med udgangspunkt i sidstnævnte, forsøger NFL at skabe konkurrencemæssig balance mellem holdene for derved at øge usikkerheden om kampenes udfald. Dette medfører et NFL produkt med højere underholdningsmæssigt kvalitet.

Konkurrencemæssig balance er en af årsagerne til at NFLs forretningsmodel er baseret på et tæt økonomisk samarbejde. Dette har udmøntet sig i en forretningsmodel hvor langt størstedelen af alle indtægter er ligeligt fordelt mellem de 32 hold. Dette sikrer at selv hold i små TV markeder med en lille fanbase har de økonomiske muskler til at spille med om mesterskabet hvert år, og at intet hold er truet rent finansielt. Samtidig sikrer NFLs lønloft på spillere, at alle hold har mulighed for at sikre sig dygtige spillere, og at forskellen på niveauet af spillerlønnings mellem holdene er meget lav. Lønloftet er også med til at forhindre at lønudgifter eskalerer, hvilket garanterer NFL holdene en effektiv kontrol med deres største omkostning, spillerlønnings. Samtidig sikrer den årlige draft, at de hold som klarede sig dårligst i den forrige sæson, har mulighed for at sikre sig de bedste, unge spillere fra college rækkerne. Det medfører at de lavest rangerede hold fra forrige sæson har de bedste kort på hånden i forhold til at forbedre sin spillertrup.

Udover at skabe øget efterspørgsel ved at øge usikkerheden om kampenes udfald, maksimerer NFL indtjeningen fra TV kontrakterne ved at samle udbuddet af rettigheder centralt for derved at sikre en favorabel forhandlingsposition, på et marked med en udbyder og flere købere. Dette medfører at NFL skaber et marked for kamp rettigheder, hvor NFL fungerer som central sælger, og med håndfuld interesserede TV stationer. Samtidig sikrer

det forholdsvis lave antal af NFL kampe, at ligaen har en forhandlingsmæssig fordel i forhold til udbud og efterspørgsel.

Som et resultat af den ligelige fordeling af TV indtægter mellem NFL holdene, kan et NFL hold flytte til en mindre by uden at blive ramt økonomisk, som et hold i en liga uden økonomisk omfordeling gør. Derved giver omfordelingen af de økonomiske ressourcer NFL holdene mulighed for effektivt at true deres lokalsamfund med at flytte holdet til andre byer, hvis ikke skatteyderne betaler for et nyt stadion. Dette er i vid udstrækning praksis i NFL, hvorved holdene sikrer store offentlige tilskud til deres stadions, som udgør en essentiel del af produktionen af fodboldkampe. Et moderne stadion er samtidig essentielt for et NFL hold, da det giver holdet langt større muligheder for tjene penge på udlejning af luksus lounges. Indtjening som ikke skal omfordeles, og som holdet dermed kan beholde. Dette bevirker at den økonomiske ulighed mellem holdene er vokset de senere år, hvilket potentielt kan true NFLs økonomiske solidaritet og dermed ligaens eksistens.

Alt i alt viser dette speciale at NFL har skabt en forretningsmodel som bidrager kraftigt til at kvalitetsoptimere NFLs primære produkt, som er fodboldkampe, samt sikre økonomisk stabilitet, for derved at gøre NFL den kommercielt mest succesfulde sportsliga i USA.

Table of contents

1	Introduction	1
1.1	Research question and areas of interest.....	2
1.2	Structure	2
1.3	Company profile – the National Football League	3
2	Methodology.....	5
2.1	Motivation and purpose	5
2.2	Data collection	5
2.2.1	Secondary literature	5
2.2.2	Financial statements	6
2.2.3	Primary sources	6
2.3	Delimitation	6
3	Theoretical foundation.....	8
3.1	Interdependency of teams	8
3.1.1	NFL Teams: single entity, cartel or cooperating firms.....	9
3.2	Sports leagues as natural monopolies	10
3.3	Lack of market competition and effects	12
3.4	Competitive balance in commercial sports leagues	13
3.4.1	Measuring competitive balance	13
3.4.2	Value of competitive balance: the Uncertainty of Outcome Hypothesis	14
4	Basics of the business model.....	17
4.1	Organizational structure	17
4.2	Core offer.....	17
4.2.1	Time sensitivity of product	19
4.2.2	Saleable units	19
4.2.3	Quantity of games	20
4.3	The NFL consumer.....	21
4.3.1	Fans of a team	21
4.3.2	Entertainment seekers	22
4.3.3	Implications for the NFL of core offer and core consumers	23
4.4	Revenue	24
4.4.1	Sources of shared revenue	25
4.4.2	Unshared revenue	27
4.4.3	Summing up revenue	27
5	Functions of the business model.....	29

5.1	Collective sale of broadcasting rights	29
5.1.1	Partnership with networks	30
5.2	Revenue sharing	31
5.2.1	National media rights	31
5.2.2	Gameday revenue	33
5.2.3	Summing up revenue sharing	33
5.3	The NFL draft	33
5.3.1	Objectives of draft	34
5.3.2	Improving competitive balance	34
5.3.3	Rookie wage scale and cost saving?	35
5.3.4	Eligibility to enter NFL Draft	37
6	NFL costs	39
6.1	Player payrolls	39
6.1.1	The salary cap	39
6.1.2	Increased competitive balance	41
6.1.3	The salary cap as a cost control	41
6.1.4	Shrinking the salary market	42
6.1.5	The salary floor stopping for-profit owners.....	43
6.1.6	Summing up the salary cap	43
6.2	Coaching salaries	44
6.3	Costs of Stadiums	44
6.4	Summing up costs	45
7	Minor features of the business model	46
7.1	Closed league.....	46
7.1.1	Territorial rights	47
7.2	Location of teams	47
7.2.1	Locating teams in lucrative markets.....	48
7.2.2	Case: Green Bay Packers - a small market team in a large market league	49
7.3	Scheduling of games	50
8	Market competition and comparative analysis	52
8.1	Market competition for the NFL as a league.....	52
8.1.1	The professional football market.....	52
8.1.2	The football market	53
8.1.3	The team sports entertainment market.....	53
8.1.4	Other considerations and implications of market position.....	54
8.2	Comparative analysis of NFL's closest competitors	54

8.2.1	Revenue and value	55
8.2.2	Variation in costs.....	56
8.2.3	Summing up the comparative analysis	57
9	Effects of the business model	58
9.1	Increased competitive balance and uncertainty of outcome.....	58
9.1.1	Quality product.....	59
9.2	Monopoly position and effects thereof.....	60
9.2.1	Monopoly position	60
9.2.2	Collective sale and bargaining power over TV networks	61
9.2.3	Monopolization and liberalization of NCAA rights	63
9.2.4	Restriction of output and implication of low supply	64
9.2.5	Results of collective sale of broadcasting rights	64
9.3	Monopsony power over players.....	65
9.3.1	Mean salaries.....	65
9.3.2	United States Football League: NFL monopsony power challenged	66
9.4	Exploitation of local communities for stadium financing	67
9.4.1	Revenue potential of new stadiums	69
9.4.2	Solidarity as the opportunity to be selfish	70
9.4.3	Leaving L.A. open	72
10	Conclusion	73
	Bibliography	75
	Literature	75
	Electronic sources	77
	Appendices	79
	Appendix 1: Most popular sport in America.....	79
	Appendix 2: Revenue of major North American sports leagues in 2009	80

1 Introduction

The National Football League (NFL) is the undisputed king of sports in the United States. 35% of Americans recently mentioned the NFL, not just football in general, as their favorite sport (Schwartz & McGarry 2014), more than double that of Major League Baseball (MLB)¹. Adding to this success is the fact that NFL is by far the biggest revenue generating sports league in the United States, generating \$8 billion in 2009, while second place MLB generated \$5.9 billion. In contrast, the National Basketball Association (NBA) and National Hockey League (NHL) generated less revenue combined in 2009 than NFL did by itself (Quinn 2012, 58)². To put the popularity of the NFL in perspective regular season NFL games are typically rated multiple times higher than NBA, NHL and MLB games in terms of viewership (Yost 2006, 94). From these numbers, it is fair to say that the NFL is experiencing a great deal of success, and to a much wider extent than the rivaling major American sports leagues.

While these numbers illustrate the extent of the NFL's success, this thesis will show the causation of this success. This thesis argues that the NFL is based on full-scale economic cooperation in order to create economic parity among the teams. This is accomplished through extensive revenue redistribution, and that no team is left behind financially. It is also done through a salary cap on player pay, and that no team can spend more than the others on salaries, while no team can spend more than what the team with the least revenue can. While these are just two of the functions of the NFL business model, they are key evidence in a business philosophy built on cooperation and the idea that the league is only as strong as its weakest team. The league as a product is not more marketable than its worst team. However, the economic parity measures are by no means the end goal. These are merely means to the end of creating the most entertaining football games possible, in order to increase fan demand. More fans watch sporting events when there is a high level of uncertainty of the outcome (Vrooman 2001, 4). This is the basic premise behind the NFL business model: creating games with as high a level of uncertainty as possible, making the quality of the NFL product as high as possible. At the same time, the collective sale of media rights to television networks guarantees the NFL a market with only one seller and multiple buyers of a product in high demand by the end consumers, the fans. This forces the TV networks into regular bidding wars over the rights to televise NFL games, guaranteeing the NFL a steadily increasing and secure source of revenue.

This thesis will show how the NFL business model is built around making the games as competitive and with a high level of uncertainty of outcome as possible in order to create

¹ See appendix 1

² See appendix 2

a high demand. It will also illustrate how the NFL has exploited its monopoly position to create leverage over mainly the TV networks but also the local communities and the players to make it highly profitable.

1.1 Research question and areas of interest

This thesis will answer the following research question:

- What characterizes the business model of the National Football League and how does it contribute to the commercial success of the league?

In addition, this thesis will analyze the following areas of interest:

- How the NFL creates increased quality of its product based on competitive balance and uncertainty of outcome.
- How the NFL positions itself as a supply side monopolist and how it exploits this position.
- How the NFL separates from other major North American sports leagues.

1.2 Structure

The following is a representation of the individual chapter and their contribution to the answering of the research question

Chapter 2 - Methodology:

In this chapter, the methodological approach is explained, including delimitation and the background of data collection.

Chapter 3 - Theoretical foundation:

By looking at theory of monopolistic markets, natural monopolies, competitive balance and the organization of sports leagues, a context is formed through which to analyze the NFL business model.

Chapter 4 - Basics of the Business Model:

Illustrating the foundation of the business model provides insight into the basics of the business model and what it was founded on. This creates an understanding of the most basic layers of the business model.

Chapter 5 - Functions of the Business Model:

This chapter explains some of the most important functions of the business model and illustrates how they contribute to the overall goals of competitive balance and increased profitability.

Chapter 6 - NFL costs:

Looking at the costs of the business model in a separate view illustrates the cost-effectiveness of the NFL and how the salary cap adds to both cost-effectiveness and competitive balance.

Chapter 7 - Minor features of the business model:

This chapter looks at other minor features of the NFL that either contribute to competitive balance or makes the NFL more profitable.

Chapter 8 - Market Position and Comparative Analysis:

A clarification of the market position and a comparative analysis with the other major American sports leagues illustrates what separates the NFL from its biggest competitors, as well as portraying the strengths of the NFL business model.

Chapter 9 - Effects of the business model:

This chapter illustrates the major effects of the business model on profitability and market position.

1.3 Company profile - the National Football League

The game of football was invented when the rules of football were written down in 1876. The NFL can trace its history back to 1920, when the American Professional Football Association was founded. The name was changed to the National Football League in 1922. In 1970 the NFL merged with the American Football League (AFL) to form the modern day NFL and created a de facto monopoly on professional football in America. While this has been challenged by rival leagues, such as the United States Football League (USFL) in the 1980s, these leagues have only been short lived.

The NFL is 100% owned by the 32 individual teams, each having an equal 1/32 share. As such, the league is non-profit, as it officially serves as a trade organization. This also makes the league tax-exempt, which it has been since 1944. As of April 2015, the league is considering dropping its tax-exempt status. However, individual teams are not tax exempt.

The NFL consists of two conferences, the American Football Conference (AFC) and the National Football Conference (NFC), each with four divisions containing four teams. The regular season consists of 17 playing weeks, and each team play a total of 16 games. The winner of each division and the best two additional teams from each conference goes to the playoff.

2 Methodology

This thesis will analyze the business model of the NFL and show the rationale behind doing so. It will provide details on the main features of the business model, which are deemed to be closely associated with the playing of football games and the effects of these. That is, this thesis will deal with the production of the primary product and the associated business mechanisms.

2.1 Motivation and purpose

As a student of the study of the Americas at Copenhagen Business School, I have always found the free market philosophy of the United States interesting. Likewise, as an avid fan of the National Football League, I have always found the popularity and grandiosity of the National Football League interesting. Hearing pundits call the NFL rather socialist while being successful in America seems at odds. To me, analyzing the rationale and ideas behind the business model of the NFL is an interesting task. Learning about the special nature of the business of sports is also something that I find fascinating.

The purpose of this thesis is to uncover the major functions and rationale behind each major function of the NFL business model, while providing analysis of the effects of the major business model.

2.2 Data collection

This section explores the collection of data by looking at the various groups of sources that is used to support the argument made in this thesis.

2.2.1 Secondary literature

The empirical data relies primarily on secondary sources. The reasons for using secondary sources are twofold. First of all, there is an abundance of secondary literature on the NFL and the related aspects. Being a sports league of great importance and of international interest makes data collection on the NFL a manageable task. Secondly, as the NFL is located in America, gathering ample primary research was not worthwhile. The secondary sources consists mainly of academic research papers on multiple aspects of the NFL business model, including labor market situation, competitive balance, the draft and the sharing of revenue, as well as data on the competing leagues.

2.2.2 Financial statements

Collecting a full financial report on the NFL is not possible, as the league and 31 of the 32 teams are privately owned and not required to disclose financial statements. This makes it difficult to obtain 100% credible financial figures. However, the Green Bay Packers is publicly held and releases a financial statement every year. These statements are only showing the bare minimum of what is required. However, it does seem though that the figures in the literature are considered sufficiently reliable, as multiple sources show roughly the same figures. So, as full financial statements are hard to come by, it adds to the basis of this thesis, which is to illustrate and analyze the functions of the business model rather than the financial figures. Financial figures will be drawn upon, but mostly used to illustrate the functions of the business model and to provide a sense of the effects of the business model.

2.2.3 Primary sources

While secondary sources are heavily relied on, two excellent primary sources are able to shed light on the business model of the NFL. The first is the NFL Constitution and Bylaws. This lays out part of the general structure of the NFL along with the governing principles. From this, essential first hand information is gathered on the structural foundations of the NFL business model. Adopted in 1970, it has been revised multiple times over the years, and has been a governing document since 1970. This serves as an excellent source on the NFL business model.

The second is the most recent Collective Bargaining Agreement, from 2011. This deals with all labor related issues and is the result of collective bargaining between the NFL Players Association and the NFL. This serves as a crucial source on the labor related issues, most notably the salary cap, of which it shows the governing structure and principles. These two sources provide essential firsthand data on the structure of the NFL business model.

2.3 Delimitation

This thesis will only deal with the features of the NFL, which are at the core of the business model. As the thesis focus on the advantages the business model creates in terms of product quality, market position and labor market competition, only aspects of the business model affecting these will be discussed. Likewise, not all revenue sources will be dealt with extensively. Among the most notable sources of revenue, which will not be discussed include sponsorships and merchandising. This is not done to leave out vital revenue sources, as much as it is meant to give added focus to the primary functions of the NFL

business model, which is to produce and sell football games. As shown in section 4.4, the sale of broadcasting rights along with attendance revenue makes up approximately 75% of total revenue. As these two sources of revenue are directly tied to the playing of football games, attention will be almost exclusively given to these sources of revenue. Likewise, the product dealt with in this thesis is limited to the football games and the closely associated costs.

3 Theoretical foundation

This chapter explores theoretical aspects of sports leagues. This is done to fully analyze the NFL in the context of being a sports league. This chapter will look at the interdependency of sports teams, competitive balance, and the notion of natural monopolies.

3.1 Interdependency of teams

Before looking at the NFL business model itself, a brief framework of the interdependency of NFL teams is needed, in order to show a difference between regular businesses and markets, and that of sports leagues in general, and of the NFL in particular. This is done to show the uniqueness of the setup of sports leagues in contrast to regular businesses.

A regular company produces a good or service that is sold to its consumers (Quinn 2012, 55). Unless it is in a monopolistic market, a company competes with other companies to sell its products or services to the consumers. This is by far how most markets function. The setup is different in the NFL as well as other sports leagues. The main product being sold is the competition between two teams, a game, and the competition between multiple teams, the race for being the best team over the full season. However, for this competition and game to occur, two competing teams must agree to cooperate in arranging a contest. This makes the two teams interdependent. These two companies have a mutual interest in creating a product to sell. This interdependency makes the relationship between sports teams unique, compared to companies in other markets. This is touched upon by Grow (2006, 186-187), stating that “professional sports leagues are unique in that combination is essential to creating the ultimate product, even though each franchise in a league is independently owned. One, two or even a handful of teams cannot produce the ultimate product: championship athletic competition,” arguing the interdependency of the teams, and how the product cannot be created by a single company like in a regular market. The same notion is brought forth by Longley (2013, 12), stating that “the sports entrepreneur needs to find at least one other entrepreneur willing to establish a team”. This shows how interdependent NFL franchises are. A single NFL franchise, just like a team in any other sport, simply cannot function without at least one more team to play against. This is the most basic component of the business of sport, that a single company cannot stand alone in the production of the main product.

The idea of interdependency between sports teams is further shown by Miller (Quinn 2012, 55-56), as he explains that cooperation between sports teams is a necessity in order to run a team. Without the cooperation between teams, a single team cannot exist. He further argues that close cooperation between the clubs of a league is vital for the success of

the league, further pushing the boundary of interdependency from simply a reliance on each other, to actual cooperation. This is also a point brought forth by Mason (1999, 404), in explaining that teams need to work together in order to create the league product. Furthermore, Longley (2013, 12) adds to this notion, as he claims that fans will even lose interest if the same two teams simply keep playing each other. Additional teams are needed, as team owners have incentives to create a league with multiple opponents to spur fan interest, and thereby cause consumer interest to increase. Therefore, with the need for multiple teams to play against, an owner of a team does not have the incentives to run a competing team out of business, as a business owner normally would in a regular industry. Along with the need for a regular set of rules for the sporting contests, the need for multiple teams to play against warrants the creation of a league along with strong cooperation between the teams (Noll 2007, 530).

In this sense, analyzing the business model of both a sports league and the individual team is not the same as analyzing that of a regular company in a regular output market. In a regular market, a company directly competes with other companies for the attention of the consumers. In sports, teams cooperate, and as will be shown, cooperation is the backbone of the NFL, also to a wider extent than in other major sports leagues.

3.1.1 NFL Teams: single entity, cartel or cooperating firms

Having illustrated the need for interdependency of sports teams, a further look at the organizational structure of sports leagues is needed. According to Noll (2003, 540), some sports leagues are formed as single entities. In these, the organizational form is that of centralized power in the league office, while “teams are not independent organizations, but are operating divisions of the league”. A good example of a sports league formed as a single entity is American soccer league Major League Soccer, where team owners own a share of the league and simply has the right to operate a team. Grow (2006, 188) directly argues that sports leagues in general should be viewed as singles entities in all “nonlabor matters”. As some scholars simply view sports leagues as single entities, it certainly provides weight to the notion that the NFL cannot and should not be looked at with the same analytical tools as one would with a regular company or market. The idea of the unorthodox setup of the NFL is even commented on by former US Chief Justice William Rehnquist, who called it “a matter of necessity”, while also stating that “the individual sports teams are the leagues’ raw materials” rather than individual companies (Grow 2006, 189). This way, the highest judicial authority in the United States has labeled individual teams the raw material of the league, rather than being the economic actors, adding further fuel to the notion that sports leagues should not be viewed as ordinary businesses.

Szymanski (2012, 2) equates a sports league with a cartel in stating that “professional team sports leagues are classic, even textbook, examples of business cartels. Members of a sports league certainly have common interests and may benefit from a reduction of economic rivalry between the teams”. This means that sports teams collaborate to an extent that is considered illegal. However, as explained in section 3.1, a sports team does not have a *raison d’être* if other sports teams do not exist, as games cannot be conducted by one team alone. While members of a cartel conspire to forego competition, sports teams collaborate to create competition on the field, why sports teams should not automatically be considered cartels. In contrast to Szymanski, Mason (1999, 404) contends that a sports league like the NFL is a single entity. The rationale is that the product, a game, cannot be produced by a single team alone. This is created by the league. Therefore, by looking at the NFL strictly from a traditional production standpoint, it should be considered a single entity.

However, this section is not intended to clarify the classification of the NFL as either a single entity or a cartel of individual companies. Rather, it is intended to show that the business models and organizational structures of sports leagues in general, and of the NFL in particular, should not be viewed as regular businesses. It should be viewed as a group of companies that competes and collaborates at the same time, and with heavily interconnected interests. Whether or not the NFL is in fact a single entity, a cartel or should be defined in a third way, is not important to distinguish in this connection.

