CAPITALISM FOR THE COOPERATIVE: THE NCAA AND NFL MODEL OF PARITY AND PROFIT

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ABSTRACT

Economists have long recognized the cartel behavior of the NCAA. Previous research has addressed the cartel characteristics of monopsony behavior, cheating, member cooperation, and supply limits of the NCAA and its members. Where this paper adds to the literature is the conceptual link between the NCAA and the NFL. Previously, these two sport-focused entities have been viewed separately. Here, the cartel behavior of the NCAA and the NFL are brought to light by identifying the similarities in corporate structure that have led to their stability. It is concluded that in each organization, utility is generated from parity. The governing boards of each entity endorse parity through their agreed upon policies.

INTRODUCTION

Professional and amateur sports have long held an important position in our society. Millions of children and adults participate in a variety of sports and many more enjoy watching teams and individuals compete in athletic venues. There is an intriguing economic aspect to professional and amateur sports that illustrates how both competition and cooperation are required for amateur and professional sports leagues to survive and prosper. This study analyzes the foundation of two important sports leagues by exploring the economic structures that have evolved in the National Football League (NFL) and the National Collegiate Athletic Association (NCAA). Competition and cooperation on the playing field and in the marketplace play key roles in these two highly successful organizations.

This paper provides the conceptual link in philosophy between the NCAA and the NFL: each organization seeks to maximize its total utility by increasing the parity among its members. The cooperation among members leads each of these sports league to more success in terms of its own goals. After a brief introduction

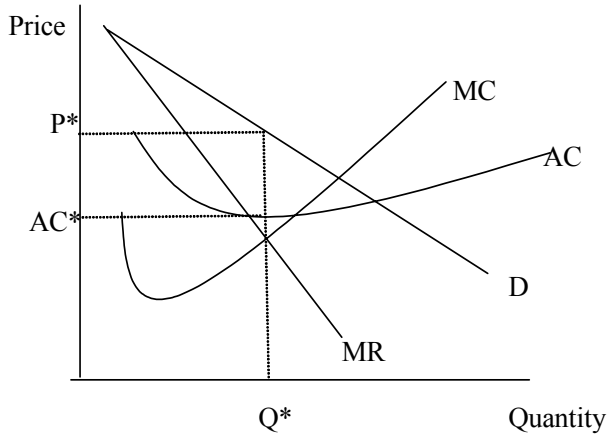
to the nature of competitive and imperfectly competitive markets for goods and labor, we present the NFL as a cartel with a synopsis of the financial impact of its cooperative league policies. We next address the NCAA as a cartel, focusing on the monopsony power of the universities which is formalized by the NCAA. Evidence from the NFL and NCAA is presented to illustrate the link between on-the-field parity and accomplishing organizational objectives. A conclusion brings together the essential points of the study.

THE IMPERFECT COMPETITION MODEL

A basic look at how competition among businesses affects price, output, and employment is helpful in understanding the economic structures of the NFL and the NCAA. Competition among firms can produce a wide variety of quality products at lower prices. A firm's objective is to increase its profit by making a better quality product at a lower cost than its competition. To reach this goal, a firm tries to increase its share of the market while reducing the shares held by other firms. In a highly competitive market, the forces of demand and supply set the price of the good or service and determine how many units of the item will be exchanged between buyers and sellers**.**

When there are many small buyers and sellers of an identical product, each firm will charge the market price for the product. To maximize its profit, a perfectly competitive firm will produce the output level where price is equal to its marginal cost of production. While a firm in this market structure can earn a positive profit in the short-run, over time the entry of new firms into the market will eliminate the economic profit of all firms.

At the other extreme, a monopolistic firm services the entire market demand for the good. Being the only supplier of the good, the monopoly is provided an opportunity to restrict output and charge a higher price. Since a monopoly faces the downward-sloping market demand curve for the product, it must reduce its price to sell additional units of its product. To maximize its profit, the monopoly will produce the output level at which its marginal revenue is equal to its marginal cost of production. At this output level the firm's price will be greater than its marginal cost. As long as the firm can keep its price above its average total cost, it can earn a positive economic profit. In the graph below, the monopoly would produce output Q*, charge price P*, and earn the profit shown by the P*, AC*, Q* rectangle.



When there are a small number of competing firms in a market, the desire of each firm to increase their profit can result in the firms joining together to form a cartel. In a cartel, the firms decide to work together rather than compete aggressively against each other. They create a set of rules by which they agree to restrict their combined output in order to drive up the price and increase their collective profit. If the cartel is successful in including all the firms in the industry, then it is able to act as a monopoly. The result is an industry price and quantity comparable to the monopoly, P* and Q*.

Under the cartel, multiple firms must work together to maintain the optimal level of output, Q*, that maximizes industry profit. Barriers to entry must be established to prevent potential challengers from coming into the industry. Such barriers could be legal, technical, ownership of key resources, or a productivity advantage.

In our model, the prices charged by individual firms (teams) in the cartel, P*, can vary based on demand differences, and imperfect customer mobility. For example, the Washington Redskins have a different demand for their product than the Buffalo Bills. They offer a slightly different product to a different cliental, which allows them the opportunity to charge a higher price for their good. While, customers in Washington may squabble over the higher ticket prices, it is unlikely they will attend games in Buffalo (or even Baltimore) to avoid the admission fee charged in Washington. In short, while the cartel members are locked into the

quantity of games, Q*, they have some power in the determination of ticket prices to attend a game.

The desire to maximize profit motivates the cartel member to minimize its production costs by paying the lowest prices possible for its resources. If the firm is competing with many other firms for labor, wages paid to workers will be driven up. If, on the other hand, the firm is a single employer of labor, or colludes collectively with their competition on wage ceilings, then the workers face a monopsonist. When employers (buyers) unify they have the power to limit the number of jobs available and pay a lower than market wage. On the supply side of the labor market, if the workers organize themselves into a body that can negotiate collectively with employers, their wages will be higher.

While cartels are illegal in the United States because they prevent competition, it can be argued that the structural frameworks of the NFL and the NCAA are, in fact, cartels in nature. Their member "firms" both compete and cooperate to be successful.

JUSTIFICATION FOR THE STUDY:

The NCAA, a non-profit organization originally designed to promote a safe environment for students participating in intercollegiate athletics, has evolved into a multi-million dollar a year enterprise. The NFL is a for-profit industry that seeks to maximize its profit by providing top quality entertainment for its fans. In effect, both entities operate as monopsonists in the market for players. Because the athletes have limited options as to where they can supply their services, there is a transfer of wage bargaining power to the buyer of labor. The NCAA controls its input market of athletes by restricting the number of scholarships available per sport and prohibiting financial compensation to student athletes. The NFL enforces a salary cap on each team's total outlay on players to standardize player costs throughout the league. The NCAA restricts output by mandating official start dates and season-ending tournaments. Similarly, the NFL sanctions a formal league schedule and a well-defined playoff structure. Both organizations employ programs of revenue redistribution and sharing. They both adhere to formal codes of conduct and monitor cartel behavior to prevent cheating by observing the output of their members. Both organizations allow their members independence in setting ticket prices and negotiating local sponsorship deals as an additional source of income, thus allowing demand to determine the prices of their games and profits to be maximized in the long-run.

Among the NCAA universities, increased parity in athletic competition improves the opportunity of member institutions to compete on a level playing field, while in the NFL increased parity leads to increased market capitalization for team franchises. In each industry the owners, be they universities or professional franchises, secure a larger share of the profit from consumers and workers than would otherwise occur if their goods and labor markets were perfectly competitive.

The structures of the NFL and the NCAA determine the quality of their products, the prices paid by their consumers, and the employment conditions of the individuals supplying those products. To provide insight into these two interesting models of sports economics, we explore the framework of the NFL and the NCAA, presenting evidence of the balance they seek between cooperation and competition.