3.2 Sports leagues as natural monopolies

Part of the focus of this thesis is on the effects of the NFL being a monopoly, which will be shown to be part of the reason for the enormous success of the NFL. Before looking at this, it is purposeful to examine whether or not the NFL is a natural monopoly, or if it has simply outmaneuvered all potential competitors. That is, has the NFL itself actively sought to become a monopoly, or is its monopoly simply due to the natural nature of sports leagues.

New & Le Grand (1999, 26) describe how certain industries should be considered natural monopolies. These are industries where “an activity is said to be a natural monopoly if production is most efficient done by a single firm or other entity”. This naturally deserves further analysis. Whenever having multiple firms producing the same good, resulting in higher costs of production or lower quality for the end consumers than when only one company produces the good, the market or industry is to be considered a natural monopoly. This is supported by Train (1991, 1), stating that a natural monopoly is the market situation where one company than by multiple companies can meet a market demand more efficiently. A natural monopoly can occur due to several reasons, one of them being that

either the fixed costs in the industry are very high, or that other entry barriers into the market are high. Train (1991, 6) discusses the reasons that natural monopolies exist, and, among others, points to economies of scale. With economies of scale in a market with high fixed costs, natural monopolies are bound to occur in some industries, as production will be done at a lower cost than when multiple companies incur the same fixed costs.

In the case of the sports leagues, New & Le Grand (1999, 26) explain how they should be considered natural monopolies. The main argument is that any given sporting contest “seeks to establish a winner: the best individual team at a particular sport”. This means that the purpose of performing contests within the league is to eventually establish which team is the best - the champion. The idea of having two champions within the same sport, within the same geographical area is not a desired result, as this leaves two teams, which are considered the best. This is an outcome, which is clearly meaningless. Having two leagues naturally establishes two champions, something that is clearly against the basic idea of performing the sporting contest in the first place. This clearly supports the idea that the NFL, as well as other sports leagues, is a natural monopoly. This is also supported by Cairns et al. (1986, 58).

Mason (1999, 403) adds to the notion of sports leagues being natural monopolies in stating that “professional sports leagues are often able to operate as monopolies, as they have historically been able to control elite-caliber competition in their given sport”. By using the argument of controlling elite competition as the reason why sports leagues are usually monopolies, Mason clearly supports the basic idea of sports leagues being natural monopolies. Longley (2013, 58) also supports the idea of sports leagues as natural monopolies, in arguing that upstarting, competing leagues need to capitalize on the mistakes of established leagues in order to succeed, meaning that a well managed league should under normal circumstances be able to operate as a monopoly. This way, Longley speaks more to the overall nature of the sports leagues, than the reason behind it. However, most importantly, his argumentation supports the idea of sports leagues being natural monopolies.

Speaking purely commercially, whenever two or more sports leagues claim to crown a team from its league as the best team in its sport, it results in a lowered level of quality of the product to the consumers. Common sense dictates that two champions within the same sport, in the same geographical market and in the same year, is not possible. Crowning just one professional football champion in America every year, instead of multiple champions, adds value to the product for the consumer, in terms of product quality. This is the main argument of New & Le Grand (1999, 26-27) of why sports leagues should be natural monopolies. So the idea of having a natural monopoly in the case of the NFL, is that it actually brings added value to the consumers in terms of product quality: there is no ambiguity as to which team is the ultimate champion of football in America. Adding to this,

New & Le Grand (1999, 27) briefly describe how a natural pressure from the consumers can lead to unification between competing leagues. This is supported by Mason (1999, 403) who argues that sports leagues have historically achieved monopoly status through merging with rival leagues. This is due to the idea of consumers disliking a lowered level of quality, which has occurred multiple times in American sports. A good example of this can be found in the very case of the NFL. During the early 1960s, two rival professional football leagues were competing in America. The NFL and the AFL (Jozsa 2014, 104-108). Both leagues crowned a champion every year, resulting in a lower level of quality of the product for the consumers, as it created ambiguity to which of the two champions from the two leagues was the real champion. These two leagues eventually merged into the modern day NFL in 1970 (Cairns et al 1986, 59).

Therefore, this thesis considers the NFL a natural monopoly. While the concept of a natural monopoly certainly speaks to the causation and the foundation of the monopoly of the NFL, it does not say anything about the effects of this. The effects and commercial advantages of the monopolies, and how the NFL has exploited these will be dealt with in chapter 9.

3.3 Lack of market competition and effects

Having established how sports leagues are natural monopolies, a look at the theoretical outcomes and advantages of monopolies for the monopolist is needed. This is done to help explain how the NFL has exploited its position as a natural monopoly, and how this has greatly contributed to the commercial success.

According to Neumann (2001 10-11), market power can come in the form of either demand side or supply side power. Supply side power is the power over the supply of the goods produced. The most extreme form of this comes in the shape of a monopoly. In the case of a monopoly, the monopolist has the power to set prices above the fair market rate, yielding greater profits. As explained by Webster (2003, 119): “prices are bid up by consumers eager to obtain a product that is in relatively short supply”. A monopoly also tends to result in lowered product quality, as the monopolist is not faced with market competition. As explained by Neumann (2001, 85), “monopolistic market power yields higher prices and a lower level of output, and thus entails a welfare loss”. This means that a monopoly will tend to control prices and output in a way that is most beneficial to itself.

Market power can also be in the shape of a monopsony, where it is on the demand side that power is vested. This is the most extreme case of a buyer’s market, where there is only one buyer to the products sold. In this case, the monopsonist is able to effectively keep

prices down. This can also occur in the case of a single employer in the labor market. In this case, the company is able to suppress wages to a level lower than the market rate.

Neumann (2001, 10) argues that a monopoly is not a set concept that definitively defines the power that the monopoly has. This also depends on the alternatives to the product of the monopoly, as well as the number of competitors. It is important to note that this definition of competition and alternatives should be viewed in a wide definition. For example, a car producer with a monopoly over a certain market faces stiff competition if there is an excellent public transportation system in the same geographical market. In this way, a company can be a monopoly over a certain type of goods produced in a certain market, yet without this position yielding much power. On the other hand, a monopoly with a product, which has few viable alternatives, yields great monopoly power over the consumers. This can be used to set prices higher than would normally be the case in a competitive market, to the level where the interests of the monopolist is best served (Neumann 2001, 6). Since the buyer in theory has no other alternatives, he is forced to buy at the price offered by the monopolist.

Longley (2013, 9) describes the effects of a competitive market with benefits flowing to the consumers, resulting in more product choices with higher quality and decreased pricing. The adverse should be considered an effect of a restrained competitive market or in the most extreme case of a monopoly. Therefore, the effects of a monopoly should be higher prices, lower quality and less product choices. In chapter 9, this will be shown to be exactly the case with the NFL in its sale of broadcasting rights, where the NFL is able to extract high fees due to its monopoly position.

3.4 Competitive balance in commercial sports leagues

Competitive balance is a concept that will be used throughout this thesis to describe the NFL product. This section will show the idea of competitive balance in the NFL, and further show why it theoretically matters for the NFL in terms of commercial advantages. This is done to show the idea behind the NFL business model and how it affects the product of the NFL in terms of increased demand.

3.4.1 Measuring competitive balance

Competitive balance and the effects on consumer interest in the NFL due to competitive balance can be measured in a wide range of ways. Competitive balance exists when there is uncertainty of outcome. There is basically three main ways of defining uncertainty of outcome, all described by Cairns et al. (1986, 6) and Quinn (2012, 208). The first is

uncertainty of match outcome. This is whether or not individual games are competitive or one sided. On a single-game level, it is important that fans expect a game to be competitive and that the outcome is not given in advance. If a game is expected to be or is won easily by one team, it will deter viewers from watching the game. This is partly supported by Szymanski (2010, 25-27) stating that attendance at the games is highest when the home team is slightly favored to win. At this point, both teams have a good chance to win, yet the outcome is not predetermined.

The second aspect is uncertainty of seasonal outcome. This is whether or not a team is competitive over the course of a season. If a team is rather quickly eliminated from playoff contention, a large amount of the fans will stop watching the games, as the rest of the season becomes somewhat meaningless to watch. Even though a league has a high level of uncertainty of match outcome, it does not automatically result in uncertainty of seasonal outcome. Even when all games are close, if they are won by the same group of teams, it will not take a lot of games before some teams are eliminated from playoff contention. It is a zero-sum game, and even the closest games will have a loser, and a loss, even a close one, is a loss. Even when a league has a high level of uncertainty of match outcome, it does not necessarily mean that it also has uncertainty of seasonal outcome.

The third aspect is uncertainty across seasons, the opposite occurring when the same few teams win the championship every year, or go to the playoffs year after year. This uncertainty occurs when fans can hope and expect their team to be competitive every year. When some teams perform badly year after year, some fans will stop watching the games, and even stop being fans of the team. This will contribute in deterring consumers from the NFL. As will be explained, part of the reason that fans watch sports is to follow to the race for the championship.

All three aspects of uncertainty of outcome are important to the NFL if competitive balance is to be at a high level. This means that the NFL not only needs to put in place rules, regulations and mechanisms promoting intra-game uncertainty of outcome, but needs to make sure that all teams are competitive over time, in order to generate competitive balance in the league. This is not to lay the groundwork for deep analysis of the level of competitive balance later on in this thesis, or to show whether one measure of competitive balance is high or low. Rather, it is meant to suggest that creating competitive balance in a sports league is both a short-term and long-term solution.

3.4.2 Value of competitive balance: the Uncertainty of Outcome Hypothesis

Along with these fundamental ways of looking at competitive parity, there are a number of ways of looking at their impacts on the demand for the NFL product. Cairns et al. (1986, 6)

describe how uncertainty of match outcome, coupled with uncertainty of seasonal outcome and outcome across seasons, give consumers added incentives to watch sporting contests. This is the idea that not knowing the winner of the championship or a single game makes watching the sport more enticing and exciting for a wider group of fans. When the uncertainty of outcome is high, more fans will watch the sporting event. When some teams are eliminated from the championship race, a share of the fans of these eliminated teams will stop watching the games. When a team is expected to be bad coming into a season, a share of the fans of that team will stop watching the games of the team.

This is the basic premise of the Uncertainty of Outcome Hypothesis (UOH), namely the idea that “increasingly imbalanced sports competitions have the potential to negatively influence fan interest and, consequently, stadium attendance and TV viewership figures” (Pawlowski 2013, 342). Vrooman (2011, 4) argues that the UOH is the idea that “fans prefer close competition with quality opponents, and large market dominance is ultimately self-defeating”. Clearly, if the UOH is correct, it should be heavily relied on in the creation of a commercial sports league. That is, if the ultimate goal of the sports league is to be profitable.

Tainsky et al. (2013) add to the idea of competitiveness as a factor in the interest of NFL games, focusing on whether or not the competitiveness of the local NFL team has any effect on the interest in other league games from that market. They find that when a local team is active in the playoffs, television viewership in the same market increases for out-of-market games (Tainsky et al. 2013, 5). This shows an interesting trend, that fans will not only watch the games of their own teams when they are competitive, but in fact also show interest for other NFL games. This means that the competitiveness of any individual team has an effect on the interest on games of the entire league. Another related finding is that the demand for out-of-market games featuring the Super Bowl champion of the previous season, is statistically lower than other out-of-market games (Tainsky et al. 2013, 6-8). This could quite possibly be due to an NFL fan preference against dynasties. This suggests that fans have a distaste for teams that repeatedly are successful. This certainly adds to the notion of how uncertainty of outcomes in the NFL has a profound effect on the demand for the NFL product. Also, Paul et al. (2011, 219-220) conclude that fan satisfaction measured in TV ratings and attendance at games are positively affected by a high degree of uncertainty of the outcome of a game in advance, while providing support for policies increasing competitive balance in sports leagues.

This all heavily suggests that competitive balance and uncertainty of outcome spur consumer interest in sports leagues. By creating a high level of competitive balance, more games will have importance in the league standings while more teams will be in contention for a playoff spot or for the championship race. This seems to suggest an effect where more viewers watch the games, and having more consumers buy the sports league products. As it

will be shown in this thesis, creating competitive balance and uncertainty of outcome is at the foundation of the NFL business model.

4 Basics of the business model

At the core, the NFL is a business just like any other business. It has a product, football games, that it sells to its consumers, the fans. In this sense, the NFL seems to have a pretty straightforward business model as it simply creates and sells a product. However, the uniqueness of the NFL is to be found in its elaborate way of creating a high quality product, and the way it has created and maintained a monopoly in the professional sports industry. This is done through a high level of inter-franchise dependency.

In order to fully analyze the effects of the business model of the NFL, a thorough look at the model as it is today is needed. In order to provide a picture of the business model, a look at the revenue streams and costs will be provided to show a pattern of the financial side of the business model, and to provide a picture of the ideas behind the model.

4.1 Organizational structure

To illustrate the nature of the NFL, a brief look at the organizational structure is in order. The NFL is governed by its Master Agreement, and the NFL Constitution and Bylaws, while all labor-related aspects are set forth by collective bargaining between the league and the players. The governing body is the Executive Committee, which is comprised by one officer from each team, usually the owner (NFL 1970, 23). This body operates as a de facto board of directors of the NFL. All action by the Executive Committee requires a three-fourths majority. The Executive Committee is responsible for the overall guidelines for the NFL, including structure, playing rules and business decisions.

The Executive Committee is also responsible for appointing a commissioner, which oversees day-to-day operations. The commissioner has a wide range of responsibilities, including approving broadcasting right contracts and crafting the schedule. Power is also vested in the commissioner to sanction owners, teams and players if they violate league rules or conducts anything detrimental to the league (NFL 1970, 28).

This brief look at the organizational structure of the NFL serves the purpose of providing an understanding of the nature of the league. It most notably shows that the power of approving broadcasting rights contract is vested in the league office and not the individual teams, illustrating the centralized nature of the NFL.

4.2 Core offer

Before looking at the flows of revenue and costs, it is important first to identify the core offer of the NFL. That is, what the NFL is offering the consumer, and how it separates itself from competing offerings. This is identified by analyzing the most basic thing that the NFL is

producing to sell to its consumers. Illustrating the product of the NFL gives an understanding of the foundation of the league.

When looking at the NFL, the main product is the football games, which is evident from Longley (2013, 11), stating that “the spectator sport industry is in the business of selling entertainment. At its most basic level, the business premise of the spectator sport business is quite simple — consumers will pay to watch two teams competing in a sporting contest.” This way, the product of the NFL is football games, which satisfies a need for entertainment for the consumer. The league product of the NFL is “a series of games with an uncertain outcome” (Mason 1999, 404). Therefore, the production of football games is the primary process of the NFL. As will be shown in section 4.4, upwards of 80% of total NFL revenue comes from the sale of the right to watch NFL games, whether that is on TV or in attendance at the stadium. This also heavily emphasizes the notion that the primary product of the NFL is the football games.

However, the entertainment in the sporting contest truly lies in the uncertainty factor, the fact that a football game is truly competitive and that the outcome is not predetermined or expected (Longley 2013, 11). This is what sells sports as entertainment in comparison to other forms of “orchestrated” entertainment, such as movies, theater, concerts etc. where the outcome is predetermined, and where the consumer is anticipating the outcome. According to Longley (2013, 11) uncertainty of outcome in sports is important in order to preserve fan interest. As explained in section 3.4.1, the uncertainty of outcome has to be sustainable, and something that is evident within individual games, seasons and across seasons. Buzzacchi et al. (2003, 182) support the argument that sports consumers care about uncertainty of outcome in saying that leagues enjoy more success if more teams win games. This means that commercial success and sustained competitive balance of the league goes hand in hand. Also, Cave and Crandall (2001, F18) briefly touch upon this in stating that “as spectators are attracted by competitive balance within a league, it is not in any team’s long-term interest to unduly weaken its competitors”. This is supported by Mason (1999, 404) when arguing that in sports leagues in general “the appeal of the league product rests on the uncertainty of the game’s outcome”. Finally, this is a point which is directly argued by the NFL in the legal case *Los Angeles Memorial Coliseum Commission v National Football League* (Weistart 1984, 1018) stating that competitive balance is an actual goal of the NFL in order to keep live attendance and the value of the television deals up. So, even though the core offer of the NFL is the sporting contests between two teams, it seems to be an established fact that the games have a much higher appeal when the games and the seasons are competitive.

Therefore, with the core offer being outlined as sports entertainment, it is in the firm interest of the NFL to make sure its games are as competitive as possible, in order to satisfy

the needs of as many consumers as possible. This creates a need as big as possible for the product. Therefore, one of the most basic assumptions of this thesis, is that the need for football games increases as the games and the teams in the NFL are competitive.

Therefore, as already mentioned, it is a key interest of the NFL to make its seasons and games as competitive as possible. That the NFL is doing everything it can to create increased competition among the teams is a main aspect that will be shown in the analysis of the business model and the organization of the NFL throughout this thesis.

4.2.1 Time sensitivity of product

An important point about the core offer and product of the NFL is that, as with the products of other sports, it is perishable (Cairns et al. 1986, 11). That is, it needs to be consumed synchronous, meaning it can basically only be consumed at the time of the game. The value to the consumers of a football game significantly decreases once the game has been played, as the product utility derives from the entertainment in not knowing the outcome. At that point, it is not possible to sell tickets or any other game-related products. Unsold tickets to a football game cannot be stocked and sold at a later point in time.

While NFL games significantly lose value when they are watched after the game, this also makes sporting events somewhat unique, in that they can only be consumed at the time of the event, that is, they lose value to viewers if there is just a small time lag in transmission (Quinn 2012, 92). This would sound like a disadvantage, as competing entertainment products outside the scope of the sports sector, such as movies, music, theater etc., can much more easily be consumed at the preferred time of the consumer. Compared to an asynchronous entertainment provider like Netflix, where users can stream movies whenever they want, NFL games significantly lose value to the consumer if not watched live. However, exactly due to the fact that it is a 'now or never' proposition, the NFL has gained an advantage. Also, as stated by Mondello (Quinn 2012, 92), the NFL has been very successful in leveraging the aspect of the lack of available substitutes and time-sensitivity of the NFL product to the TV networks in making national media contracts.

4.2.2 Saleable units

The NFL produces football games and sells these to its consumers. However, it can be difficult to break the product up into saleable units, as with the production of a physical good. The best way to do so would be to look at tickets or seats at the stadium. In this sense, the cost and price of a unit can be calculated. Also, there is a limit to the quantity of products sold. However, this is not possible to do with the fans watching games on TV. Here, the

production is not limited to a certain amount of units. Costs are not tied to the units produced, as it does not increase NFL costs when more people watch the games on TV, or decrease when few people watch it³. The maximum limit of saleable units equals the number of potential consumers worldwide. This also means that, *ceteris paribus*, the revenue potential of consumers watching the games on TV is much greater than that of the in-stadium attendees. Therefore, the lack of limits of saleable units makes the broadcasting of NFL games much more attractive as a focal point of the NFL, than the revenue from attendance.

4.2.3 Quantity of games

Another aspect of a product, which has a big effect on the profitability of the NFL, is the quantity of games. As a commercial entity, it is important to find the right quantity of products to sell. The NFL has a 17-week regular season, with each team playing 16 games. With 32 teams, this amounts to 256 regular season games in total. By comparison, there are 30 MLB teams, each playing 162 games. This amounts to 2430 regular season games. In the NBA and NHL there are 30 teams, each playing 82 games, amounting to 1230 regular season games. These numbers do not even include playoff games, where each round is decided in one game in the NFL, and 7 games in the other three leagues. The NFL certainly separates from the other major leagues in this aspect.

This brings three distinct advantages to the NFL, compared to the other major leagues. First of all, the low number of games makes each game more important. Each NFL game counts for 1/16 of the season, while an MLB game counts for 1/162 of the season. Naturally, this adds excitement to each NFL game, as more is simply on the line in each game. Secondly, according to basic supply and demand, keeping supply lower than demand increases the price of the product. TV networks are in demand of quality broadcasting in order to sell advertising. The low supply gives the NFL an advantage in brokering TV contracts. This is an aspect that will be covered in section 9.2.2, but is important to note as an added effect of the low quantity of games. Thirdly, with only eight home games per season, Vrooman (2009, 14) argues that the attendance in NFL games is virtually inelastic to the price of the tickets. This is also evidenced by the high rate of sold out games in the NFL, as league wide attendance in 2008 was at approximately 90% of stadium capacity (Miller & Washington 2009, 111). This holds true while NFL ticket prices are far higher than in the other leagues, with NFL median ticket prices in 2009 at \$70, while NBA and NHL are roughly at \$47-48 and MLB only at \$12 (Quinn 2012, 61).

³As will be explained, player costs are somewhat tied to the amount of revenue, and thereby the value of sales, but are still considered fixed costs.

All in all, the relative low number of NFL games seems to be an advantage rather than a factor limiting the profitability of the NFL. By having a relative low number of games, the NFL gains a number of low supply advantages, supporting the argument that this aspect of the NFL business model contributes in making the league profitable.

4.3 The NFL consumer

While addressing the core offer of the NFL has shown what the NFL is offering, it is important to identify the key types of consumers of the NFL product. This is done in order to show the distinction between two types of NFL consumers, who have widely different preferences regarding the NFL product, as well as the preferences of the consumers that the business model is built around. The two types of consumers are in most literature mentioned as one as sports fans, while host communities, TV networks etc. are also mentioned as other types of consumers (Mason 1999, 407). In this thesis, only the sports fans will be mentioned as the consumers, but will be separated as two types, to show how they have different purchasing motives. While both TV networks and host communities pay handsomely for the services of NFL games and placement of teams, this thesis regards the football games as the primary product and the fans and viewers as the primary consumers. In the following, the primary consumers are divided into two groups, the fans of the teams and the entertainment seekers. This allows an analysis of the separate motives of the two groups.