REVIEW OF THE NATIONAL FOOTBALL LEAGUE

The American Professional Football Association was formed in 1920 with eleven teams; two years later the association changed its name to the National Football League. Although the league had a shaky beginning with teams entering and leaving at will, as the popularity of the sport increased, team owners were able to develop a set of rules and regulations that gave stability to an increasingly profitable enterprise. Since its inception the league has seen changes in its member cities, occasional competition from other professional football leagues, and the development of a strong union representing the athletes who perform in the NFL. Today the NFL has thirty-two teams and is considered by many to be the most successful sports league in the world.

The structure of the National Football League has evolved over the years by agreements among team owners on a number of important factors that promote a balanced competition on the field. Having competitive games is essential to maintaining a strong level of fan interest in NFL games. In essence, the owners are uniting to produce a joint product of entertaining and profitable games. The desire of each individual club owner to have a team that outperforms all others must be constrained in the context of rules that provide for increased profit for the entire league. Several times each year, the NFL owners gather to discuss rule changes, schedules, player issues, expansion team proposals, revenue sharing, and other league-related issues. It appears that "this structure is becoming the prototype approach to operate a sports league in the United States."[1] In the market for sports entertainment, it is parity and cooperation among clubs, as opposed to cutthroat

business competition, that result in the best product for the customers and the greatest profit for the producers.

Former NFL Commissioner Paul Tagliabue described his league's organizational structure as a prototypical capitalistic market that favors "the little guy." Tagliabue supports the concept that capitalism in its purest sense results in parity. [2] However, it is not the free market principles that have led to the increased parity among NFL teams. Instead it is the organizational structure embraced by their governing board that keeps the playing field even. The following policies and regulations are most effective in a cartel structure, where decisions are made at an aggregate level in an effort to maximize the collective profits of the participating members.

Parity Adjustments

It is important that all teams abide by the league rules. There are methods used by the NFL owners' association to provide side payments to satisfy all members and maintain cooperation. One way to improve on-the-field performance parity is to adjust team schedules based on relative quality. Each season the NFL teams play a carefully designed schedule of 16 games based on their previous year's performance. To improve the level of competition across the league, teams that finished near the bottom of the standings the previous year have a relatively softer schedule while teams that finished near the top have a stronger schedule. Another way to appease the weaker members is to give them the first choice of players from the incoming talent pool. In its annual draft of amateur players, the NFL teams select the top college football players in reverse order of their league standings the previous year. This means the weaker teams are able to draft the better players, thus improving their chance of being competitive on the field.

Revenue Sharing

Another approach used to promote on-the-field parity is preventing the wealthiest teams from buying all the top players. Through negotiations with the NFL Players Association the NFL developed a revenue sharing plan. Under the terms of the latest collective bargaining agreement which runs through the 2011 season, the top fifteen revenue-producing teams will be required to contribute funds to a pool which will be shared with the lowest seventeen revenue-producing teams. These side payments allow the lower revenue clubs to be more competitive in hiring

quality players. "Before this settlement, the players received about 65 percent of a smaller revenue pool known as defined gross revenue. The new, larger revenue pool is called total football revenue, and the players are to receive approximately 59.5 percent of it."[3] The contributions to the pool by the wealthiest fifteen NFL clubs are based on revenue from sources other than television contracts. Television revenue is already shared equally by all 32 clubs.

Barriers to Entry

The number of teams in the NFL is determined by the owners of the existing teams. Decisions to change the number of teams are based on how such a change will impact the overall profit picture of the NFL. Controlling the number of teams also means controlling the number of jobs for players in the league. The owners have monopoly power over the broadcasting of professional football games and monopsony power over the hiring of the best players.

Monopoly Behavior

Another structural feature of the NFL aimed at giving all teams more equal resources to compete for players is a salary cap which limits the total outlay of each team on player salaries. Under the new collective bargaining agreement signed by the NFL team owners and the NFL Players Association in March 2006, the salary cap for each team, which was $85.5 million for the 2005 season, will increase to $102 million for 2006 and $109 million for 2007. There is also a floor below which salaries cannot fall.

The Market for the NFL Players

In the first several decades of its existence, the NFL was the only professional football league and its teams had total control over players. There was no players' union and there were no viable employment alternatives for the players. They either accepted the salaries offered to them or did not play professional football. Two opposing factors have affected the labor market monopsony of owners.

There have been several other professional leagues that tried to compete with the NFL for players, fans, and profits. The only one that significantly impacted the NFL was the American Football League (AFL) which survived ten years until

it merged with the NFL for the 1970 season. During the decade before the NFL-AFL merger, both leagues competed for college players and player salaries increased. The World Football League lasted only two seasons (1974-1975). Even though it had strong financing from its investors, the United States Football League (USFL) collapsed after only three seasons of games played in the spring and summer months of 1983-1985. Two current leagues, the Arena Football League, formed in 1987, and the Canadian Football League (CFL), have never been serious threats to hire many top players away from the NFL.

As the popularity and profit of the NFL increased, players recognized the potential to obtain higher salaries and improved benefits. When their requests were ignored by team owners, the players formed the NFL Players' Association in 1956. After some tumultuous times, including a month-long strike in 1987, the NFLPA has increased its bargaining stature in its representation of players in negotiations with the owners. In March 2006 the owners and the NFLPA agreed on a new collective bargaining agreement that will extend through the 2011 season.

One might argue that the NFL owners' association cannot be viewed as a cartel since typical cartel members would obtain greater profits if their competitors did not exist. In the NFL there is a synergy of profit between the owners. In fact, one could view the NFL owners as agents representing different divisions of the same enterprise. By acting together the owners establish monopoly power with regard to supplying professional football games. The NFL owners collectively negotiate injury clauses, release policies, retirement plans, performance incentives, and other player issues. Their objective is to minimize expenses. The NFL behaves as a cartel with its shared revenue, capped salary expenses, cooperation of owners, and control of its input market.

Even though the owners implement policies to promote equality on the playing field, some teams perennially perform at a sub-par level. It has been suggested that the owners of these teams choose to pocket much of their profit rather than reinvest it in their franchise. The NFL owners' association monitors each team to insure its allegiance to the league's objectives. League profit is negatively affected by owners who circumvent the rules to help (or hurt) their teams on the field. Any shift away from parity reduces the value of the product created by the NFL. Teams caught violating the league rules are liable to pay fines, lose draft picks, face reductions in their salary cap, or suffer other penalties sanctioned by the league.[4] The policies set by the owners' association serve to improve the parity among competing programs, while reducing the incentive to cheat. This dependence

on each other to maintain a high quality product is not typical for cartels, most cartels are not bothered when members dissolve, but it works for the NFL.

NFL LITERATURE REVIEW

Literature regarding the NFL as a cartel has been sparse. The escalation in players' salaries and the league's collective bargaining agreement with the players' association have steered researchers away from identifying the NFL as a typical cartel. However, the limited options for premium football players, the cooperation between NFL owners, and the requirement of a super majority vote of existing owners for approval of new entrants suggests there is cartel behavior in professional football.

In 1993, the NFL owners and the NFL Players Association penned an agreement that promoted cooperation among labor and owners. Even though the settlement did not help all players equally, it did increase the rewards for players in general and improved the competitive balance among teams.[5] The agreement also led to a standardization of costs and a less volatile stream of revenue by teams. Einolf (2004) presented data examining the parity in spending among NFL teams since 1981. Since the agreement clauses were invoked in 1994, team salaries have increased for all teams, benefiting players and owners. Franchises have worked cooperatively to "increase consumer interest in their collective product." (Einolf, 2004, p.128). This cooperation between the players and the owners has led to a better product and increased the fan base for the NFL. Vrooman refers to the payroll cap as "cost sharing collusion." (1995, p. 971) He contends that revenue sharing in the NFL leads to a competitive balance and parity.