4.3.1 Fans of a team

The first group of NFL consumers is the one consisting of fans of a team. Most fans primarily watch the games of their own team. This means that the key need fulfillment of the fans is that of watching their favorite NFL team. According to Mason (1999, 405), consumers of the product of sport heavily identifies with the team they are fan of. He also states that “all consumers of the sports product seek to identify with a given team”, meaning that sports fans do not simply watch the best games, but the game of their own team. Wakefield (2007, 14-15) also addresses this when showing how some fans feel like the team represents them and they identify heavily with a team. By feeling as part of the team, it will undoubtedly take a lot to stop the fan from watching the team, either in stadium or on TV. Longley (2013, 12) argues that some fans identify with their teams, and that the product for them is to watch their own team. New & Le Grand (1999, 32) support this by making the argument that fans hold a strong allegiance to their own team, and that another game cannot simply substitute the game of their own team. This is an important point to make. One NFL game cannot

simply substitute another by making it more competitive than the one of the fans' own team. This is important, as this group of consumers is not only easy to persuade into buying the NFL product, which is the game of their own team, but in fact seems hard to stop from doing so. This way, the NFL has a group of hard-core fans, which it will require little or no persuasion for them to buy its product.

However, it is critical to note that even though fans, to a varying degree, follow their own team, a share of the fan base will undoubtedly stop following their team if the team consistently lose a majority of its games. They are named as the so-called "fair weather fans" by Mason (1999, 408). In this sense, some competitive parity is important in order to maintain the attention of this important target group for all NFL teams. This group of consumers prefers that their team win by large numbers, rather than their team participating in a close contest (Horowitz & Whittenburg 2012, 13). This will stand in contrast to the preferences of the next group of consumers.

4.3.2 Entertainment seekers

Mason (1999, 406) argues that sports leagues to a much wider extent than earlier competes for the same consumers. As two sports leagues have different products to offer the consumers, it heavily suggests that a large group of consumers does not value supporting a certain team or even a certain sport, at least not to the same extent as the group of consumers described in section 4.3.1. This means that the need of the same consumer can be fulfilled by a number of different sports, the need being pure sports entertainment or even simply entertainment. For these consumers, the core offer is not the chance to watch one's favorite team. If this was the case, there would be no competition between the leagues and sports, as the favorite team could only be found in one league. To these consumers, the product is sports entertainment. This means that a league like the NFL needs to make its product as good and entertaining as possible to compete for these consumers.

More importantly, the NFL is in direct competition with other organizers of sporting events for the attention of a number of consumers, a point made by Mason (1999, 406). Also, Biner (2014, 12) makes the distinction between TV audience and fans attending games in the stadiums. He argues that TV audiences in general prefer watching close games, while fans in the stadium want their team to be dominant and win games big. These are obviously two very differing views, causing two widely different preferences for the NFL to adapt to in order to satisfy consumer preferences. Horowitz & Whittenburg (2012, 13) add to this when stating that the neutral observers watch the NFL games because they simply favor the sport and close contests. Their interest is best peaked when games are decided in the last minutes, making their entertainment seekers' reasons for watching games fundamentally

different from that of the fans.

4.3.3 Implications for the NFL of core offer and core consumers

Having established two types of NFL consumers, it is essential to discuss the implications of two consumer types for the NFL. As will be further explained in section 4.4 the media rights contracts make up the majority of NFL total revenue, and it has exceeded revenue from gate receipts since 1977 (Quinn 2012, 96). As media rights revenue is by far the biggest source of revenue, it is in the best interest of the NFL to focus on catering for the fans watching games on TV, as opposed to those in the stadium, as this group apparently makes up the largest group of potential consumers, and thereby has the largest revenue potential. Adding to this argument is the fact that fans of a team are likely to watch the games of their team, even when the team is not favored to win or favored to win by large numbers. The fans attending the games at the stadium are also more likely to be true fans of the team, making it probable that they will attend the games regardless of whether the team regularly wins or not. The fact that most games are sold out supports this argument.

The product in professional and “commercially-driven team sports” was at first developed for the fans of a team and those watching the games in the stadiums. However, today’s game of football is more focused on selling entertainment, and does so by catering more to the consumers watching the games on TV (Mason 1999, 405). Mason (1999, 408) also shows that leagues in fact primarily cater for the TV consumers when adopting rule changes friendly to TV and by rescheduling games to fit TV schedules. As people looking for entertainment favor close and exciting games, it is clear that the NFL should work towards game uncertainty and competitive balance in order to maximize profits. This is clearly in line with the argument made by Biner (2014, 12-13), and with the Uncertainty of Outcome Hypothesis as explained in section 3.4.2. This point will be shown to be at the basis of the business model.

Additionally, what holds true for both these two groups of consumers is that a big part of what they consume, is the race for the championship, watching the contest for being the best team (New & Le Grand 1999, 26). This means that value is also placed by the consumers on the fact that NFL finds the ultimate champion, the single best team. The fans looking for their team to become champions as well as the entertainment seekers find the value in the race for the championship. This means that it is important for the quality of the NFL product to operate as the undisputed crowner of the best team in professional football. In other words, it adds quality to the NFL product that it operates as a monopoly of professional football.

4.4 Revenue

Having established what the NFL produces and which consumers it sells its product to, it is purposeful to get an overview of NFL revenue in order to further get a meaningful picture of how the NFL generates revenue. This illustrates the commercial focus of the NFL on its primary production of football games and the general focus of the business model on football games.

Table 4.1: Estimated NFL annual return for 2009

	Revenue (million)	Share of total	Notes
National media rights	\$4008	50%	Estimated as half of total revenue
Gameday (incl. tickets)	\$1684.16	21%	
Local unshared revenue	\$1603.2	20%	Calculated as 20% of total revenue
Other (sponsorship, merchandising, etc.)	\$720.64	9%	
Total revenue	\$8016	100%	
	Costs (million)	Share of total	Notes
Player payrolls	\$3379.5	48.6%	
Other	\$3567.7	51.4%	Calculated as total costs minus player payrolls
Total costs	\$6947.2	100%	
Profit	\$1068.8		
Profit Ratio	13.3%		

Source: Quinn 2012

The NFL takes in revenue from a wide range of sources. Looking at the revenue of the NFL in 2009 as shown in appendix 2, the total amount of revenue the league took in was approximately \$8 billion (Quinn 2012, 10). While this number does not say a lot by itself, it does compare favorably to the same numbers for the other major American leagues, as MLB had \$5.9 billion, NBA \$3.8 billion and NHL \$2.8 billion of revenue for the same periods. This shows that the NFL is way ahead of its competitors in terms of generating revenue. Table 4.1 shows an estimated annual return for the entire NFL for 2009. The table is based on figures provided by Miller (Quinn 2012, 57-76), while others are calculated as a basis of

projected shares of revenue⁴. While the figures for total revenues and total costs are provided in this source, other figures are hard to come by. While keeping in mind the limited basis upon which the table rests, the figures still provide an interesting overview⁵. The by far most important thing to notice is that the NFL has a profit ratio of 13.3%. If this figure is correct and representative for a longer period of time, it should be a sign of a company that is very profitable.

4.4.1 Sources of shared revenue

Shared revenue is the revenue, which is shared among the teams, either equally or partially. While the sharing of revenue will be discussed in chapter 5, this section will discuss the sources of the shared revenue. This is done to further analyze the revenue discussed in section 4.4. Table 4.2 shows the general shares of revenue that the NFL takes in. Of the \$8 billion in revenue in 2010, approximately \$4 billion came from the sale of national television rights to broadcast NFL games. Cave and Crandall (2001, F12) further states that more than half of the total revenue in the NFL comes from the national broadcasting contracts. The thing to notice in this is that at a minimum, half of total NFL revenue comes from the sale of the national media contracts. These contracts are negotiated collectively for the league as a whole. This means that the NFL as a league collectively negotiates with the television networks and sells package deals, instead of having each franchise sell its home games in its own local market (Quinn 2012, 58). It also means that the NFL acts as a lone supplier of NFL games for the TV networks to broadcast. The effects of this monopoly position will be analyzed in section 9.2.2. This practice has been in place since the first collectively sold national media rights contract was signed in 1962. From that point up until 1998, the value of these rights increased from \$4.7 million per year to \$2.2 billion per year (Cave & Crandall 2001, F13). This reflects a stunning 17% nominal annual growth rate. An annual growth rate in the primary source of revenue, which should be considered enviable for any business.

Table 4.2: Major NFL revenue sources

	Share of aggregate average revenue
National media rights	50-55%
Gameday	20-25%
Local unshared revenue	20%
Other	5-10%

Source: Quinn 2012

⁴ Based on estimates in the same source

⁵ It is important to note that since 31 of the 32 NFL teams are privately owned, public financial records only exists for the publicly owned Green Bay Packers franchise, making the figures less than 100 % accurate

These figures support the argument that the NFL is primarily based on the sale of broadcasting rights to entertainment seekers. While TV revenue makes up more than half of aggregate NFL revenue, it is estimated that revenue from gate receipts, parking and other sales at games such as food, apparel and drinks, make up 21.6% of total league revenue (Quinn 2012, 10). According to Fenn (Quinn 2012, 81), of the \$237 million each NFL team had in revenue in 2008, approximately \$59 million came from gameday tickets and concessions associated with in-stadium games, making it an approximate 25% share. Therefore, this thesis estimates that on average, this source of revenue makes up 20-25% of overall NFL revenue. Looking at released financial reports of the Green Bay Packers⁶ (Wisconsin 2000, 8) shows that for the 1994-95 fiscal year, total ticket revenue was at 23% of total revenue, and at 20% in 1999-2000, supporting the 20-25% estimate. The NFL started as a business heavily dependent on selling tickets. In 1948 the NFL paid television networks to televise football games (Horowitz & Whittenburg 2012, 1), which shows how much the NFL teams relied on the revenues from the sale of tickets. In 1977, TV rights revenue exceeded revenue from gate receipts for the first time, and has done so ever since (Quinn 2012, 96). That the NFL used to rely on attendance as its biggest source of revenue is highlighted by location of its teams in the largest markets, discussed in section 7.2.1.

That gate receipt revenue today makes up only 20-25% of the total league revenue, shows that the national media contract is a big point of emphasis for the financial policy of the NFL. Even though it only makes up between a fifth and a fourth of total revenue, Fenn (Quinn 2012, 81) still characterizes the revenue from ticket sales and concessions as having a big importance for the NFL, yet this thesis argues that the national media contracts are the point of emphasis for the NFL.

4.4.1.1 Blackout rule - protecting attendance and aesthetics

Considering that revenue from tickets comprise around 20-25% of total revenue of the league, it would seem that selling out games are not essential to the NFL. A possible effect of the broadcasting of a sporting event is the negative effect it can have on attendance (Quinn 2012, 65). To circumvent this, the NFL has a so-called blackout rule. This means that if a certain game is not sold out at least 72 hours prior to the game, the game is not allowed to be broadcast within 75 miles of the stadium (Quinn 2012, 65). In effect, it guarantees that fans living close to the home venue cannot watch the team unless the game is sold out. This is certainly meant to entice local fans to buy tickets for the games instead of watching at

⁶ Being the only publicly held NFL team, the Green Bay Packers is the only one to disclose financial statements

home. It also shows that the NFL is somewhat concerned about the aforementioned negative effect on attendance that the broadcasting of games can have. That the blackout rule is intended to protect attendance is clear from the fact that at its implementation with the first television packages in 1956, no game was allowed to be broadcast within 75 miles of the game, regardless of whether it was sold out or not (Horowitz & Whittenburg 2012, 2). This was a clear sign that ticket revenue was the important source of revenue back then.

Another reasoning for the blackout rule is, according to Fenn, that “no one wants to watch a game at a partially filled stadium” (Quinn 2012, 81). That is, Fenn argues, that a half empty stadium reduces the overall quality of the experience of watching a game on TV. This way the Blackout Rule is in place to protect not only gate revenue, but also the aesthetics of the TV viewing experience. As further explained by Fenn (Quinn 2012, 84), TV ratings suffer when the stadium is empty, while a full stadium gives the viewer a much better experience.

All in all, the blackout rule makes sure that the broadcasting of a game does not negatively influence attendance. This way, the NFL protects not only a reliable source of revenue but also the quality of the broadcasts, making sure that it protects its viable source of revenue from the TV networks.

4.4.2 Unshared revenue

Even though it appears that most revenue in the NFL is shared more or less equally between the teams, there are certain types of revenue, which are exempt from the sharing system. The most important type is the revenue from luxury suites at the stadiums⁷, along with some team specific revenue sources such as local sponsorship agreements, local advertising and stadium concessions (Moorhead 2006, 661). According to Vrooman (2009, 16), the share of total revenue comprised by unshared venue revenue, has doubled from 10% to 20% over the last decade. As the NFL is built on solidarity and financial parity, this trend seems alarming. The effect of the increasing amount of unshared local revenue will be discussed in section 9.4.2.

4.4.3 Summing up revenue

As upwards of 80% of total NFL revenue comes from the broadcasting contracts and gameday revenue, a large majority of total NFL revenue is closely related to selling opportunities to watch NFL games. This heavily fortifies the foundation of this thesis that the NFL relies on the attention of the two consumer groups described in section 4.3, namely the entertainment seekers and the fans. At the same time, unshared revenue provides

⁷ Suites with prime view at stadiums, rented primarily by wealthy businessmen or corporation

incentives for teams to seek out new revenue streams, while also partly undermining the egalitarianism that will be shown to define the NFL business model in the following chapter.

5 Functions of the business model

With the sources of revenue addressed in the previous chapter, the different ways for the NFL to generate revenue has been established. This chapter will go further than to address the 'what' and discuss the 'how' and 'why'. It is essential to discuss the main features of the business model in order to illustrate the basics of the business model. Therefore, this chapter illustrates that the sharing of revenue and collective sale of broadcasting rights are at the foundation of the business model, as it provides NFL teams with a steady source of revenue, while keeping revenue disparities low. While the collective sale of broadcasting rights and the equal sharing of revenue from these were implemented at the same time, and are oftentimes treated jointly in the literature, they need to be separated and analyzed separately as they each have distinct effects.

5.1 Collective sale of broadcasting rights

One of the keystones of the NFL business model is the collective sale of broadcasting rights to its games (Quinn 2012, 64). As has been shown in table 4.2, the sale of media rights make up more than half of total NFL revenue, underscoring its great importance to the profitability of the NFL. Unlike MLB, NBA and NHL, the NFL collectively sells all broadcasting rights, meaning that all NFL broadcasting rights are sold as package deals. This practice was first started when commissioner Bert Bell negotiated a package deal for every team with CBS in 1956 (Horowitz & Whittenburg 2012, 2), laying the groundwork for collectively negotiated deals in the early 1960s. To illustrate the setup of the packages, the current deals are as of 2008 (Miller & Washington 2009, 115):

- AFC Sunday afternoon games: CBS
- NFC Sunday afternoon games: Fox
- Sunday Night Football: NBC
- Monday Night Football: ESPN

According to most sports economists, it is the brokering of national broadcasting contracts that separate the NFL from MLB and the other leagues, making it financially and competitively superior (Yost 2006, 65)⁸. Therefore, the collective sale of broadcasting rights is at the core of the NFL business model.

⁸ The great bargaining advantage over TV networks and the resulting higher revenue from the collective sale of broadcasting rights, will be dealt with extensively in section 9.2.2

5.1.1 Partnership with networks

It has been fairly well established that from the NFL point of view, the sale of broadcasting rights to TV networks is the way to reach most potential consumers, by far being the biggest and most steady source of revenue. But what do the networks get out of the deal? What is the function of the NFL broadcasting rights that makes it a profitable deal for the broadcaster? These are important points to elaborate on, as it is evident that not only does the NFL create a product that satisfies the end consumer, but also a product that the TV networks make a profit from.

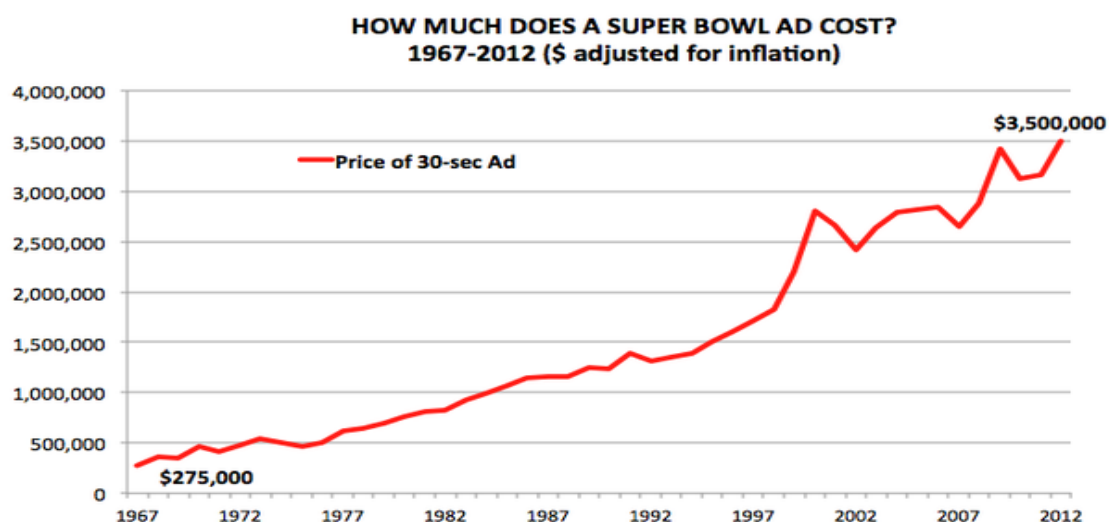
According to Evens et al. (2013, 39), a sports broadcaster, that is a TV network, operates in the demand side of the market for sports rights. This is the market where the NFL collectively sells broadcasting rights of its games to the TV networks. At the same time, the TV networks operate on the supply side of the sports programming market. The sports programmes are sold both to the viewers, but also to a third actor, namely advertisers. This means that the TV networks need to provide quality programming to attract a large audience, so that it can charge premium rates. With a large audience and quality programming, the advertisers become interested in advertising at that specific time, and hence, the TV networks can sell time during the quality programmes to advertisers at higher rates. In essence, when the TV network has a high quality product, it attracts a large audience. With a large audience the TV network can charge higher prices to advertisers (Mason 1999, 410).

Providing broadcasting options of increasing quality enables TV networks to make higher profits. This in turn enables the TV networks to invest higher sums in quality broadcasting, such as NFL broadcasting rights. Therefore, it seems pertinent to conclude that the NFL and the TV networks both have a high interest in making sure that the NFL product is of high quality. This would also suggest that the relationship between the NFL and the TV networks is of a partnership nature.

To illustrate this, consider the rising costs of a 30 second ad during the Super Bowl, illustrated in table 5.1, which gives a hint at the overall increase in value of NFL broadcasting rights. The TV networks broadcasting the Super Bowls are simply able to charge more and more for airtime during the single most watched TV programme every year. As Mondello (Quinn 2012, 90) puts it, “a 30-s television spot during the Super Bowl is the single most valuable piece of real estate in all of American broadcast television”. While the game of football may be popular and attracts a large audience, enabling TV networks to sell airtime to advertisers, the sport itself is a good fit for TV. The game of football is simply a game very well suited to be broadcast as a programme with good advertising opportunities. The game consists of many, two to eight second plays. Between these plays there are breaks of 25-40 seconds. With many natural breaks, the broadcasting TV networks can easily insert larger

breaks for commercials. Comparing this to a game like soccer with two halves of consistent play, where there is no time to insert commercials during the game, the game of football seems much better suited for commercial broadcasting. This shows that the NFL has not only developed its product through increased uncertainty of outcome, but has a product suitable for TV.

Table 5.1: The rising costs of Super Bowl ads



Source: Thompson 2013

5.2 Revenue sharing

One of the things that significantly separate the NFL from most other leagues, making its business model unique, is the extensive system of revenue sharing that exists among the teams. This has been briefly touched upon, in order to illustrate the sources of revenue. The sharing of revenue will be addressed in order of revenue source, namely media rights and gameday revenue, to highlight an essential part of the NFL business model.

5.2.1 National media rights

The collective sale of broadcasting rights provides the NFL with a steady source of media revenue. It also guarantees that the league in fact controls all broadcasting revenue and not the individual teams. The revenue from national media contracts is pooled and shared equally among the 32 teams (NFL 1970, 46). This is one of the most fundamental features of the NFL business model. The rationale behind the implementation of equal sharing of TV revenue is best described by then NFL commissioner Pete Rozelle: "The whole thing was equalizing the competition on the field (...). The sharing of income gave everyone the tools, the money to compete equally" (Yost 2006, 75). Yost draws the conclusion that the

implementation of the sharing of TV revenue is the decision that has been most vital in securing the future economic success of the NFL, while also arguing that the sharing of national TV revenue is important in guaranteeing competitive balance (2006, 75).

This indicates that the sharing of TV revenue is meant to foster competitive balance. At the same time, Mondello argues that the pooling of broadcasting rights and the equal sharing of revenues from these have provided “the financial security that resulted in economic and competitive parity among the clubs” (Quinn 2012, 95). This clearly shows that the rationale behind the sharing of revenue is to guarantee both the survival and the economic well being of every team, but also to facilitate competitive balance on the field. Therefore, the sharing of national media rights revenue is a vital part of the NFL business model.

5.2.1.1 The Sports Broadcasting Act of 1961

The sharing of media revenue first started in 1961, in pre-merger NFL. At the time, each team had its own broadcasting agreement, which varied in value from \$35,000 for the Green Bay Packers to \$175,000 for the New York Giants (Yost 2006, 73). However, all of the agreements had been negotiated by NFL commissioner Bert Bell in the late 1950s (Horowitz & Whittenburg 2012, 2). The varying values of broadcasting contracts clearly caused large financial disparities between the teams and created inequality of opportunities, as the New York Giants had better economic opportunities to sign premier players than the rest of the teams. As a means to financially secure all teams, commissioner Pete Rozelle convinced the team owners in 1960 to forego their individual media rights contracts and collectively sell the rights, while sharing the revenue equally.

However, this practice of collective sale of broadcasting rights was quickly found by the courts to be in violation of antitrust legislation, arguing that the NFL acted as a cartel (Yost 2006, 74). The rationale was that the collective sale of broadcasting rights was restricting trade, as the NFL acted as a single seller, unfairly operating as a monopoly in violation of the Sherman Antitrust Act⁹. In response, the Sports Broadcasting Act was passed by Congress in late 1961, giving professional sports leagues antitrust exemption. This was justified by Congress as a way to foster competitive balance in sports leagues. The rationale was that the collective sale of media rights and the sharing of revenue are important in securing competitive balance. In turn, competitive balance gives added social welfare through increased quality of the NFL product to consumers (Quinn 2012, 11). However, as later shown, this has also had the added effect of increasing bargaining power

⁹ Passed in 1890 to curb big monopolies

of sports leagues, resulting in dramatically increasing values of the broadcasting contracts. This is discussed in section 9.2.2.

The importance of the Sports Broadcasting Act of 1961 cannot be sufficiently emphasized. This gave the NFL the opportunity to put in place the key function of the NFL business model of collectively selling broadcasting rights. Without the collective sale of broadcasting rights made possible by the antitrust exemption of the Sports Broadcasting Act, the NFL business model would look markedly different.

5.2.2 Gameday revenue

The sharing of revenue does not stop at broadcasting rights. The NFL also shares gameday revenue, meaning revenue from tickets, concessions, parking etc. All local revenue from games is shared on a 60-40 basis (Quinn 2012, 65), meaning that the home team keeps 60% of the revenue after the deduction of gameday expenses. The remaining 40% is pooled with the revenue from all games in the NFL and shared equally among the teams. The idea is that when both teams contribute to the value of a game through their participation, they should both extract financial value.

Previously, the gameday revenue was shared on a straight game basis between the home team and the visiting team. To even out redistributive inequalities that emerged from individual teams playing either large drawing or small drawing opponents throughout a season, the current system of pooling 40% and sharing it equally amongst all teams was put in place in 2002 (Moorhead 2006, 658). The exception to the sharing of gameday revenue is the revenue from luxury suites and club seats, which was touched upon in section 4.4.2.

5.2.3 Summing up revenue sharing

In total, 100% of broadcasting rights as well as 40% of gameday revenue is shared evenly in the league. As these are the two largest sources of revenue, it shows that the NFL is serious about financial egalitarianism, making sure that all teams have a comparable amount of revenue. Coincidentally, the two types of revenue, which are shared, are also the two types most closely related to the playing of football games. This emphasizes the notion brought forth in section 3.1 that teams are interdependent in the creation of a football game that no team can function alone.

5.3 The NFL draft

While the revenue sharing gives all teams a comparable amount of revenue, the annual NFL draft gives all teams an equal opportunity to improve themselves in terms of playing talent.

The reverse order NFL player entry draft dates back to 1936, the NFL being the first league to implement a draft (Quinn 2012, 175). The draft allocates entering players to individual teams by letting each team have one pick in each of seven rounds of incoming players from the college ranks. The order of picks is determined by the end position of each team the previous season. In essence, the last place team from the previous season holds the first pick in each round, while the champions of the past season receives the final choice in each round. This section explores the objectives and effects of the draft in order to illustrate that it is a vital part of the NFL business model.

5.3.1 Objectives of draft

According to Maxcy (Quinn 2012, 173), the NFL draft was instituted to foster competitive balance through the equal distribution of playing talent, a point also made by Horowitz & Whittenburg (2012, 2). With equal distribution of playing talent, it is believed that teams will have equal playing strength and be able to fully match one another. This way, competitive balance and uncertainty of outcome is fostered. Therefore, increased competitive balance is one of the primary objectives behind the NFL draft.

However, this is not the only objective behind the draft. Before the draft was instituted in 1936, teams would bid for the services of available players from college. This created a market situation where multiple teams sought the services of the same player (Quinn 2012, 176). This either drove up the price of signing a player, resulting in higher costs for NFL teams or centralized talent in large market teams. By instituting the draft, the NFL sought to control the salaries of players by only allowing one team to negotiate a contract with the player, thereby preventing bidding wars between the teams.

5.3.2 Improving competitive balance

The idea behind the draft as a means to improve competitive balance is clear. By giving the low ranking teams a better chance to improve their talent masses, the draft intends to equally distribute playing talent, thereby fostering competitive balance in the league. Quinn points out that before the draft was implemented in 1936, players would migrate to the teams making the best offers, naturally the teams being financially best off (Quinn 2012, 176). This would suggest that competitive balance tended to be low before the draft was instituted. Additionally, Grier & Tollison (1992), finds that the draft does have a positive effect on the winning percentage of the worst teams and therefore on competitive balance. They show that a high draft choice raises the winning percentage of teams significantly over a period of time. This is an important point, in that some correlation between holding a high draft pick and improving the win percentage does exist. Yost (2006, 3), argues that the draft

guarantees all teams a level playing field in terms of securing the best college talent, regardless of the size of the market the team operates in. On the other hand, Kahn (2000, 88) argues that the draft does not affect competitive balance in the NFL, as he finds that the implementation of the draft in 1936 had no immediate effect on the winning percentage in the period afterwards. At the same time, there is no guarantee of success in the draft. Clearly the draft does not guarantee that the worst teams become better, but simply offers an opportunity to do so, as teams are forced to choose a player based on future performance expectations (Massey & Thaler 2013, 1493). There is no guarantee that the player will perform to match expectations.

This section is not intended to show to what extent the draft improves competitive balance or how much it improves the worst teams. Too many variables exist to conclude this precisely. However, it is evident that the draft most likely does improve competitive balance to some extent, at the very least partially fulfilling its public objective. Therefore, the draft is important in giving all teams the chance for success, in this way adding to fan satisfaction by improving competitive balance.

5.3.3 Rookie wage scale and cost saving?

With the implementation of the 2011 Collective Bargaining Agreement (CBA) between the players and the league, a rookie wage scale was introduced. This was done after high draft picks had received large contracts right after being drafted and before they had ever played in the NFL. The rookie wage scale limits the bargaining power of newly drafted players by setting out the general terms of the contract for each position in the draft (NFL 2011, 21). Basically, each drafted player receives a standard contract with a value according to his draft position.

According to Coenen (Quinn 2012, 181), the biggest effect of the NFL draft is that it acts as an effective cost reduction mechanism. This is an effect of the elimination of labor market competition for the services of the incoming rookie players. By assigning each player to a team, the NFL effectively reduces the bargaining power of the player by giving the team a unilateral monopsony position, in that the team which has picked the player is the only one allowed to negotiate a contract with the drafted player. The assignment of players to a team eliminates the competitive labor market by giving each player only one potential employer to bargain with.

Since the 2011 CBA came into effect, the draft has contained the rookie wage scale (NFL 2011, 21). This is a new provision, which sets forth the length, and maximum value of rookie contracts in accordance to the position where the player is selected. Put differently, drafted players have virtually no bargaining power as it is a 'take it or leave it' deal. Even

though the rookie wage scale has improved the draft as a cost saving mechanism, the draft was still considered a cost saving mechanism in itself before the use of the rookie wage scale. Table 5.2 looks into the rookie contracts of a sample of drafted players the year before (2010) and after (2011) the implementation of the rookie wage scale, providing an interesting picture at the impact of the rookie wage scale. The table illustrates that top drafted players receive much smaller contracts in terms of value after the implementation of the rookie wage scale than before. While the 1st overall pick in 2010 received an average salary of \$13 million per year, the 1st overall pick in 2011 only received \$5.5 million annually, a 58% drop. The same trend holds true for the lower picks. As exemplified in table 5.2, the 5th, 15th and 32nd overall drafted players had drops of 45% (5th overall), 29% (15th overall) and 11% (32nd overall) respectively of their annual average salaries. However, the savings for the teams on rookie contracts become smaller and smaller the further down we get in the draft, and, as the table illustrates, the 50th and 70th overall drafted players in 2011 received marginally more per season than the players drafted in the same position in 2010. While this sample is small, it suggests that the players hit hardest financially by the implementation of a rookie wage scale are those drafted high, and that the NFL teams with high first round choices have been saving a great deal of money on rookie contracts since the CBA was implemented in 2011, an argument supported by Massey & Thaler (2013, 1493). However, as will be explained in section 6.1.1, the NFL has a cap on all payrolls and a minimum amount that teams must spend on player payrolls¹⁰. The overall salary cap figure was not lowered with the implementation of the rookie wage scale, that is, the amount that teams are allowed to spend on their payrolls has not gone down. While the rookie wage scale limits the amounts teams can spend on rookies, it does not change the overall amount that teams can spend on players. Conversely, the salary floor is still at the same value as before the rookie wage scale was implemented in 2011 (NFL 2011, 84). As the NFL teams are still required to spend a certain amount of money on their player payroll, it would suggest that the rookie wage floor is simply providing veteran players with more bargaining power in their contract negotiations, thus not actually saving the NFL teams money in the end. However, it can be argued that a draft pick is always a gamble as the future performance of the drafted player is unknown. There should, all things being equal, be less uncertainty signing a player with multiple years in the NFL, than one who has yet to prove that he belongs in the NFL. This suggests that the rookie wage scale is simply taking money from rookies drafted high and shifting it towards established veteran players, as the salary cap and salary floor is not affected by this, meaning that NFL teams can spend no more or less overall than they previously could.

¹⁰ The salary cap sets a maximum amount that teams are allowed to spend on players in a given year. See section 6.1.1 for more on the salary cap

Table 5.2: Value of rookie contracts 2010-2011

2010	Years	Max value(\$)	Average/year (\$)
1st overall (Sam Bradford)	6	78,045,000	13,007,500
5th overall (Eric Berry)	6	50,044,300	8,340,717
15th overall (Jason Pierre-Paul)	5	16,084,000	3,216,800
32nd overall (Patrick Robinson)	5	9,409,500	1,881,900
50th overall (Javier Arenas)	4	3,798,416	949,604
70th overall (Ed Dickson)	3	1,878,000	626,000
2011			
1st overall (Cam Newton)	4	22,025,498	5,506,375
5th overall (Patrick Peterson)	4	18,429,500	4,607,375
15th overall (Mike Pouncey)	4	9,259,695	2,314,924
32nd overall (Derek Sherrod)	4	6,600,000	1,650,000
50th overall (Marcus Gilchrist)	4	3,955,600	988,900
70th overall (Justin Houston)	4	2,786,248	696,562

Source: www.spotrac.com

5.3.4 Eligibility to enter NFL Draft

Players seeking to enter the NFL draft must pass certain requirements, as defined in the CBA. The most important of these is that a player must be at least three years beyond his high school graduation date to enter the NFL draft (CBA 2011, 17). As all players entering the NFL draft comes directly from the college ranks, it means that they have three years in college where the NFL teams cannot approach the players with the intent to recruit them, assuming that the players go directly from high school to college. This requirement was instituted in 1921, when the National Collegiate Athletic Association¹¹ (NCAA) was provoked by recruitment by NFL teams of players still in college (Quinn 2012, 175). From this point, NFL teams were not allowed to recruit players, which had not graduated from college. This was done to appease the NCAA.

The eligibility requirement to enter the draft has the implication that there is a clear line between players who can play in college and players who can play in the NFL. The exception is fourth year players in the NCAA, who have eligibility to play in the NCAA or enter the NFL draft. Nonetheless, there is a clear definition between players being eligible to play in the NCAA and players, which are eligible to play in the NFL.

As will be shown in section 8.1.1, the NFL operates as a monopsony in the professional football labor market. By having the eligibility requirement, the NFL makes sure that the NCAA and the NFL each have their own separate labor markets, instead of

¹¹ The NCAA arranges all college athletics

operating in the same. By requiring all players in the draft to have completed at least three years since graduating high school, only players with less than one year left of NCAA eligibility can join the NFL. In essence, the NFL has abstained from labor market competition with the NCAA (Quinn 2012, 176). No matter the perspective, the eligibility requirements are a hinder to any hypothetical labor market competition with the NCAA. Whether or not labor market competition would exist between the two leagues, had the requirements not existed, is a question for further research, as insufficient literature exists on this topic to make any conclusions here on the effect of this.

6 NFL costs

While the revenue side of the NFL is centered on equal sharing and the maximization of profits, the costs are very much controlled. The NFL business model has a strong emphasis on cost-certainty and cost-control, using these cost-controls to promote fan satisfaction through increased competitive balance. This chapter explores the major costs that the NFL incurs as well as how the NFL business model is committed to control costs.

6.1 Player payrolls

The largest share of the costs that all NFL teams incur is related to salaries to players. This hardly comes as a surprise, considering that the game produced by the players is the product of the NFL. From a production standpoint, the players are simply the main means of production. The actual 2009 team payrolls show that the average payroll was \$105.6 million. At the same time, the average total team operating expenses for 2009 was \$217.1 million (Quinn 2012, 68-69), making the player payrolls an approximate half of overall expenses. Looking specifically at the released financial reports of the Green Bay Packers (Wisconsin 2000, 10), player costs made up 66% of total expenses for the fiscal year 1999-2000, while being 68% for 1994-95. While this is certainly higher than the average for the total NFL in 2009, it simply adds to the idea that the expenses associated with players by far make up the biggest cost for the NFL teams.

6.1.1 The salary cap

As just stated, player payrolls make up the largest share of overall costs for an NFL team. One of the areas in which the NFL model diverges from that of both the MLB and NBA, is that the NFL has a hard salary cap. As explained by Miller (Quinn 2012, 70), the NFL has had a cap on all player payrolls since 1994. This is a cap on the total amount of expenses on player salaries in a given year, and not a cap on individual player salaries. The value of the salary cap is calculated every year as a set share of All Revenues (AR)¹² of the league divided by the number of teams in the league (NFL 2011, 79-83). In the period of the current CBA (2011-2020), the salary cap is at 46.5% to 48.1% of AR, depending on the year. This means that all teams are allowed to spend up to almost half of their average overall revenues on player salaries.

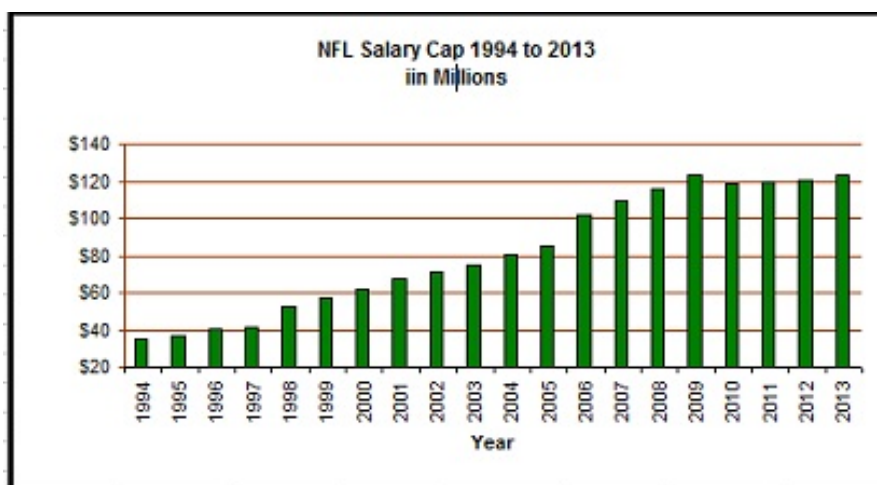
As stated in the 2011 CBA (NFL 2011, 90), “No Club may have a Team Salary that exceeds the Salary Cap”. While loopholes do exist, such as prorating a signing bonus over

¹² While it is described in the CBA as ‘All Revenue’, some revenue is excluded from the calculation of the salary cap. All football game related revenue is included in the calculation of the salary cap.

the lifespan of a contract despite the signing bonus being paid at the start of the contract, the salary cap of the NFL is a hard cap. This is in contrast to the soft cap of the NBA, where there are many exceptions to the limits set forth by the salary cap (Quinn 2012, 160).

The salary cap was implemented in 1994 as part the 1993 collective bargaining agreement. As all labor compensation is mandatory subjects of bargaining under the 1935 National Labor Relations Act, players needed, to agree to the implementation of the salary cap (Quinn 2012, 70). The players agreed to this as compensation to the owners after they had agreed to grant veteran players free agency, while owners also agreed to implement a salary floor. Before this, players were either bound to a team for the totality of their career, or the signing of a free agent player was discouraged by compensation rules¹³ (Quinn 2012, 70). As table 6.1 shows, the salary cap figure has risen steadily since its implementation in 1994. This is logical, considering that it is tied directly to overall revenue, and that overall revenue has risen steadily with each new broadcasting contract.

Table 6.1: Development of the salary cap



Source: Bleacherreport

Included in the 2011 CBA is also a provision on Minimum Team Cash Spending, more commonly referred to as the salary floor (NFL 2011, 84). The provision states that over the 2013-2016 and 2017-2020 periods, each team is required to spend at least 89% of the combined salary cap figures. This means that if the salary cap figures for a period are \$125, \$130, \$135 and \$140 million per year, each team is required to spend at least \$471.7 million (89% of \$530 million) over that four-year period. Conversely, there is no annual salary floor. Besides the fact that a team must have a 53-man roster, and that each player has a

¹³ Before the implementation of free agency in 1993, teams had the rights to players even when their contracts had expired, under the Reserve Clause. Players could sign with another team, but the team would be forced to pay compensation to the previous team of the player.

minimum salary, varying according to the number of years accrued in the league, there is no annual minimum-spending limit.

6.1.2 Increased competitive balance

One of the arguments for implementing the salary cap is the promotion of competitive balance, thereby spurring fan satisfaction through increased uncertainty of outcome. The rationale is that the salary cap limits the amount that NFL teams can spend on players, this way guaranteeing that all teams are able to spend no more than the maximum amount on player payrolls. This, in turn, should help level the financial playing field. Through the salary cap, the restrictions on a team's overall payrolls contributes to reallocation player talent, giving all teams the same proportionate amount of talent (Quinn 2012, 159). This should result in increased competitive balance between the teams and eventually increase uncertainty of the outcome of games. If the Uncertainty of Outcome Hypothesis, discussed in section 3.4.2, is correct, this will spur fan demand for the NFL.

The financially equalizing effect of the salary cap is evident when looking at the coefficient of variation of team payrolls before and after the implementation of the salary cap. In the seasons immediately before the implementation of the salary cap (1990-93), the NFL had a coefficient of variation of team payrolls of 0.16. In 2006 the same number was 0.106, showing the effects of the salary cap on team payroll variations (Vrooman 2009, 35). While this amount of data is low, it does suggest the financial implication of the salary cap, that is, it tightens the payroll disparities.

However, there is ambiguity in the literature as to whether or not the implementation of the salary cap has helped foster competitive balance in the NFL. Vrooman (2000, 374; 2009, 25) argues that the salary cap in fact promotes competitive imbalance. On the other hand, Moorhead (2006, 669) claims that the salary cap is intended to level the playing field, but that it does not amount to increased competitive balance. However, whether or not the salary cap does indeed promote competitive balance is not the key issue here. Instead, it is critical to examine the reasoning behind the implementation of the salary cap by the NFL. Conclusively determining whether or not it actually facilitates competitive balance, and eventually increased uncertainty of outcome, is not as important as determining that it is one of the intentions behind it.

6.1.3 The salary cap as a cost control

While there is ambiguity in literature as to whether or not the salary cap boosts competitive balance in the NFL, lowers it, or whether it has no effect at all, there is no skepticism as to whether the salary cap is a cost-controlling mechanism. The value of the salary cap is

calculated every year as a percentage of All Revenue of the league the previous year. This means that the total amount available to spend on player salaries is always lower than the amount of revenues (Yost 2006, 15). This guarantees every NFL team enough financial means to cover its biggest annual costs, that is the player salaries, and to do so at the same share of revenue as the previous years. Furthermore, Horowitz & Whittenburg (2012, 17) add that broadcasting revenue alone exceeds the salary cap. This means that each NFL team has financial stability in knowing that their biggest expenditure is guaranteed to be covered by one steady source of revenue.