EMPIRICAL ANALYSIS

An interesting comparison can be made between the NFL and Major League Baseball (MLB). Parity is not stressed in MLB with the same vigor as it is in the NFL. The MLB salary caps are softer since owners who break the cap simply pay a luxury tax on the spillover salary. Paying the additional tax is not always a disincentive for MLB owners to purchase players. The benefits some teams earn from media contracts and gate receipts outweigh the costs of high player salaries and tax penalties. The spending disparity allowed in MLB implies that team parity is not as critical a league objective as it is in the NFL.

Although there is no perfect method of determining the impact of parity on collective league profit, the comparison of the NFL to MLB provides an example of a league that stresses parity versus a league that provides a framework for individual teams to maximize their own profit. The NFL parity may be evidenced through measurable variables such as attendance, operating profit, market values, and rates of return on investment. Compared to MLB, the NFL teams have higher capacity levels (attendance as a percent of stadium capacity), operating profit (earnings before interest and tax), rates of return, and market capitalization. The parity within the NFL is a key component to the financial strength of the league.

NFL teams have the highest capacity level of any professional sport in the United States. MLB attendance has been slipping since 2001 and in 2004 the average MLB team operated at 68.1% capacity. NBA attendance has also fallen off in the past few years since the departure of Michael Jordan. But during 2003 - 2004 season, the typical NBA team still operated at 88.5% capacity. The National Hockey League (NHL) attendance-to-capacity ratio was 90.5% in the 2003-2004 season before the strike of 2004-2005 resulted in the suspension of league play. Meanwhile, twelve NFL teams sold over 99% of their seats in 2003 and the league overall operated at 94.7% capacity (see Table 1). Only four NFL teams averaged less than 90% capacity for the 2003 season. In the NHL, thirteen teams were below 90% capacity in the 2003-2004 season. Twelve of 30 teams in the NBA, and 26 of 30 teams in MLB, were below 90% capacity in 2004.[6] Although the low number of homes games per season is a positive contributor to the NFL attendance success, there are, however, other areas that demonstrate the financial success of the NFL and the benefits of parity.

In 2004, the average NFL team earned $26.6 million in profit, with the league overall bringing in total profit of over $850 million. (See Table 1.) Only the Arizona Cardinals showed a loss from its NFL operations that season. In MLB, 11 teams showed a loss during the 2000 season, with the average team in baseball losing $1.9 million. (See Table 3.) In 2005, the number of MLB earning a loss decreased to five teams. As a whole, MLB reported a combined loss of $57 million in 2000, and profit of $330 million in 2005.[7] The accounting procedures of MLB owners have been a topic of much discussion, but regardless of their methods of reporting income and shifting money from team to media operations, it is clear that the NFL is a more profitable league for owners. NFL owners have earned greater annual profits and have witnessed larger increases in team valuations.

Table 1: NFL Operating Profit and Attendance		
(in millions $)	Operating Profit	Capacity
NFL Teams	2004	2003
Washington Redskins[2]	53.8	94.2%
Dallas Cowboys	54.3	97.1%
Houston Texans	41.3	100.6%
New England Patriots	50.5	100.6%
Philadelphia Eagles	24.5	99.9%
Denver Broncos	49.4	99.3%
Cleveland Browns	41.1	100.1%
Chicago Bears	40.1	86.0%
Tampa Bay Buccaneers	45.4	101.0%
Baltimore Ravens	32.7	100.4%
Miami Dolphins	15.8	96.5%
Carolina Panthers	24.3	97.6%
Green Bay Packers	35.4	97.4%
Detroit Lions	15.4	94.2%
Tennessee Titans	35.1	100.4%
Pittsburgh Steelers	36.5	94.3%
Seattle Seahawks	14.4	94.1%
Kansas City Chiefs	31	98.4%
St Louis Rams	39.8	100.1%
New York Giants	26.7	98.2%
Jacksonville Jaguars	34.6	77.1%
New York Jets	12	98.2%
Cincinnati Bengals	45.6	80.5%
Buffalo Bills	36.1	92.6%
San Francisco 49ers	43.6	97.1%
New Orleans Saints	42.6	99.2%
Oakland Raiders	7.8	96.0%
San Diego Chargers	32.8	88.4%