This is an essential point to make, and the importance of this cannot be emphasized sufficiently. While the salary cap guarantees small market teams enough revenue to cover player payrolls, it provides larger market teams, with larger amounts of unshared revenue, the potential to make even larger profits. As explained by Yost (2006, 10), the extra revenue from such unshared sources as luxury suites and club seats simply boosts profits. Yost gives the salary cap the credit for this, as the large market teams are not able to spend more on player payrolls than the small market teams. Thereby, the large market teams are able to make larger profits than they might otherwise would if they were able to spend as much on player salaries as they wished. All in all, the salary cap seems to act as an effective cost control, making small market teams financially competitive while making large market teams more profitable.

6.1.4 Shrinking the salary market

The salary cap not only provides the NFL teams with cost certainty. In addition, it helps the NFL teams suppress the salaries of the players by effectively restricting the size of a team's total payroll (Quinn 2012, 171). This is a great bargaining advantage for the NFL teams in a contract negotiation with a player, as it puts an upper ceiling for salaries in the contract negotiations. While it certainly can be argued that there is a reasonable limit in most salary negotiations in regular markets, there is an actual limit, which hampers the negotiation power of players in the NFL, as the players need to adjust their value to the salary cap figure. Not even a star player will be able to negotiate a contract taking up, for example, 25% of the salary cap when a team needs 53 players on the roster, even if the team has the financial means to do so.

Krautmann & Solow (Quinn 2012, 171) add to the aspect of the salary cap suppressing salaries for players, stating that "salary caps depress salaries, forcing players to bear some of the burden of this policy." This shows the idea of constraining player salaries in a way that satisfy the teams financially. It emphasizes the idea of the salary cap being a limit to the overall possible value of NFL contracts. Therefore, the salary cap is in effect an overall

collective labor market policy, helping suppress overall salaries of NFL players, and in that way ensuring a more profitable NFL.

6.1.5 The salary floor stopping for-profit owners

The often forgotten salary floor, or Guaranteed Minimum Cash Spending, is an important feature of the salary cap. While the effects of the salary cap as a cost-control has been shown, the salary floor in turn prevents teams from keeping costs too low. Due to the sharing of revenue, all teams receive a sizeable amount of revenue. This is also evident from the correlation between wins and revenue in the NFL, which is at 0.160, far below that of the other major leagues (Quinn 2012, 66)¹⁴. This low correlation basically means that teams profit whether winning or losing. While this gives the teams financial security, it could potentially entice some owners to sign cheap players to keep costs too low, thereby making a higher profit. If we assume that there is a correlation between signing top players and winning, cutting costs by signing cheap players could also have the effect of increased competitive imbalance. This is assuming that only some teams sign cheap players to make larger profits. As competitive balance plays a large role in forming the NFL product, increased competitive imbalance would cause a decreased quality of the NFL product, potentially causing falling demand. While this is very hypothetical, having a salary floor eliminates the possibility of owners profit maximizing by signing cheap players, thereby potentially functioning as a vital part of the NFL business model.

6.1.6 Summing up the salary cap

The salary cap serves multiple purposes. First of all, it undoubtedly guarantees all teams financial security in knowing exactly how much a team is allowed to spend, and ensuring that all teams have enough means to spend. By doing this, the salary cap not only keeps teams financially viable, but also levels the playing field financially, guaranteeing that no team can spend more than others on players. While there is uncertainty as to whether or not this positively affects competitive balance, as discussed in section 6.1.2, the salary cap certainly demonstrates the ambition of the NFL to spur competitive balance. At the same time, the salary floor ensures that no team spends significantly less than the other teams, thereby preventing owners from profit maximizing. In the following, the salaries of coaches are discussed, in order to show the rather low significance of these.

¹⁴ For a comparison with the NBA, NHL and MLB, see section 8.2.1

6.2 Coaching salaries

While there is a cap on player payrolls, no such cap exists on the salaries of coaches. Statistics on the current and earlier coaching salaries are a scarcity, Miller's overview of coaching salaries in 2003 functioning as a rare insight into the incomes of the coaches (Quinn 2012, 73-74). According to Miller's overview, the average head coaching salary was \$2.51 million, ranging from \$0.75 million to \$5 million. While we can certainly expect these numbers to have increased since 2003, the increase should not be substantial¹⁵. Looking at the non-player salaries of the NFL team the Green Bay Packers for the 1994-95 and 1999-2000 fiscal years, an increase of 105% is evident (Wisconsin 2000, 11). However, part of this is due to 21 new positions being created over this period, these being both administrative and coaching positions. Despite the creation of 21 new positions, a part of the 105% increase should be contributed to an increase in the salaries of the coaching staff.

While it is difficult to compare the increase in coaching salaries between 1994-95 and 1999-2000 with that of 2003 to today, the look at the increases of non-player salaries of the Green Bay Packers should reflect a low to modest increase in general coaching salaries. What this has shown, is that with the highest coaching salary in 2003 being \$5 million, and with only a slight increase in coaching salaries for the Green Bay Packers for the mentioned five year period, coaching salary increases should not be considered significant since 2003. Assuming that this holds true, the total value of coaching staff salaries today should not be considered a major cost to NFL teams.

However, Miller briefly considers the positive correlation between coaching salaries and winning percentage (Quinn 2012, 74), arguing that teams willing to pay for top coaches have a tendency to have a higher winning percentage. While this gives large market teams with high profits a competitive advantage, being able to hire better coaches through higher and uncapped salaries, this seems like a small part of the overall picture. All in all, the ability of high revenue teams to hire better coaches should not reflect, at best, more than a modest part of the overall competitive balance picture.

6.3 Costs of Stadiums

Having discussed the major costs that NFL teams incur in relation to salaries, it is important to address at the costs of stadiums. From a business standpoint, stadiums are an essential mean of production for NFL teams. The construction of a stadium is obviously very costly, as the total costs of NFL stadium constructions between 2001 and 2009 ranged between \$364 million and \$1150 million (Quinn 2012, 47). However, NFL teams rarely carry more than a

¹⁵ Considering the increase in NFL profitability and held up against the increases in player salaries illustrated by table 6.1

small share of the costs themselves. Rather most of the expenditures are put on the city and/or the state¹⁶. In fact, in the eight stadium constructions in the above-mentioned eight-year period, the teams have only carried more than a third of the costs in one single case¹⁷. The impact of this on the NFL business model will be further analyzed in section 9.4. In this section it is simply noted that the costs of stadium constructions, although varying from team to team, is kept significantly down, giving the NFL teams a great financial advantage.

6.4 Summing up costs

As has been illustrated in this chapter and in section 4.4, player costs make up roughly half of overall costs of the NFL teams. The salary cap on all player payrolls works as an effective cost control, guaranteeing that player costs do not exceed a certain share of revenue. At the same time, it is likely that the salary cap positively affects competitive balance to some extent, as it keeps salary disparities between teams low, giving weight to the notion that fan satisfaction through uncertainty of outcome is at the core of the NFL business model. While there is no such cap on coaching salaries, the significance of these in the overall picture is modest at best, as they do not represent more than a low share of the overall costs. At the same time, the NFL seems able to control the costs of constructing another vital part of its production apparatus, the stadiums, as most costs associated with constructing new stadiums have been held by taxpayers.

¹⁶ The shares paid by the state and cities respectively varies. Important is the fact that it is the public which funds these stadiums.

¹⁷ The Philadelphia Eagles 2003 construction of Lincoln Financial Field is an abnormality, in that the team financed 60,5%. See table 9.4 for more information.

7 Minor features of the business model

This chapter looks at aspects of the business model which is not at the heart of the NFL business model, but which is still a feature of this. The closed nature of the NFL guarantees the league control over the geographical composition of teams, in turn resulting in most teams being located in the largest markets. Also, the playing schedule contributes in fostering the appearance of competitive balance, adding to the quality of the NFL product.

7.1 Closed league

The nature of entry of new teams into a sports league is a major defining point of a league. There are two basic ways of defining leagues in terms of entry, the first one is an open league. This means that every year, the worst teams are relegated, while the best teams from the second best division is promoted into the league. In an open league, the geographical location of the teams cannot be controlled, as it is simply the best team from the second best division, which is promoted, regardless of location. This is the way most European leagues are conducted (Buzzacchi et al. 2003, 171).

The other way to define a league in terms of entry is as a closed league. This is a league where the composition of teams stays the same every year. There is no relegation or promotion of teams. The only way to admit new teams into the league is through the approval of the owners of the league. Longley (2013, 13) describes North American sports leagues as closed, meaning that new teams have to get approval from current owners before entering the league or relocating a current team. This is described in Article III of the Constitution and Bylaws of the National Football League (NFL 1970, 4-5). According to this article, new teams can only enter the league with the approval of three-fourths of the current franchises, a decision made by the Executive Committee. Also, new teams entering the NFL have to pay a substantial fee to join. The latest team to do so was the Houston Texans, paying \$700 million to join the NFL in 2002 (Jasina & Rotthoff 2010, 304). This gives the league centralized power over the composition and location of the teams, in contrast to the open leagues. This is a clear commercial advantage for the closed league, as it can much easier centrally organize the geographical location of teams in order to take advantage of unexploited markets. This means that the NFL can block a move of a team to a city with an existing NFL franchise, as well as it can place a new team in a city without an existing team. Jasina & Rotthoff (2010, 304) describe how closed leagues will grant entry to the league for a new team, only if it is considered that the market of the new team carries great commercial opportunities, and if the market has previously been unexploited. Therefore, the fact that the NFL is a closed league gives it the possibility to control the composition of teams.

7.1.1 Territorial rights

Due to the NFL being a closed league, each NFL team has a designated home territory, as described in Article IV of the NFL Constitution and Bylaws (NFL 1970, 12). A Home Territory extends for 75 miles in every direction from the exterior corporate limits of a team's hometown¹⁸. Within the Home Territory, the team has the exclusive right to exhibit football games. This means that no other team is allowed to play games in the respective territory, giving teams a monopoly on NFL football in their designated Home Territories. The Home Territory also includes the Home Marketing Area, reserving full right of a team to conduct league related commercial activities for the specific team in the Home Territory. These rights include sponsorships, the creation of retail stores, as well as local advertising. In essence, each NFL team has a geographical market reserved exclusively for the team. In this sense, a team does not have to compete with other teams within their own Home Territory, giving each franchise a de facto monopoly in its own territory. Territorial rights as these are only possible in closed leagues, where the league effectively controls the location of the franchises. Mason (1999, 402-403) explains that teams in closed leagues in general enjoy such advantages as territorial rights, that is, the exclusive rights to a specific geographical market. This indicates that the case of home territories is not exclusive to the NFL, but is an aspect in most closed leagues.

Another provision of the territorial rights in the NFL is the element of telecasting. No telecast of another game is permitted in the home territory of a team whenever the team plays at home (NFL 1970, 45). This is one of the more important features of the territorial rights. It basically means that no TV viewers within a home territory are able watch other games when the home team is playing. The reasoning for this is that it should eliminate all competition for viewers within this home territory.

7.2 Location of teams

Even though other factors play a role, the size of the market is the most important factor in determining the location of a commercial sports team. According to Longley (2013, 66), the location of teams is one of the most important and strategic decisions of closed sports leagues¹⁹. Larger markets provide a larger potential fan base and more potential TV viewers, which can generate more revenue and more hometown support. This section explores the location of franchises as a factor in the NFL in relation to market size, and depicts the ability of the NFL to control the location of franchises.

¹⁸ Exceptions include the two New York teams, the Oakland Raiders and San Francisco 49er, and the Baltimore Ravens and Washington Redskins, all of which are within 75 miles of each other

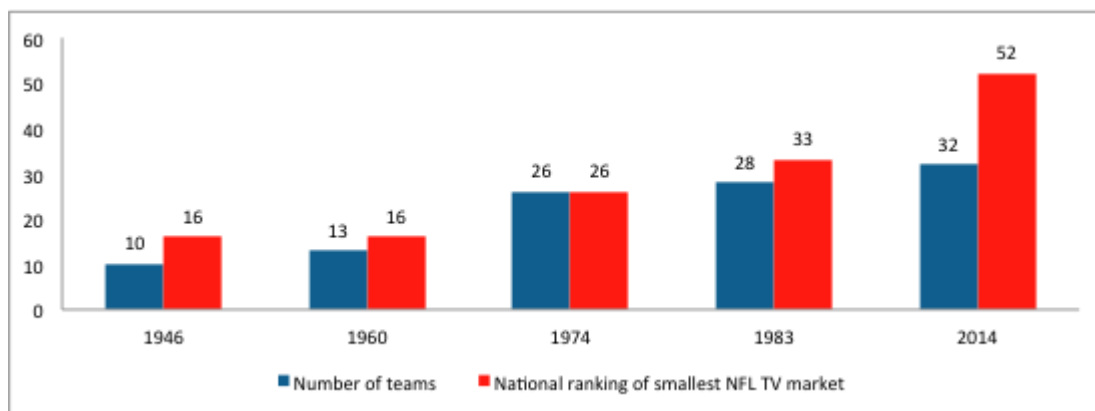
¹⁹ In open sports leagues, the league does not control team location

7.2.1 Locating teams in lucrative markets

Looking at the locations of NFL franchises since 1946, exploiting the largest TV markets seems to be of great importance to the league and the teams. Table 7.1 illustrates the number of teams compared to the smallest TV market ranking in the league over time. In 1946, the NFL had ten teams, each in one of the 16 largest markets in terms of population, with 13 teams in the 16 largest markets in 1960²⁰. In 1974, 26 teams were located in the 26 largest markets, and 28 teams in the 33 largest markets in 1983 (Longley 2013, 68-73). This shows a tendency of teams placing their geographic base into the largest markets. As mentioned in section 4.3.3, commercial sports leagues were initially based on the revenue from the sale of tickets. The placement of NFL teams in the most populated cities from 1946 to 1983 is a clear indication of this trend.

However, this trend has shifted somewhat since 1983. To a wide extent, this trend can seemingly be explained by a shift in the demographics of the NFL cities. For instance, the city of Buffalo fell to 52nd in terms of TV market size, from a place as 21st in 1974, Cincinnati dropped from 23rd to 36th place during the same period, and Pittsburgh 15th to 22nd (TVB 2014).

Table 7.1: Number of NFL teams and smallest TV market size



Source: Quinn 2013, 68-73 & TVB 2014

While there are outliers, the fact that currently 27 of the 32 teams of the league is located in one of the 31 largest TV markets in the United States (TVB 2014), is certainly not a coincidence. It seems very straightforward to conclude that the location of teams in the largest TV markets is among the most important strategic decisions of the NFL. Naturally, this is a factor beyond the control of the NFL. This trend can also partly be explained by the relocation of teams from larger cities to smaller ones, offering a new stadium financed largely by the taxpayers, such as the move of the Rams from the second largest TV market

²⁰In the statistics, the Green Bay TV market (ranked 68th in the United States by itself) includes the much larger Milwaukee TV market 120miles south of Green Bay

of Los Angeles to the 21st largest market in St Louis in 1995. This aspect will receive further attention in the analysis of the effects of the business model in section 9.4.

7.2.2 Case: Green Bay Packers - a small market team in a large market league

When considering the NFL's emphasis on locating teams in the largest TV markets, the Green Bay Packers serves as an interesting outsider in this regard. The Green Bay Packers is a team located in the NFL's smallest TV market, a market ranked the 68th largest in the nation. If the location of NFL teams is done to exploit large TV markets, should the Green Bay Packers not be moved to a place like Los Angeles, with the second ranked TV market nationwide?

However, the Green Bay Packers is a testament to the business model of the NFL. The team has been very competitive, has won 11 championships before the merger, and four Super Bowls after the merger. Moreover, the team is oftentimes referred to as Titledown, in reference to the many championships. The success of the Green Bay Packers illustrates that the business model of the NFL helps small market teams survive, and adds to the idea that the business model does give all teams a chance to win. This is supported by former NY Giants general manager Ernie Accorsi, stating that "if they [the Packers] didn't get to share in television money, they wouldn't have survived" (Yost 2006, 76). In the 1950s, before the implementation of collective sale of broadcasting rights and the equal sharing of revenue, the L.A. Rams received \$100,000 while the Packers received only \$5,000 in broadcasting fees. Had this continued, the Packers would undoubtedly have been at a competitive disadvantage. When negotiating the first TV packages in 1956, it was difficult for the CBS TV network to accept televising the games of the Green Bay Packers, yet it was eventually accepted, as the NFL would have otherwise backed the entire league out of it (Horowitz & Whittenburg 2012, 2). This clearly shows the reliance of the Green Bay team on the economic model of the NFL.

In order to compensate for the small TV market, the Green Bay Packers has done several things to overcome this disadvantage. Even before the sharing of revenue started in the early 1960s, from 1933 to 1994 the team played two to three games each season in Milwaukee, a city 120 miles south of Green Bay. This was a way of expanding the Packers fan base to include the currently 36th largest TV market (TVB 2014). The possibility of the Packers playing in Milwaukee is even described in the NFL Constitution and Bylaws (NFL 1970, 58), and the city is included in the Home Territory of the Green Bay Packers, despite being located well beyond the 75 miles from the home venue²¹ (NFL 1970, 12). By this, the

²¹ As mentioned in section 7.1.1, the Home Territory extends for 75 miles from the home city of the team

Green Bay Packers diminishes the perceived problem of being located in a very small TV market, by adding the Milwaukee TV market. In 1933, the year the team started playing home games in Milwaukee, TV revenue was not a factor of concern. Instead, the team chose to play some of its home games in Milwaukee in order to spur general fan interest and keep attendance up. Explicit evidence is not available on the success of the attempts to gain a share in this TV market. However, it is noteworthy that 71% of Milwaukee's adult population is considered fans of the Packers, amounting to the 4th most loyal NFL city²² (Miller & Washington 2009, 115).

To put this in perspective, though, it is important to note that the Green Bay Packers are believed to have one of the most loyal fan bases in the NFL, and that it is the team with the highest share of fans of their hometown adult population in the NFL. Specifically, 81% of the adult population in the city of Green Bay is listed as Packers fans (Miller & Washington 2009, 115). In addition, not a single Packers home game has ever faced a TV blackout due to unsold tickets, making the team only one of a handful of teams having accomplished this. At first, it might seem odd that the Green Bay Packers has not moved to a larger TV market long ago. However, the above stated examples of a way to come about this demonstrate the team's capacity to overcome this factor. Furthermore, it is significant to note that the team has been located in small market Green Bay since joining the NFL in 1921, and is the longest tenured team in the NFL which is still located in the same city, bearing the same name as when founded.

7.3 Scheduling of games

A feature of the NFL business model which potentially affects the uncertainty of outcome of games, and in turn the demand, is the playing schedule. The NFL season is comprised of a 17-week schedule with each team playing 16 games. Each team play home and away against the other three teams in their division (NFL 1970, 58-59). The division is subsequently paired with one division from each conference, from which each team plays one game, either home or away. The remaining two games on the schedule for all teams are played against the teams with the same standing the in previous season from each of the two remaining divisions in the same conference.

Here, it is important to notice the two games played against teams with the same final standing. If the AFC East division is paired with the AFC South division in the 2015 season, the first place team from AFC East in 2014 will play the first place teams from AFC

²² Meaning that Milwaukee is the city in the United States with the fourth highest share of the population supporting a certain NFL team. Considering that no NFL team is located in Milwaukee makes this ranking noteworthy.

North and AFC West. This shows that the NFL is not only looking to create competitive balance between the teams by making all teams equally competitive. It is also working towards uncertainty of outcome in individual games by pairing teams of perceived equal playing strength. This is a remnant of the idea of commissioner Bert Bell, who in the 1940s started crafting the playing schedule to feature weaker teams against weaker teams, and stronger teams against stronger teams in the beginning of the season, so as to make all games important later in the season (Horowitz & Whittenburg 2012, 2). This was clearly done to keep up interest in the games of all teams, as far along in the season as possible.

If the Uncertainty of Outcome Hypothesis is correct, and if the pairing of teams of equal playing strength does create extra uncertainty of outcome, it should help spur fan interest of the games. However, what factor these two games play in the overall picture is difficult to determine in practice. The final standing in a division does not necessarily say anything about the actual playing strength of one team versus another in the same final standing. Therefore, while the pairing of teams with equal records does not necessarily bring added uncertainty of outcome, it does seem to suggest that the NFL is working towards uncertainty of outcome in this aspect.

8 Market competition and comparative analysis

This chapter explores the market position of the NFL, elaborating on the statement of the NFL being a monopoly, addressed in section 3.2. The chapter shows that the NFL faces competition from other sports leagues, most notably the NBA, NHL and MLB. To add depth to the market position discussion, a comparative analysis with these sports leagues shows the difference between the NFL business model and that of these other sports leagues.

8.1 Market competition for the NFL as a league

When looking at the market position of the NFL at the league level, that is looking at the NFL as a single entity, it is not only important to describe the market of the NFL as seen in the narrow definition of professional football. It brings important depth to the discussion to look at the competition for the attention of the consumers, not just in the professional football market, or even the football market, but also in the broader sports entertainment market. This is done here to provide insight into the fierce competition that the NFL faces, thereby illustrating how the NFL product faces competition from a wide range of products.

8.1.1 The professional football market

In the narrowest definition of a market, the NFL competes for the attention of the consumers in the professional football market. In this market, the NFL is clearly the only true player, as other leagues, such as Canadian Football League or the Arena Football League are inferior on all parameters, for example revenue, viewers and the fact that players always chose the NFL when given the choice. In the literature (Longley 2013) (New & Le Grand 1999) (Leone 1997, 478) the NFL is labeled a monopoly. Despite the fact that other providers of professional football exist, the NFL should be considered a monopoly due to its superiority. The Arena Football League and the Canadian Football League clearly are fringe players.