Table 1: NFL Operating Profit and Attendance		
(in millions $)	Operating Profit	Capacity
NFL Teams	2004	2003
Indianapolis Colts	16.4	101.0%
Minnesota Vikings	15.6	99.9%
Atlanta Falcons	26.8	96.7%
Arizona Cardinals	16.2	56.0%
National Football League		94.7%

1. Earnings before interest and taxes
2. Teams are listed by market value highest to lowest.
Data Sources: Street & Smith's Sports Business Journal "By the Numbers 2004" Vol. 6, Issue 36
NFL profit data were found at www.forbes.com/lists/results

In the United States, 30 NFL teams rank in the 37 top-valued sports franchises.[8] Table 2 displays the market value of NFL teams. Over the period from1998 to 2004, the market values increased over 180 percent among the established franchises (excluding the newly formed Cleveland and Houston clubs). The Philadelphia Eagles (+644%) and Kansas City Chiefs (+476%) have enjoyed the greatest increases in market value over this period. This breadth of growth has not been observed in MLB. Table 3 reveals that since 1998 five baseball franchises have decreased in value. From 2003 to 2004, thirteen baseball teams experienced reductions in their market value. The average rate of growth in market value for MLB clubs during the 1998 to 2004 period was 54%, less than a third of the rate of growth in the NFL.

Table 2 NFL Team Valuations (in $millions)								
NFL Teams	1998	1999	2000	2001	2002	2003	2004	Growth[1]
Washington Redskins	403	607	741	796	845	952	1100	173%
Dallas Cowboys	413	663	713	743	784	851	923	123%
Houston Texans						791	905	14%
New England Patriots	252	460	464	524	571	756	861	242%
Philadelphia Eagles	112	318	329	405	518	617	833	644%
Denver Broncos	320	427	471	540	604	683	815	155%

Table 2 NFL Team Valuations (in $millions)								
NFL Teams	1998	1999	2000	2001	2002	2003	2004	Growth[1]
Cleveland Browns			557	598	618	695	798	43%
Chicago Bears	237	313	319	362	540	621	785	231%
Tampa Bay Bucs.	346	502	532	582	606	671	779	125%
Baltimore Ravens	329	408	479	544	607	649	776	136%
Miami Dolphins	340	446	472	508	553	638	765	125%
Carolina Panthers	365	488	513	574	609	642	760	108%
Green Bay Packers	244	320	337	392	474	609	756	210%
Detroit Lions	312	293	378	423	509	635	747	139%
Tennessee Titans	322	369	506	536	551	620	736	129%
Pittsburgh Steelers	300	397	414	468	557	608	717	139%
Seattle Seahawks	324	399	407	440	534	610	712	120%
Kansas City Chiefs	123	353	367	412	462	601	709	476%
St Louis Rams	322	390	418	448	544	602	708	120%
New York Giants	288	376	387	419	514	573	692	140%
Jacksonville Jaguars	294	419	460	500	522	569	688	134%
New York Jets	259	363	384	423	512	567	685	164%
Cincinnati Bengals	311	394	423	479	507	562	675	117%
Buffalo Bills	252	326	365	393	458	564	637	153%
San Francisco 49ers	254	371	379	419	463	568	636	150%
New Orleans Saints	243	315	324	371	481	585	627	158%
Oakland Raiders	235	299	315	351	421	576	624	166%
San Diego Chargers	248	323	393	416	447	561	622	151%
Indianapolis Colts	227	305	332	367	419	547	609	168%
Minnesota Vikings	233	309	322	346	437	542	604	159%
Atlanta Falcons	233	306	321	338	407	534	603	159%
Arizona Cardinals	231	301	305	342	374	505	552	139%
average growth								181%