The NFL has not always been in a monopoly position in this market. Most notably, the pre-merger NFL was challenged by the AFL in the 1960s. The competition between the two leagues for the attention of the consumers unified the two leagues, and they had fully merged by 1970 (Cave & Crandall 2001, F5). As established in section 3.2, the value of the sports league product is heavily dependent on the fact that the league is crowning the true champion. If two competing leagues exist, there is no true best team, as both leagues crown a champion. At first, the NFL and AFL did not merge, but simply played a joint championship game with the champion of each league, the game that later became the Super Bowl. As an

effect of the merger, the NFL is practically facing no competition at all in the market for professional football. This thesis, thus, finds the NFL to be a monopoly in the professional football market.

8.1.2 The football market

Broadening the perspective, the market for football in general is found. Disregarding the two minor leagues mentioned in the professional football market, the football market consists of two major players: the NFL and the NCAA, the latter arranging all games at the collegiate level. The NCAA is very popular, with many quality games, big arenas and wide support. Despite the fact that teams in the NCAA are made up of college teams, that is, functioning as a youth league, the NCAA should be seen as a major rival to the NFL.

However, it seems that the NFL and NCAA have accommodated to the situation and are able to coexist in the football market. Competition and perhaps discrepancy for the attention of the viewers seems obvious. However, the NCAA and the NFL seem to have solved this battle by having the NFL games played mainly on Sundays, while the NCAA teams in general play their games on Saturdays. As mentioned in section 4.2.1, the NFL product, as well as the product of other sports, is very time sensitive. The two leagues have made this time sensitivity an advantage, enabling the NFL and NCAA to distribute their product in a way that guarantees that fans do not have to choose between the two. Watching an NCAA game on Saturday does not preclude watching an NFL game on Sunday.

Also, a setup has been made that clearly works to prevent competition between the two leagues in the labor market. As mentioned in section 5.3.4, for a college player to enter the NFL, the player must first have entered the NFL draft. The eligibility requirements of entering the draft are prohibiting players with less than three years beyond high school to enter the NFL draft. In essence, the NFL makes sure that it does not get into a fight with the NCAA for its first, second and third year players. As mentioned, this essentially guarantees labor market peace between the two leagues, as it eliminates the competitive labor market.

8.1.3 The team sports entertainment market

As explained in section 4.2, the core offer of the NFL is sports entertainment. When looking at the NFL through this lens, it should be seen as in competition with other providers of team sports entertainment. In this sense, the NFL faces competition from not only the NCAA, but also from the other major sports leagues, namely the NBA, the NHL and MLB²³. If a consumer is simply looking for sports entertainment and does not have any preferences, it

²³ While the NFL certainly faces competition from other sports leagues, only these three major leagues are mentioned to simplify the discussion.

would seem that these four sports are interchangeable. Also, Mason (1999, 406) argues that the real competition for sports leagues in selling their product is in the wider sports entertainment market, meaning that a league like the NFL also face competition from other types of sport such as tennis, NASCAR racing and others.

As the NBA, NHL and MLB are considered the biggest competitors that the NFL faces in the team sports entertainment market, it is important to look at what separates these four leagues in terms of business model and effects thereof. Section 8.2 highlights the differences and similarities, and what makes the NFL both superior and very successful.

8.1.4 Other considerations and implications of market position

As has been shown by highlighting the NFL position in the football market, the professional football market and the team sports entertainment market, the NFL operates in more than just one market. This implies that the NFL competes in even broader markets than simply the three markets discussed. Consider the choice of a consumer between watching an NFL game or going to the theater. Both scenarios should bring entertainment value to the consumer, yet in different ways. Therefore, while the NFL faces no competition for consumer demand of professional football games, it does face competition from a wide range of other companies when analyzing the market in a broader perspective.

While the NFL operates as a monopoly in one market, it certainly competes with other sports leagues for the attention of the consumers. Whenever a company competes with other companies, it must constantly optimize the quality of its product (Longley 2013, 9). This is exactly what the NFL is doing when improving competitive balance and merging with the AFL in order to prevent a competitive market. Therefore, while the NFL market position in wider markets could be analyzed, it does not seem relevant to do so as this would only show increasing competition from suppliers of other products. Rather, this thesis concludes that the NFL faces competition from a wide range of entertainment suppliers. Therefore, as the NFL faces competition for the attention of the sports consumer, it must continuously make sure that it has a product with a high level of quality.

8.2 Comparative analysis of NFL's closest competitors

As explained in section 8.1.4, even though the NFL is virtually the only professional football league, it does face competition from other sports. The closest competition the NFL faces is that from the NBA, NHL and MLB. Therefore, it is important to analyze the overall differences between these leagues, identifying the parameters on which the leagues compete for the fans. Through this analysis, the unique structure of the NFL business model

is highlighted, revealing the aspects on which the model has been successful. A schematic comparison of the four has been made in table 8.1. First of all, it is clear that the NFL is the most profitable league, with approximately \$8 billion of revenue in 2008, with MLB coming in second with revenue close to \$6 billion. The NFL not only takes in substantially more revenue, but is also considered by far the most popular league. Moreover, the average NFL TV rating and the number of attendees at games are significantly higher than for the NBA, NHL and MLB. This cements its status as the most popular league of the four.

8.2.1 Revenue and value

It is important to dig deeper into what separates the NFL from the MLB, NHL and NBA than simply looking at overall revenue and popularity. First of all, the NFL is more profitable despite having only approximately 10% of the games that the MLB does, and 20% of the games that the NBA and NHL do. Therefore, the NFL generates a higher amount of revenue off a significantly lower output, generating \$31 million per game in 2008 while the other leagues generated \$2-3 million per game. Consequently, it seems evident that the NFL product is simply more attractive to consumers, with a higher level of quality than the product of the other leagues, thereby bringing a higher level of entertainment to the consumers. Revenue sharing is by far most extensive in the NFL, as the NFL teams share equally upwards of 80% of total revenue. By comparison, the MLB teams equally share all of its national media revenue, but only making up 17% of total revenue, while they share 31% of all local revenue, which comprised 78% of total revenue in 2006 (Vrooman 2009, 15), that is, MLB shares far less revenue than the NFL. The NBA and NHL shares even less revenue. That revenue sharing is much less extensive in the other major leagues is evident from the correlation of variation in overall team revenue. The NFL clearly has more financial parity, as the correlation of variation (CV) in team revenue is markedly lower for the NFL than for the other leagues. The widest margin in 2006 was between the NFL at 0.165 and MLB at 0.292. That greater revenue sharing exists in the NFL, is also clear from the fact that teams in the NFL do not generate as much additional revenue due to winning additional games, as the correlation of variation between team revenue and wins is very low. For the NFL this number is 0.160 suggesting that wins do not impact revenue in any significant way. In other words, teams in the NFL make money whether they win or lose. In MLB, on the other hand, this number is 0.532, showing a much closer correlation between winning and generating revenue. While the sharing of national media revenue is also a norm in the other leagues, the national broadcasting deals in these leagues, from which the revenue is also shared, are economically insignificant. Instead, these leagues depend on local broadcasting deals with

unshared revenue, leading to greater economic inequality as the deals depend on the market size (Quinn 2012, 58).

Table 8.1: Comparison of major North American sports leagues

	Number of teams	Total games per season	Salary cap	CV of payrolls (2006)	Ave TV rating (2000-09 finals)	Ave attendance per game	"Most popular sport?"
NFL (08)	32	256	Hard	0.106	41.7	66625	35%
MLB (08)	30	2430	Luxury tax	0.362	12.1	32516	14%
NBA (08)	30	1230	Soft cap	0.189	8.4	17394	6%
NHL (08)	30	1230	Hard cap	0.102	2.6	17308	5%
	League wide revenue (million)	Revenue per team (million)	CV in team revenue (2006)	Revenue per game (million)	CV of revenue and wins	Ave value of teams (2006)	CV of team value
NFL (09)	\$8016	\$250.5	0.165	\$31.31	0.160	957	0.171
MLB (09)	\$5898	\$196.6	0.292	\$2.43	0.532	431	0.446
NBA (08-09)	\$3786	\$126.2	0.257	\$3.08	0.445	372	0.244
NHL (08-09)	\$2819	\$93.97	0.248	\$2.3	0.246	200	0.333

Sources: Miller & Washington 2009; Quinn 2012, 58-66; Vrooman 2009, 36-37; Schwartz & McGarry 2014

Another aspect on which the NFL distinguishes from the other leagues, is the value of the teams. The average NFL team was in 2006 worth \$957 million, with a low correlation of variation of 0.171. The average MLB team was only worth less than half of that, with \$431 million, while the MLB had much larger disparities with a CV of 0.446. Team values in the NBA and NHL were even lower, with averages of \$372 million and \$200 million, with a CV of 0.244 and 0.333. The low disparity in team values in the NFL is clearly an effect of the sharing of revenue.

8.2.2 Variation in costs

On the cost side, only the NHL has a salary cap similar to that of the NFL, while the soft salary cap of the NBA²⁴ and the luxury tax system of the MLB²⁵, each provide large loopholes to spend much more than other teams. This results in widely differing CV of team payrolls in the leagues, ranging from 0.102 of the NHL and 0.106 of the NFL, compared to 0.189 by the NBA and a whopping 0.362 by the MLB.

The New York Yankees, the team with the highest value of the MLB in 2006, was valued at \$1200 million, also having the most revenue. At the same time, the team was the

²⁴ A soft salary cap is a salary with many loopholes

²⁵ In which teams pay a fee for breaking a certain amount, but are allowed to do so

highest spender on payrolls at \$219 million. The lowest valued team, the Florida Marlins valued at \$244 million and with only \$122 million in revenue, only had a \$31 million player payroll, less than 13% of the Yankees' payroll. In the NFL, the second highest spending team with a payroll of \$151 million, was the Minnesota Vikings while also being the lowest valued team and having the lowest amount of revenue of the 32 teams²⁶. By comparison, the Oakland Raiders spent the least on payrolls with \$94 million 62% of the Vikings' expenditures (Vrooman 2009, 36)²⁷. This shows a stark difference between the two leagues. In the MLB, the lack of an effective revenue sharing system and a salary cap seems to enable the highest valued teams with the most revenue to spend the most on player payrolls. Conversely, in the NFL the lowest valued team with the least revenue coincidentally spent second most on player payrolls in 2006. While the fact that the lowest valued team spent the second most on player payrolls in the NFL could be a coincidence, it emphasizes the importance of the revenue sharing and the salary cap to the NFL business model. In the NFL, all teams are able to spend to the value of the salary cap, and high revenue teams are unable to use their financial advantage to spend more money on players than their competitors.

8.2.3 Summing up the comparative analysis

While this comparative analysis does not take all aspects into consideration, it certainly heavily implies two things. First of all, it implies that the NFL has the business model, which is by far the one most based on financial egalitarianism of the four leagues. The figures presented in this chapter show that the NFL has a very low dispersion of team values, team revenue and payrolls. Secondly, the analysis has shown that the NFL is by far the most financially successful league of the four. More viewers watch NFL games and more people attend NFL games, which simply generate more revenue. While the success of the NFL can to some extent be attributed to simply playing a sport that the fans cherish, this is only part of the explanation. The business model of the NFL necessarily plays a big role. Assuming that the Uncertainty of Outcome Hypothesis is correct, and that the low dispersions of team revenue and team payrolls translate into competitive balance, the business model certainly is a big factor in the success of the NFL. Therefore, this analysis adds weight to the idea that financial egalitarianism and commercial success of sports leagues goes hand in hand, and that the NFL business model is one to copy for other American sports leagues.

²⁶ The highest spending team was the Indianapolis Colts, spending \$153 million

²⁷ For a full list of values, revenue and payrolls of NFL, MLB, NBA and NHL teams in 2006, see Vrooman 2009, 36-37

9 Effects of the business model

So far, this thesis has shown the mechanics and features of the NFL business model. It has portrayed the rationale behind the features of the business model and it has been demonstrated how the NFL has worked towards the most egalitarian business model in American professional sports. This chapter will take this elaboration a step further, discussing the effects of the business model. The business model brings added competitive balance and uncertainty of outcome, giving the NFL a higher quality product. The effects also include the ability of the NFL to charge higher fees from the TV networks through its monopoly position, while the revenue sharing gives individual teams the opportunity to force states and cities into financing large stadium constructions.

9.1 Increased competitive balance and uncertainty of outcome

Competitive balance and uncertainty of outcome are two aspects that have been discussed extensively in this thesis. It is shown how competitive balance and providing a level playing field is an important part of the NFL business model. So far, this thesis has also relied on the Uncertainty of Outcome Hypothesis in order to provide an explanation for the goal of uncertainty of outcome and competitive balance of the NFL. However, it is important to briefly look at how the business model affects competitive balance. The intention is not to provide a statistical analysis of winning percentage or closeness of games, but merely to show what effect on competitive balance the literature suggests these to have.

According to Vrooman (2011, 25) the NFL is by far the league with the greatest competitive balance of the major leagues, not only in the United States, but also including the major European soccer leagues. He argues that this is due to both revenue sharing and cost controls, concluding that the basis of keeping all teams financially competitive is at the foundation of the commercial success. Yost goes as far as describing the success of the NFL to be a direct result of the business model, as it directly results in the “high-caliber competition that has kept stadium seats filled and television viewers enthralled” (2006, 3). In this way, Yost not only contributes the success of the NFL to a high level of competition, but also contributes the high level of competition to the “quasisocialistic system” (Yost 2006, 3), undoubtedly referring to the centrally organized system of revenue sharing, cost-controls and distribution of playing talent. Grier & Tollison (1993, 298) argues that the draft does promote competitive balance, while also concluding that other mechanisms of the NFL business model has influence on the creation of competitive balance, such as the sharing of revenue and the salary cap. Moorhead (2006, 659) argues that the success of the NFL relies to a wide extent on the competitive balance, where all teams can make the playoffs every

year. This, he argues, is to a wide extent a result of the revenue sharing system, where all teams have the financial resources to compete on the field. In turn, this results in the NFL being vastly popular, causing networks to pay “endlessly increasing sums of money to secure NFL broadcasting rights” (2006, 659).

All the aspects covered here seem to heavily suggest that the commercial success of the NFL can to a wide extent be attributed to the creation of competitive balance through revenue sharing, a salary cap, as well as the draft, resulting in a higher quality of the product, which in turn creates an increasing demand for the NFL product.

9.1.1 Quality product

It has become evident that the NFL has worked towards building a business model focusing on improving the competitive balance of the league, with the purpose of increasing uncertainty of outcome. This is meant to foster increased quality of the NFL product. This section displays the fact that the NFL fields a quality product. To do this, an examination of the demand for the product is presented. This section portrays the TV ratings and viewerships of regular season NFL games, as well as comparisons between the Super Bowl and the championship games of the other major leagues. This is done to highlight the drastically higher demand that the NFL is facing compared to the NBA, NHL and MLB.

The comparison in table 9.1 between the average TV rating of the championship games of the four major leagues, shows that the NFL is the superior league when looking at TV ratings. With a rating almost four times as high as second placed World Series, the Super Bowl far exceeds all three other major sports leagues. The number of viewers tells the same story. With a markedly higher rating, the NFL seems to satisfy the need of the sports consumer to a much wider extent than the other major leagues. As the quality of the sports entertainment product lies in the uncertainty of outcome, the fact that many more viewers tune in to the games of the NFL, shows that many more consumers are satisfied by the

Table 9.1: TV ratings of championship games 2000-2009

Event	Years	Rating	Viewers (1000s)
Super Bowl (NFL)	2000-2009	41.7	90,421
World Series (MLB)	2000-2009	12.1	19,053
NBA Finals	2000-2009	8.4	14,320
Stanley Cup (NHL)	2000-2009	2.6	4,081
BCS (NCAA)	2000-2009	16.4	17,385

Source: Quinn 2012, 90

product quality of the NFL than of the other leagues. Another statistic showing the superiority of the NFL, is that of the 50 most watched sports events on TV in 2013, of which 46 were NFL games. In 2012, the same number was 34, while most other events on the list that year were part of the Summer Olympics, which is only held once in every four years. In 2011, only five other sporting events than NFL games were among the 50 most watched (Sports Media Watch 2013; 2012; 2011). A majority of these are regular season games, while only a single game of the World Series of the MLB made it into the top 50 in one of the years. This greatly reinforces the claim that the product of the NFL is vastly more popular than that of the other major leagues. The fact that a championship game of the MLB - the second most popular American sports league - was not even present on the list of the 50 most watched sporting events for two of the three years, while the list was mainly made up by NFL games, clearly cements the superiority of the NFL.

These TV ratings and rankings show beyond any doubt that the NFL is the greatest television league in American sports. It also suggests that the entertainment value of the NFL is far greater than that of the other sports leagues. This heavily suggests that the work of the NFL towards creating a superior product through increased uncertainty of outcome has had a great effect. As the quality of the NFL product lies in the entertainment factor, the fact that a much greater number of people consistently seek entertainment satisfaction in NFL games, shows that the product quality is in fact much higher than that of competing leagues. While other factors undoubtedly also contribute in the high TV ratings, the NFL focus on competitive balance along with its great popularity gives rise to the Uncertainty of Outcome Hypothesis when showing that the work of the NFL towards uncertainty of outcome is paying off.

9.2 Monopoly position and effects thereof

As has been explained in section 8.1.1, the NFL holds a monopoly position in the market for professional football. This section explores how the NFL business model has established this position, and extensively shows how it has exploited this position to extract ever-increasing fees from its sale of broadcasting rights, by creating bidding wars between the TV networks.

9.2.1 Monopoly position

As discussed in section 8.1.1, the NFL is a monopoly in the market for professional football. However, the fact that the NFL is the only true professional football league is not what

makes the NFL a monopoly in relations to the TV networks, who have been established to be the largest source of revenue for the NFL. Most professional sports leagues can be defined as monopolies, as sports leagues are natural monopolies, as discussed in section 3.2. What makes the NFL unique compared to NBA, NHL and MLB is the collective sale of broadcasting rights. By collectively selling broadcasting rights instead of having teams individually negotiate broadcasting deals, the NFL is in effect creating a monopoly on the broadcasting of NFL games, eliminating the competitive market in which teams sell the rights individually. The clear difference between the NFL and the other major sports leagues in the United States is the fact that in the other leagues, the TV networks are not subject to dealing with only one single seller, but buy the rights individually from the teams. If TV networks, for instance, do not focus on which baseball games to show, they can negotiate contracts with various teams, reaching the economically most advantageous deal to broadcast.

9.2.2 Collective sale and bargaining power over TV networks

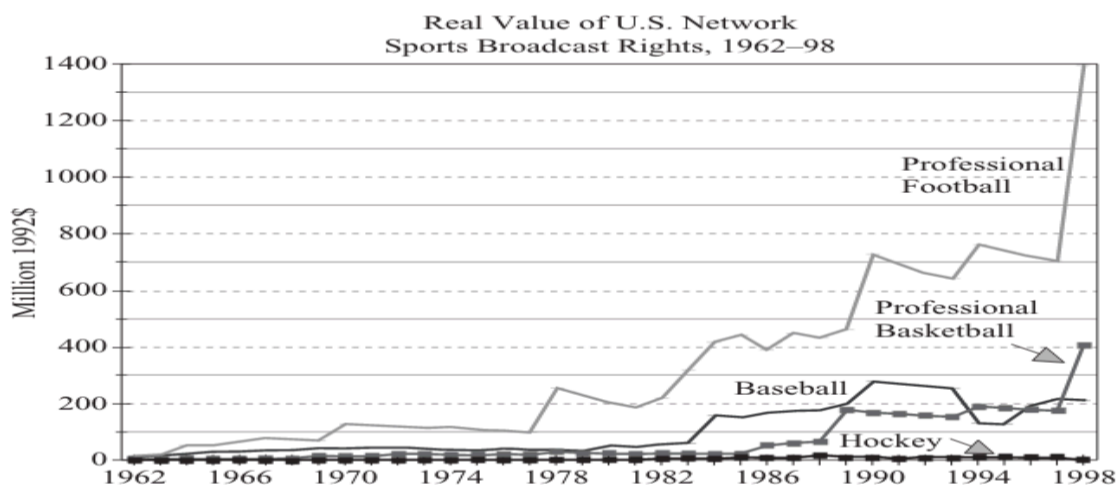
According to Miller, “economic theory tells us that, compared to a perfectly competitive industry, a monopoly firm restricts output and charges consumers a higher price” (Quinn 2012, 64). This means that whenever a monopoly firm exists, it is able to extract higher prices from the buyers of its product. This is also clearly supported by the theoretical background in section 3.3, which shows that monopolies tend to result in higher prices from the buyers. The restriction of output and increasing prices are consistent with that of a monopoly.

It is here argued that one of the main reasons for the superiority of the NFL business model is the collective sale of broadcasting rights. As explained in section 5.1, the collective sale of broadcasting rights has been in place in the NFL since the early 1960s. This unifies all power of brokering broadcasting deals in one single seller. Evens et al. (2013, 40) note how sports broadcasting markets are often characterized by “supply-side monopolies and demand-side abundance”. This seems to be the exact case with the NFL, as the NFL exerts power over the supply of NFL rights, while a handful of TV networks are looking to buy NFL broadcasting rights. As shown by Yost (2006, 78), the NFL signed broadcasting package deals with five different TV networks in 2006. By operating in a market with a handful of buyers and only one seller, the NFL naturally extracts increased bargaining power, compared to the situation where the individual teams sell the rights. The importance of collective sale of rights is further highlighted by New and Le Grand (1999, 32), stating that, in sports leagues, when individual clubs sell their own rights to broadcasters, they are not able to extract the monopoly prices that leagues do when they sell their rights collectively. This

clearly implies that leagues with collective sales of broadcasting rights are able to extract higher overall fees for their rights than in leagues with individual team sales.

The NFL has been very successful in using this bargaining power to extract higher fees from the networks. This has been done by playing networks against each other, causing them to overbid for the NFL rights. Yost (2006, 75-76) directly argues that commissioner Pete Rozelle skillfully played networks against each other, from the start of the collective sale period. This resulted in rights fees quickly going drastically up. In the first four years alone, the national contract with CBS increased from \$4.6 million per year to \$14.1 million per year. Also, Cave & Crandall (2001, F9) show how professional football broadcasting rights have increased compared to the other three major leagues, as illustrated in table 9.2. As is evident from table 9.2, the rights of the NFL have, in the period 1960-1998, basically exploded compared to the modest increases in the value of rights of the MLB, NBA and NHL.

Table 9.2: Real value of US Network Sports Broadcast Rights, 1962-1998



Source: Cave & Crandall 2001, F9

The fact that the value of NFL television rights have soared, while the rights of other leagues have only increased modestly, supports the idea that the collective sale of broadcasting rights is the engine behind this hefty growth of the league. This is supported by Vrooman (2009, 27), directly arguing that this pooling of media rights and the following monopoly position yields greater revenues for the NFL. As so, it seems safe to propose that the NFL has utilized the monopoly position that the collective sale provides, while suggesting that the individual team sales of NBA, NHL and MLB has held these leagues back in terms of broadcasting revenue.

Cave & Crandall (2001, F5) argue that the bargaining power of the sellers of sports broadcasting rights depends on the available substitutes for the programming. In the case of

the NFL, there are no available substitutes for professional football, as the NFL clearly is the only league with the viewership numbers that broadcasters cherish to sell advertising space at high rates to. This also drives up the bargaining power of the NFL to TV networks. While it can be argued that the other three major sports leagues in America are also the only major leagues within their sport, they either do not collectively sell their broadcasting rights, or the collectively sold rights simply represent a very small share of their total broadcasting rights sales. All in all, the collective sale of broadcasting rights contributes to the monopoly power of the NFL, a power that is fully utilized. To illustrate the effects of the monopolization of broadcasting rights, the following section provides an example of this.

9.2.3 Monopolization and liberalization of NCAA rights

While the previous section exposed that the collective sale of broadcasting rights most likely has a big effect on the prices charged for broadcasting rights, it can be difficult to measure the economic extent of this. This is due to the fact that in recent time, there is no way to measure the NFL with and without this collective sale, as the NFL has sold the rights collectively since 1962. However, Miller (Quinn 2012, 64) highlights the effects on prices that a collective sale of broadcasting rights can have in a very similar situation and with a very similar product. Between 1952 and 1983, the NCAA was collectively negotiating broadcasting deals with TV networks for what is known today as the Football Bowl Subdivision - the division of best teams in the NCAA. In 1984, the United States Supreme Court found this to be in violation of antitrust law, much like in the case of the NFL in 1960²⁸. This forced the NCAA to allow individual schools and conferences to negotiate their own deals. The striking thing to notice, is that in the five year period leading up to this ruling, an average of 25 NCAA football games were televised each year, with right fees of \$4.02 million per game. In the six years following this ruling, the number of games televised jumped to 41 per season, while average fees fell to \$1.12 million per game. To put it in other terms, the number of games televised increased by 64% while fees fell by 70%.

The NCAA case shows that the collective sale of broadcasting rights is a classic case of monopolization. First of all, the hefty increase in televised games after the liberalization shows that a monopoly on sports rights limits the supply of games. However, there can be numerous reasons for the increasing output. The increase in games could, for instance, be an effect of the falling prices that is that broadcasters could afford to buy more rights. However, this is not of great concern here. Instead, it is critical to consider that this case shows how monopolization of sports broadcasting rights hugely affects the fees charged for the broadcasting rights. Therefore, the large fall in the average fees per game should be

²⁸ The Sports Broadcasting Act of 1961 did not give antitrust exemption to the NCAA

very much attributed to the liberalization of the NCAA sports rights market. As demonstrated, monopolies tend to charge higher prices than is the case in a competitive market, where individual teams or conferences sell their own games. The case of the NCAA before and after 1984 seems to be a textbook example of a monopoly industry, as the breakup of the NCAA monopoly drastically reduced the prices charged.

This relates very easily to the situation of the NFL, as it shows the great effects that the monopolization of broadcasting rights and the breakup of the same have on the price charged by the supplier. While the NFL and NCAA are not two exact matches, they are though very comparable, with the same product features and operating in the same industry. As prices fell by 70% after the liberalization of NCAA rights, this clearly suggests that the NFL enjoys a great benefit from its monopolization of broadcasting rights. This indicates that the collective sale of broadcasting rights provides the NFL with bargaining power, greatly influencing the fees charged for the broadcasting rights.

9.2.4 Restriction of output and implication of low supply

As mentioned in section 4.2.3, the number of games in the NFL is distinctly lower than the number of games in the other major sports leagues, with only 16 games per NFL team compared to 162 per team in the MLB and 82 in the NBA and NHL. However, this should not be seen as a restriction of output, but rather as a difference in the nature of the sports itself. Like in the NFL, the NCAA teams only play games in the fall, and only play 12 games per season, while the Canadian Football League has a 20-week regular season schedule. The NFL falls in the middle with 16 games, suggesting that the NFL does not restrict the supply of its games by cause of commercial advantages, but rather that the NFL is merely consistent with the quantity of other leagues within the same sport.

While it seems that the low quantity of NFL games is not a restriction of output, it still adds to the effect of helping the NFL secure increased bargaining power. Sought or not, the low supply is still a low supply, and with a much lower output of games than MLB, NBA and NHL, the NFL naturally gains an advantage in the negotiations of media contracts with the TV networks. With a low supply, the NFL is able to create a scarcity effect, utilizing it in the negotiations for broadcasting contracts with the TV networks.

9.2.5 Results of collective sale of broadcasting rights

All in all, it seems that the collective sale of broadcasting rights gives the NFL a great advantage in securing increasing revenue from this source. The collective sale practice gives the NFL a monopoly position and increasing bargaining power over the TV networks, which are forced to pay higher fees in order to secure NFL rights. As this is the case, the

collective sale of broadcasting rights is clearly a key feature of the NFL business model, while the higher broadcasting rights fees is a key effect of this collective sale. Also, the relative low supply of NFL games gives the added scarcity effect, while the broadcasting rights are in high demand by the TV networks. The exploding fees for broadcasting rights of the NFL and the much lower increases in fees for the leagues with individual team sales, heavily suggests that the NFL has created a large advantage for itself.

9.3 Monopsony power over players

The monopsony power that the NFL teams extract through the draft has already been established in section 5.3.3. However, the NFL also holds monopsony power when considering employment. The NFL is the only true professional football league available for players, as other leagues, such as the Canadian Football League, are considered far inferior to the NFL. This gives the NFL monopsony power, as the NFL as a league has a collective labor policy as exemplified in the salary cap, discussed in section 6.1.1. Longley (2013, 10) touch upon the monopsony power when explaining that the monopoly position of sports leagues allow the leagues to assert bargaining power over stakeholders, such as employees. In this way, a monopoly sports league gains leverage over players by reducing labor market competition, basically resulting in a transfer of wealth from players to owners. This brief discussion of the monopsony power of the NFL demonstrates that the NFL has the lowest mean salaries of the four leagues, while providing evidence that when challenged by other football leagues, salaries tend to increase.

Before looking at the salary implications for the players, it is important to address another important aspect. As explained in section 9.2.2, the NFL is a monopoly in the supply of NFL media rights, as a result of the collective sale practice. In the same way, the NFL is not a monopsony in the football player labor market. Here, the distinction should be made between the NFL as the only major football league available for players and the market competition for players by the individual teams within the NFL. However, as the NFL has collective labor policies, it does extract some monopsony power.

9.3.1 Mean salaries

While discussing the monopsony power of the NFL as compared to that of other leagues, comparing mean salaries of NFL players with that of the NBA, NHL and MLB is important in showing the disparities that exist between the leagues. Vrooman (2009, 15) presents the mean salaries of the four leagues for the 2007 season, as shown in table 9.3.

Table 9.3: Mean salaries in the major leagues, 2007

	NFL	MLB	NBA	NHL
Mean salary (million)	\$1.4	\$2.95	\$5.22	\$1.77

Source: Vrooman 2009, 15

The table clearly shows that the NFL has the lowest mean salary of the four leagues. On the surface, this seems like an oddity, as the NFL generates the largest amount of revenue of the four leagues. One would assume that the financially largest league would be able to pay its players the most. However, the NFL is the league with largest rosters, consisting of 53 players. Conversely, an NBA roster only consists of 15 players. This stark difference clearly provides most of the explanation for the much larger NBA salaries. With a mean salary of \$5.22 million and 15 players, the average NBA payroll was \$78.3 million. In contrast, the average NFL payroll was \$74.3 million in 2007. As NBA revenue is less than half of NFL revenue²⁹, it can be concluded that the NFL spent relatively less of its revenue on player salaries than the NBA in 2007.

Additionally, the mean salary in the MLB is approximately twice that of the NFL, while an NFL roster is only 32% larger than an MLB roster, consisting of 40 players. Part of the explanation ought to be the fact that the NFL holds greater monopsony power over players, and are consequently able to successfully suppress salaries. Vrooman (2009, 22) describes the NFL as having the greatest monopsony power of the four leagues, while also describing the NFL Players Association, the labor union of the players, as weak (2009, 15), while that of the MLB as strong. This could, at least to some extent, explain that the NFL players have the lowest mean salary of the four leagues, as NFL teams are able to better suppress salaries. While it is difficult to contribute this effect to any one part of the NFL business model, the fact that it is the sole true professional football league and has a strong collective labor policy factor in.

9.3.2 United States Football League: NFL monopsony power challenged

One example in recent years exists of a rival league challenging the NFL monopoly and monopsony power. As explained in section 8.1.1, since the 1970 merger of the AFL and the NFL, the modern day NFL has only sporadically faced competition in the professional football market, in both the output and labor market. However, the most significant competition occurred in the period 1982-1985, and came from the United States Football

²⁹ As shown in table 8.1

League (USFL). As the NFL players went on a strike in 1982, the USFL was able to lure a number of players into its fold, and act as a real competitor to the NFL. During the USFL period of 1982-85, real player salary increases in the NFL were between 20% (Kahn 2000, 79-80) and 27% annually (Vrooman 2009, 22). In the period of 1977-82, preceding the USFL era, the same number was 4% annually, while it was 5% annually for the 1985-1989 period, which just succeeded the USFL. Kahn (2000, 78-79) explains that NFL TV revenue grew at the same rates before and during the USFL years, and that attendance at games grew substantially, leading up to the USFL years, while decreasing in the 1982-85 period. This clearly means that the large NFL player salary increases in the USFL years cannot be explained by a large growth in NFL revenue. Rather, this is taken as a clear sign of the monopsony power of keeping down wages in the years preceding and succeeding the USFL challenge, through collective labor market policies. The USFL example shows that when the NFL does not face labor market competition and acts as a monopsony, salary increases are low. Concurrently, when facing labor market competition, NFL salaries go markedly up. While the amount of data is obviously very low due to only one time period and one challenging league, it gives a fair idea of the effects that the lack of labor market competition.

9.4 Exploitation of local communities for stadium financing

This thesis has shown the big expenditures that the NFL teams have on especially player payrolls. The costs of the home venues, however, have only been addressed briefly in section 6.3. This is partly due to the fact that most NFL teams only carry a minority of the stadium costs. Most stadiums built in recent history have been financed by a majority of public funds. In four out of the 14 stadium constructions between 1992 and 2009, the respective team did not contribute anything financially, while in 13 out of 14 instances, the team contributed less than 32% of the aggregate costs (Quinn 2012, 47), as shown in table 9.4. In the 1990s, a number of NFL teams got new stadiums. The Cleveland Browns' new stadium in 1990 is a good example of how the NFL team only pays a small share of the cost of building a new stadium, as city of Cleveland contributions was \$190 million, the State of Ohio paid \$37 million, while the Browns only paid \$64 (Quinn, 2012, 48). This way, NFL teams are able to elicit large public contributions to finance their stadiums. Compared to a regular business, this gives the NFL teams a great advantage, as they receive large public subsidies for an essential means of production of their main product.

Table 9.4: Financing of NFL stadiums 1992-2009

Team	Year	Total cost in million	Share paid by team	Share paid by public	Other
Atlanta Falcons	1992	\$214	0%	100%	0%
St. Louis Rams	1995	\$280	0%	100%	0%
Baltimore Ravens	1998	\$220	13.2%	86.8%	0%
Tampa Bay Buccaneers	1998	\$190	0%	100%	0%
Cleveland Browns	1999	\$308	25.6%	68.2%	6.2%
Tennessee Titans	1999	\$290	0%	100%	0%
Denver Broncos	2001	\$364	24.7%	73.1%	2.2%
Pittsburgh Steelers	2001	\$244	31.4%	68.9%	0%
Detroit Lions	2002	\$500	14%	-	-
Houston Texans	2002	\$402	28.6%	71.4%	0%
Seattle Seahawks	2002	\$430	23.3%	76.7%	0%
Philadelphia Eagles	2003	\$512	60.5%	39.5%	0%
Indianapolis Colts	2008	\$715	14.0%	86.0%	0%
Dallas Cowboys	2009	\$1150	28.3%	58.7%	13.0%

Source: Quinn 2012, 47

As explained by Leone (1997, 478), the monopoly market position enables the NFL to extort local governments for large stadium contributions. This relates to the basics of supply and demand. A high amount of cities aspire for an NFL team, while, on the other hand, a lower amount of NFL teams exists. This has caused cities to overbid each other in an effort to attract the 'service' of an NFL team in the given city. This way, it is not the exact monopoly position that enables the teams, but rather the fact that there is a lower supply of NFL teams than there are cities with a demand for the same. This is shown by Vrooman (2009, 32), in stating that approximately 30 mid-size markets compete for 10 to 12 teams in each league,

including the NFL. This is supported by Winfree (Quinn 2012, 33) when arguing that: "The combination of high demand and the NFL's monopolistic structure has allowed teams to credibly threaten to move in order to get stadiums built". This clearly shows that the NFL teams have great bargaining power over cities wanting an NFL team, both current cities and potential new NFL cities.

Given the size of these investments, it would seem that cities usually should be heavily rewarded and receive a decent return on investment. However, while NFL teams receive hefty public subsidies, the cities and taxpayers do not get a decent return on their investments in most instances. According to Winfree (Quinn 2012, 44-45), sports teams and NFL teams alike, do not bring any economic benefit to the local area in which it is located. Cities are usually simply left with the bill and little else but the emotional effect of being an NFL city to show for it. The fact that most cities do not get a good return on their investment puts more emphasis to the notion that the NFL is receiving deals well beyond their fair market value.

9.4.1 Revenue potential of new stadiums

As explained in section 4.4.2, the revenue from luxury boxes and club seats are, unlike ticket revenue, kept entirely by the home team. Newer stadiums are increasingly built around club seats and luxury boxes, enabling teams to reap greater unshared revenue than teams in old stadiums. As public finances mostly finance new stadiums, taxpayers indirectly contribute to the profits of NFL teams. Also, teams contributing to the finances of constructing a new stadium, usually pass on the costs to the season ticket holders through the added cost of a Personal Seat License³⁰, which Vrooman (2009, 32) describes as monopoly exploitation of the fans.

By having the local taxpayers foot a large part of the bill for the new stadiums, which, has more unshared revenue potential, resulting in more team revenue, a wealth transfer from the taxpayers to the teams occurs. The increasing unshared revenue potential of new stadiums is also clearly reflected in the values of the teams. Teams playing in new venues are simply valued higher and have higher revenue multiples times higher than the revenue of teams playing in older venues (Vrooman 2009, 35). As unshared revenue is simply extra-added profits for NFL teams, it seems to suggest that taxpayer money indirectly goes into the bottom line of the NFL teams.

Concurrently, teams are not interested in building new stadiums unless they can extract unshared revenue from this. While the taxpayers and the fans in most instances are

³⁰ A PSL is a fee paid for the right to buy season tickets for a certain seat in a stadium

left with the majority of the bill, NFL teams contribute a substantial amount in most cases. But the incentive to contribute to building a new stadium is missing without the possibility of this generating increased revenue for the team. Consequently, Moorhead (2006, 663) argues that some unshared revenue is needed to provide incentives for teams to construct new stadiums. Without this, teams would only receive a small fraction of the additional stadium revenue, most likely making it difficult for the team to make the construction of a new stadium a profitable business.

9.4.2 Solidarity as the opportunity to be selfish

As explained in section 7.2.1, the NFL has always looked to place franchises in the biggest cities due to its bigger revenue potential (Longley 2013, 68-69). This makes sense as a city with a large population offers a bigger potential fan base and, more importantly, consumer base. However, the reason that an NFL team is able to move from a large market city to a smaller market city without suffering financially is due to the extensive revenue sharing that exists in the NFL.

As a large majority of all revenue is evenly shared among the teams, moving from a big market city to a midsize market city does not affect the revenues of an individual team considerably, why the move does not threaten the team financially. That is, the NFL business model provides teams with the possibility of seeking out better stadium deals in smaller TV markets. The solidarity of the business model enables teams to consider their own interests, not considering the long-term financial viability of the league. Vrooman (2009, 34) explains that while teams in the other major leagues also make use of relocation threats towards cities, NFL teams are more likely to leave a city. This, Vrooman argues, is due to the extensive revenue sharing in the NFL, supporting the idea that the business model of the NFL enables the venue relocation extortion game in the current extent. The fact that the business model enables individual NFL teams to increase their profitability, should be considered a great advantage for the teams.

However, while the NFL business model enables NFL teams to leverage cities and local governments for public funds for new stadiums, and this way seriously cut costs, there is a downside to this. A downside, which potentially can undermine the NFL business model. As has just been explained, NFL teams can be enticed to leave large TV markets for a smaller TV market with a potentially smaller fan base and less shared revenue potential. A team is ready to do this to play in a modern stadium with more unshared revenue potential, due to more club seats and luxury boxes. The Rams, moving from the second largest TV market in L.A. to the currently 21st ranked TV market in St. Louis in 1995, is a good example of a team moving from a large TV market to a smaller one (Moorhead 2006, 665). The Rams

received 100% public financing of their new St. Louis stadium, the Edward Jones Dome (Quinn 2012, 47), meaning that the Rams were able to move into a brand new stadium with more unshared revenue potential, and do so free of charge. The problem with this is exactly that individual teams' unshared revenue will increase, while pooled and shared media revenue will decrease. There are two possible effects of this.

First of all, this should increase the disparities in revenue between the 32 teams. As the NFL business model is built on economic parity, this can potentially undermine the business model and make the NFL more competitively unbalanced. While revenue sharing gives the individual NFL team a great advantage in securing large public stadium subsidies, it does so while undermining exactly revenue sharing, as newer stadiums have much more unshared revenue potential. Moorhead (2006, 661-666) argues that the emergence of local unshared revenue, of which the potential is greater for large market teams, has already in 2006 caused a swelling in revenue disparities between teams, as the revenue gap in 2006 was twelve times as high as it was in 1990.

Secondly, as has been explained above, the location of teams in the largest TV markets generates more TV revenue for the NFL. However, if more and more teams start relocating to increasingly smaller TV markets in order to seek out better stadium deals with more unshared revenue potential, the pool of revenue from TV deals should consequently become increasingly smaller. Therefore, the business model of the NFL, with a high level of revenue sharing, provides the individual teams with incentives to seek out smaller markets with stadiums with higher unshared revenue potential. All in all, during the last two decades, unshared revenue has gone from 10% to 22.6% of total revenue (Quinn 2012, 10), showing a worrisome development for the NFL. However, as no team has actually relocated since the Oilers left Houston in 1997, it does not seem that the threats of relocation have been carried out and may not be all that credible.

To counter the threats of relocation to smaller markets, the NFL instituted the G-3 loan program in 1999 (NFL 1970, 1999 Resolution G-3). These are loans for stadium constructions or renovations, intended to encourage large market teams to stay in their current cities. The majority of teams can receive up to 34% of financing (maximum \$100 million), while the teams in one of the six largest TV markets can receive up to 50% of the costs (maximum \$150 million) (Quinn 2012, 15). With these loan programs, the NFL is working against the relocation of teams from large markets to smaller markets, providing increased contributions to stadium constructions in larger markets.

While this is certainly an interesting aspect, and one that seems worth further research, it will not be further discussed in this thesis. However, it is noted that the relocation of teams has the potential to seriously undermine the NFL business model in the future, if

the NFL is not ready to properly react to this, as attempted through the G-3 loan program.