1. Growth rates were calculated for the seven year period.
Data Source: Team Valuation data were found at www.forbes.com/lists/results

Table 3 Major League Baseball Team Valuations (in $millions)									
MLB Team	1998	1999	2000	2001	2002	2003	2004	Growth[2]	EBIT[3]2005
New York Yankees	362	491	548	635	752	849	832	130%	-50
Boston Red Sox[1]	230	256	284	339	426	488	533	132%	-18.5
New York Mets	193	249	314	454	482	498	442	129%	-16.1
LA Dodgers	236	270	325	381	435	449	399	69%	13.4
Seattle Mariners	251	236	290	332	373	385	396	58%	7.3
Atlanta Braves	299	357	388	407	424	423	374	25%	27.6
San Fran Giants	188	213	237	333	355	382	368	96%	11.2
Chicago Cubs	204	224	242	247	287	335	358	75%	7.9
Houston Astros	190	239	280	318	337	327	320	68%	30.2
St. Louis Cardinals	174	205	219	243	271	308	314	80%	7.9
Texas Rangers	254	281	294	342	356	332	306	20%	24.7
Baltimore Orioles	323	351	347	335	319	310	296	-8%	21
Cleveland Indians	322	359	364	372	360	331	292	-9%	34.6
Colorado Rockies	303	311	305	334	347	304	285	-6%	16.3
Philadelphia Phillies	131	145	150	158	231	239	281	115%	14.8
AZ Diamondbacks	NA	291	268	245	271	269	276	-5%	21.8
San Diego Padres	161	205	197	176	207	226	265	65%	13
Chicago White Sox	214	178	166	213	223	233	248	16%	21.7
Cincinnati Reds	136	163	175	187	204	223	245	80%	17.9
Anaheim Angels	157	195	195	198	195	225	241	54%	-2.6
Detroit Tigers	137	152	200	290	262	237	235	72%	3.5
Pittsburgh Pirates	133	145	161	211	242	224	217	63%	21.9
Oakland Athletics	118	125	134	149	157	172	186	58%	16
Milwaukee Brewers	127	155	167	209	238	206	174	37%	22.4
Florida Marlins	159	153	125	128	137	136	172	8%	-11.9
Kansas City Royals	108	96	122	138	152	153	171	58%	20.8
Toronto Blue Jays	141	162	162	161	182	166	169	20%	29.7
Minnesota Twins	94	89	91	99	127	148	168	79%	7

Table 3 Major League Baseball Team Valuations (in $millions)									
MLB Team	1998	1999	2000	2001	2002	2003	2004	Growth[2]	EBIT[3]2005
Tampa Bay Devil Rays	NA	225	163	150	142	145	152	-32%	20.3
Montreal Expos	87	84	89	92	108	113	145	67%	N/A
average								54%	

1. Bolded teams showed an operating loss for the 2000 season.
2. Growth rates were calculated for the seven year period.
3. Earnings Before Interest and Taxes
Data Source: Team Valuation data were found at www.forbes.com/lists/results