9.4.3 Leaving L.A. open

With the focus of the NFL on the location of teams in the largest markets, it seems peculiar that L.A. has not had an NFL team since the Raiders and the Rams both left the city after the 1994 season. Being the second largest TV market in the United States (Vrooman 2009, 34), and considering the importance of TV revenue to the NFL, it would seem pertinent to place a franchise in L.A., and do so promptly. Moving a team from a small market to L.A. would likely spur interest in the second largest TV market and thereby increase the aggregate pool of media revenue, in turn making the NFL more profitable.

However, this is only half the story of the importance of the L.A. market. Even as a city without an NFL team, L.A. serves a great purpose for the NFL, namely that of an interested buyer of an NFL product, that is the placement of a team in L.A. This way, an NFL empty L.A. serves the purpose of being a great bargaining chip for a team looking for a better stadium deal from its current city. This means that a team can use its potential move to L.A. as a bargaining chip in securing public funds from its current city, for the construction of a new and modern stadium (Vrooman 2009, 34). Winfree (Quinn 2012, 46) directly argues that a number of NFL teams have extorted their current cities for public stadium deals, by threatening to relocate to L.A. This makes an NFL-empty L.A. a great asset for the NFL. Vrooman (2009, 34) adds that the NFL prefers keeping one major market open to be used in relocation threats, and that L.A. has been used extensively in previous venue negotiations with cities for stadium financing. It seems that leaving L.A. open is a great business for NFL teams, and certainly something that is anything but a coincidence.

In writing of this thesis, there are ongoing talks of relocating a team to L.A. in the coming years. The San Diego Chargers are mentioned as one of the prime candidates to relocate from the 28th ranked TV market to the second largest.

10 Conclusion

This thesis has sought to illustrate the characteristics of the business model of the NFL. To illustrate the business model, the core product and the types of consumers that buy the NFL product has been examined. The NFL mainly produces football games that are sold to two types of consumers, the fans and the entertainment seekers. While the NFL heavily relies on the fans that cherish watching their team, the league seeks to level all teams to promote uncertainty of outcome in individual games and across seasons, in order to sell the games to the other type of consumers, namely the entertainment seekers. The latter group cherishes close games, which are not decided until in the end. Therefore, this thesis asserts that the NFL follows the idea of the Uncertainty of Outcome Hypothesis in creating greater consumer demand through increased uncertainty of outcome in games.

In chapter 5, the discussion of the sharing of revenue found that uncertainty of outcome and competitive balance is promoted by the NFL through first and foremost the sharing of revenue. Consequently, it is argued that the sharing of a majority of NFL revenue is the foundation of the business model. The equal sharing of TV revenue, along with the partial sharing of gameday revenue, enables all teams not only to be financially viable, but it also lays the groundwork for making all teams competitive on the field. At the same time, the cap on team player payrolls contributes to promoting competitive balance by keeping NFL payroll disparities at a minimum, compared to leagues without the salary cap. However, the biggest advantage with the salary cap seems to be that it acts as an effective cost-control, as teams cannot spend more than a certain share of revenue on players. Therefore, NFL teams are guaranteed a steady and secure source of revenue, along with close control of a majority of costs. The annual reverse order draft guarantees the inferior teams from the previous season the best chance to improve its player talent, thereby improving competitive balance.

Through a comparative analysis in chapter 8, this thesis has shown that the NFL is both the most financially egalitarian sports league as well as the most commercially successful league in the United States. This should be seen as an indication that close financial cooperation and the keeping of revenue disparities low, is a great contributing factor in making the NFL league.

While the effects of the NFL business model are many, this thesis has focused on those, which seems to have the greatest impacts on the profitability and market position of the league. There are two notable effects of the NFL business model. First of all, the competitive balance and uncertainty of outcome practices most likely have a great positive effect on the quality of the NFL entertainment value. These both drive up fan interest and consumer demand. The collective sale of broadcasting rights enables the NFL to create a

favorable market situation, where it acts as a lone supplier in a market with a handful of interested buyers. Coupled with the relatively low supply of NFL games, this lone supplier situation enables the NFL to extract monopoly rent in the form of higher fees from the TV networks, through the creation of bidding wars for its highly demanded product. Secondly, the extensive revenue sharing enables NFL teams to make credible relocation threats towards their home cities. As teams are not dependent on local TV revenue, they can move to smaller cities for better stadium deals without suffering financially. This forces cities to provide large contributions to the stadiums of NFL teams, using taxpayer funds. The flipside for the NFL is that this increasing percentage of unshared revenue causes a rise in unshared revenue, due to more luxury suites in these new, modern stadiums. This is a potential threat to the egalitarian business model of the NFL.

In conclusion, this thesis has shown what characterizes the NFL business model and how it contributes to the commercial success of the league. It has shown that the NFL has built a very sustainable business model, which has greatly contributed to the long lasting commercial success of the league. The close financial cooperation between NFL teams and the centralized control of costs is at the foundation of the NFL business model. This creates a high level of competitive balance as well as securing the financial viability of all teams, making the business model one to copy.

Bibliography

Literature

- Bartok, Richard E. (1991): "NFL Free Agency Restrictions under Attack". *Duke Law Journal*, Vol 1991 (2) p. 503-559
- Biner, Burhan (2014): "Parity in professional sports when revenues are maximized". *Economic Modelling* Vol 40, ScienceDirect
- Buzzacchi, Luigi, Szymanski, Stefan & Valletti, Tommaso (2003): "Equality of Opportunity and Equality of Outcome: Open Leagues, Closed Leagues and Competitive Balance". *Journal of Industry, Competition and Trade*, 2003 Vol 3(3) p. 167-186. Springer Science & Business Media, vol 3 (3)
- Cairns, J., Jennet, N. & Sloane, P. J. (1986): "The Economics of Professional Team Sports: A Survey of Theory and Evidence". *Journal of Economic Studies*, 1986 Vol 13 (1) p. 3-80. Emerald Journals
- Cave, Martin & Crandall Robert W. (2001): "Sports Rights and the Broadcast Industry". *The Economic Journal* 2001 Vol 111 p 4-26. John Wiley and Sons
- Downward, Paul & Dawson, Alistair (2000): "The Economics of Professional Team Sports". Routledge. London
- Evens, Tom, Iosifidis, Petros & Smith, Paul (2013): "The Political Economy of Television Sports Rights". Palgrave Macmillan
- Fort, Rodney & Quirk, James (1995): "Cross Subsidiation, Incentives and Outcomes in Professional Sports". *Journal of Economic Literature*, Vol 33 (3) p 1265-1299
- Grier, Kevin B. & Tollison, Robert D. (1992): "The Rookie Draft and Competitive Balance: The case of Professional Football". *Journal of Economic Behaviour and Organization*, 1994 Vol25 (2) p 293-298. ScienceDirect Journals
- Grow, Nathaniel (2006): "There's no "I" in League: Professional Sports Leagues and the Single Entity Defense". *Michigan Law Review*, 2006 Vol 105(1) p 183-208
- Jasina, John & Rotthoff, Kurt (2012): "A model of promotion and relegation in league sports". *Journal of Economics and Finance*, 2012 Vol 36(2) p. 303-318. Springer Science & Business Media
- Jozsa, Frank P. (2014): "National Football League Strategies, Business Expansions, Relocations and Mergers". Springer International Publishing
- Horowitz, Ira, Whittenburg, G.E. (2012): *Network Revenue Sharing and Competitive Balance in the NFL*. The Oxford Handbook of Sports Economics, The Economics of Sports Vol 1. Oxford University Press

- Leone, Katherine C. (1997): "No team, no peace: Franchise Free Agency in the National Football League". *Columbia Law Review*, 1997 Vol 97(2) p. 473-523.
- Longley, Neil (2013): "An Absence of Competition: The Sustained Competitive Advantage of the Monopoly Sports Leagues". *Sports Economics, Management and Policy*, Vol 5. Springer
- Massey, Cade & Thaler, Richard H. (2011): "Decisionmaking and Market Efficiency in the NFL Draft". *Management Science*, Vol 59(7) p. 1479-1495.
- Mason, Daniel S. (1999): "What is the Sports Product and Who Buys it? The Marketing of Professional Sports Leagues". *European Journal of Marketing*, 1999 Vol 33 (3/4) p. 402-419. Emerald Journals
- Miller, R., K. & Washington, K. (2009): "Sports Marketing 2009". Richard K. Miller & Associates. Loganville, GA
- Moorhead, Clay (2006): "Revenue sharing and the Salary Cap in the NFL: Perfecting the Balance Between NFL Socialism and Unrestrained Free-Trade". *Vanderbilt Journal of Entertainment and Technology Law*, 2006 Vol 8(3).
- Neumann, Manfred (2001): "Competition Policy, history, theory and practice". Cheltenham
- New, Bill & Le Grand, Julian (1999): "Monopoly in Sports Broadcasting". *Policy Studies*, 1999 Vol 20(1) p. 23-36. Routledge, Taylor and Francis Group
- Noll, Roger G. (2007): "Broadcasting and Team Sports". *Scottish Journal of Political Economy*, 2007 Vol 54(3) p. 400-421. John Wiley & Sons.
- Noll, Roger C. (2003): "The Organization of Sports Leagues". *Oxford Review of Economic Policy*, 2003 Vol 19(4) p. 530-551. Oxford University Press
- Paul, Rodney J., Wachsman, Yoav & Weinbach, Andrew P. (2011): "The role of Uncertainty of Outcome and Scoring in the Determination of Fans Satisfaction in the NFL". *Journal of Sports Economics* vol 11(2) p.
- Quinn, Kevin G., (2012): "The Economics of the National Football League, the State of the Art". *Sports Economics, Management and Policy* 2. Springer, New York
- Szymanski, Stefan (2010): "The Comparative Economics of Sports". Palgrave Macmillan
- Thaler, Richard & Massey, Cade (2005): "Overconfidence vs Market Efficiency in the National Football League". National Bureau of Economic Research. Cambridge, Massachusetts
- Tainsky, Scott (2010): "Television Broadcast Demand for National Football League Contests". *Journal of Sports Economics*, 2010 Vol 11(6) p. 629-640.
- Tainsky, Scott, Xu, Jie, Salaga, Steven & Mills, Brian M. (2014): "Spillover Benefits to Local Enthusiasm: Increases in league-wide interest as a consequence of local

sports team competitiveness". Journal of Economics and Business, Vol 74 p. 1-10. ScienceDirect

- Tainsky, Scott, Xu, Jie, Zhou, Yilun (2014): "Qualifying the Game Uncertainty Effect". Journal of Sports Economics, 2014 Vol 15(3) p. 219-236. Sage Publications
- Train, Kenneth E. (1991): "Optimal Regulation, the Economic Theory of Natural Monopoly". MIT Press. Cambridge, Massachusetts
- Vrooman, John (2000): "The Economics of American Sports Leagues". Scottish Journal of Political Economy, 2000 Vol 47(4) p.364-398. John Wiley and Sons
- Vrooman, John (2011): "Two to Tango, Optimum Competitive Balance in Professional Sports Leagues". The Econometrics of Sport, p. 3-34. Edward Elgar Publishing.
- Vrooman, John (2009): "Theory of the Perfect Game: Competitive Balance in Monopoly Sports Leagues". Review of Industrial Organization, 2009 Vol 34(1) p. 5-44. Springer Science & Business Media
- Wakefield, Kirk L. (2007): "Team sports marketing". Butterworth-Heinemann. London
- Webster, Thomas J. (2003): "Managerial Economics - theory and practice". Elsevier
- Weistart, John C. (1984): "League control of Market Opportunities: a Perspective on Competition and Cooperation in the Sports Industry". Duke Law Journal, Vol 1984(6) p. 1013-1070.
- Yost, Mark (2006): "Tailgating, sacks and the salary cap, how the NFL became the most successful sports league in history". Kaplan Publishing

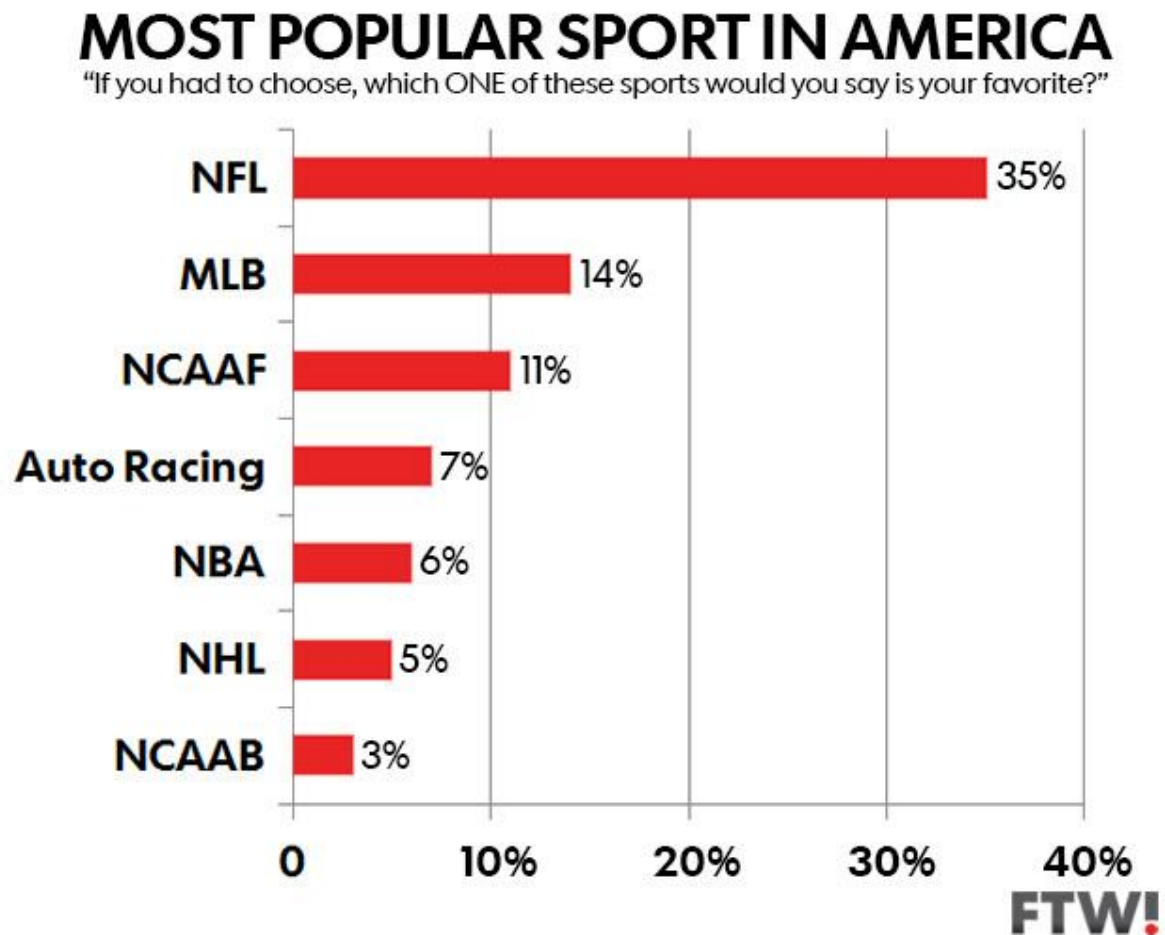
Electronic sources

- Bleacher Report (2013): "NFL Salary Cap 2013: The World Really is Flat". Retrieved at: <http://bleacherreport.com/articles/1581886-nfl-salary-cap-2013-the-world-really-is-flat>
- National Football League (1970): "Constitution and Bylaws of the National Football League". Retrieved at: http://static.nfl.com/static/content/public/static/html/careers/pdf/co_.pdf
- National Football League (2011): "Collective Bargaining Agreement". Retrieved at: <https://nflabor.files.wordpress.com/2010/01/collective-bargaining-agreement-2011-2020.pdf>
- Nielsen (2014): "Local Television Market Universe Estimates". Retrieved at: http://www.tvb.org/media/file/Nielsen_2014-2015_DMA_Ranks.pdf

- Schwartz, Nick & McGarry, Tim (2014): The NFL is the most popular Sport in America for the 30th year running". Retrieved at: <http://ftw.usatoday.com/2014/01/nfl-most-popular-sport-poll>
- Smith, Michael D. (2012): "Poll find NFL more popular than ever". Retrieved at: ["http://profootballtalk.nbcsports.com/2012/10/06/poll-finds-nfl-more-popular-than-ever/](http://profootballtalk.nbcsports.com/2012/10/06/poll-finds-nfl-more-popular-than-ever/)
- Sports Media Watch (2013): "2013 Ratings wrap: NFL Dominates List of most Watched Sporting Events". Retrieved at: <http://www.sportsmediawatch.com/2013/12/2013-ratings-wrap-nfl-dominates-list-of-most-watched-sporting-events/>
- Sports Media Watch (2012): "The 50 Most-Watched Sporting Events of 2012". Retrieved at: <http://www.sportsmediawatch.com/2013/01/2012-numbers-game-the-most-watched-sporting-events-of-the-year/>
- Sports Media Watch (2011): "2011 Numbers game: "100 Most-Viewed Telecasts of the year". Retrieved at: <http://www.sportsmediawatch.com/2011/12/2011-numbers-game-100-most-viewed-sports-telecasts-of-the-year/>
- Spotrac.com – Sports Contracts, Salaries, Caps, Bonuses, & Transactions. Retrieved at: www.spotrac.com
- Thompson, Derek (2013): "Super Bowl Ads are still super cheap: \$4 million for 30 second is a bargain". Retrieved at: <http://www.theatlantic.com/business/archive/2013/02/super-bowl-ads-are-still-super-cheap-4-million-for-30-seconds-is-a-bargain/272628/>
- Wisconsin State Legislature (2000): "Green Bay Packers" Retrieved at: <http://legis.wisconsin.gov/lab/reports/green%20bay%20packers.pdf> Mentioned as "Wisconsin 2000"

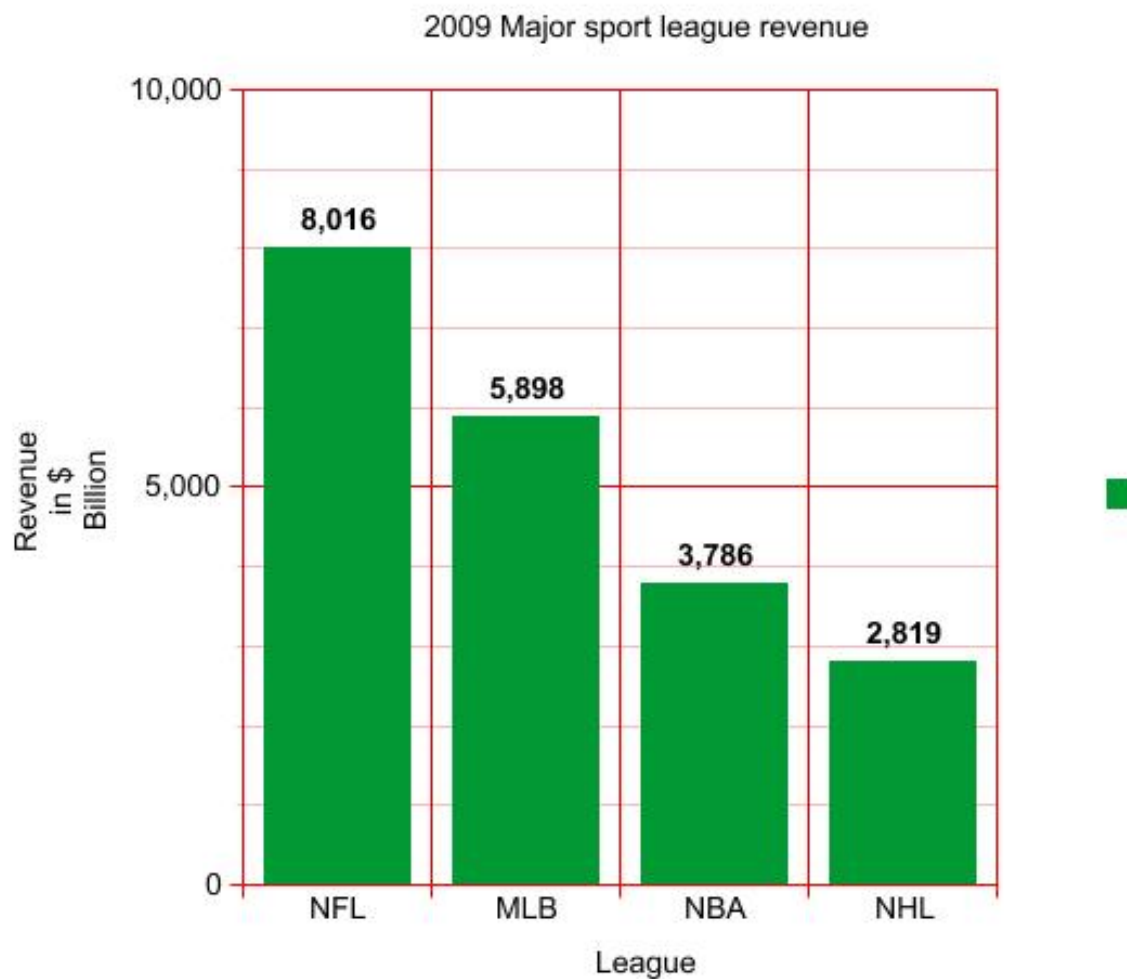
Appendices

Appendix 1: Most popular sport in America



Source: Schwartz & McGarry, 2014

Appendix 2: Revenue of major North American sports leagues in 2009



Source: Quinn 2012, 58