Table 4 NFL Owners' Rate of Return on Investment				
NFL Team	Date of Purchase	Purchase Price	2004 Market Value	Annual Rate of Return
		($ millions)	($ millions)	(%)
Arizona Cardinals	1932	0.5	552	13.6
Atlanta Falcons	2001	545	603	2.66
Baltimore Ravens	1999	275	776	18.9
Buffalo Bills	1959	0.03	637	24.8
Carolina Panthers	1993	206	760	12.6
Chicago Bears	1920	0.0001	785	20.8
Cincinnati Bengals	1967	7.5	675	12.9
Cleveland Browns	1998	530	798	7.1
Dallas Cowboys	1989	150	923	12.9
Denver Broncos	1984	78	815	12.4
Detroit Lions	1963	4.5	747	13.3
Green Bay Packers	1921	0.25	756	10.1
Houston Texans	1999	700	905	5.3
Indianapolis Colts	1972	15	609	12.3
Jacksonville Jaguars	1993	208	688	11.5
Kansas City Chiefs	1959	0.03	709	25.1

Table 4 NFL Owners' Rate of Return on Investment				
NFL Team	Date of Purchase	Purchase Price	2004 Market Value	Annual Rate of Return
		($ millions)	($ millions)	(%)
Miami Dolphins	1994	138	765	18.7
Minnesota Vikings	1998	250	604	15.8
New England Patriots	1994	158	861	18.5
New Orleans Saints	1985	71	627	12.1
New York Giants	1989	75	692	16
New York Jets	2000	635	685	1.9
Oakland Raiders	1972	0.18	624	29
Philadelphia Eagles	1994	185	833	16.2
Pittsburgh Steelers	1933	0.0025	717	19.4
San Diego Chargers	1984	70	622	11.5
San Francisco 49ers	1977	13	636	15.5
Seattle Seahawks	1997	194	712	20.4
St Louis Rams	1972	19	708	12
Tampa Bay Buccaneers	1995	192	779	16.8
Tennessee Titans	1959	0.03	736	25.2
Washington Redskins	1999	750	1100	8
average rate of return				14.8
length of ownership (years)				26.2
Data Sources: Street & Smith's Sports Business Journal "by the Numbers 2004" Vol. 6 (36) NFL market valuation data were found at www.forbes.com/lists/results				

Tables 4 and 5 present the purchase prices of the current NFL and MLB franchises. Based on information gathered from the club owners, the data show that NFL owners earned a higher rate of return on their investment than did MLB owners. The typical NFL owner has held the team for over 26 years and earned a 14.8% annual rate of return. In comparison, the average MLB owner has held the team for less than 10 years, with only a 10.7% annual rate of return.

The evidence presented in the tables is not conclusive proof by itself that promoting team parity is a profitable strategy. However, it does show that a league which emphasizes parity and cooperation (NFL) has been more profitable than a league which allows wide disparities in spending based on market sizes and owner attitude (MLB). The general health of the NFL is stronger than that of MLB for a variety of reasons, one of which is the NFL policies that more strongly promote parity among the teams.

Table 5. Major League Baseball Owners' Rate of Return on Investment

MLB Team	Date of Purchase	Purchase Price	2004 Market Value	Annual Rate of Return
		($ millions)	($ millions)	(%)
Anaheim Angels	2003	180	241	33.9
Arizona Diamondbacks	1995	130	276	8.7
Atlanta Braves	1993	173	374	7.3
Baltimore Orioles	1993	173	296	5
Boston Red Sox	2002	660	533	N/A[1]
Chicago Cubs	1981	20.5	358	13.2
Chicago White Sox	1981	20	248	11.6
Cincinnati Reds	1999	67	245	29.6
Cleveland Indians	1999	323	292	-1.8
Colorado Rockies	1991	95	285	8.8
Detroit Tigers	1992	82	235	9.2
Florida Marlins	2002	158.8	172	4.1
Houston Astros	1992	115	320	8.9
Kansas City Royals	2000	96	171	15.5
Los Angeles Dodgers	2004	430	399	N/A
Milwaukee Brewers	2005	180	174	N/A
Minnesota Twins	1984	36	168	8
New York Mets	1986	80.75	442	9.9
New York Yankees	1973	10	832	15.3
Oakland Athletics	2005	180	186	N/A
Philadelphia Phillies	1981	30	281	10.2

Table 5. Major League Baseball Owners' Rate of Return on Investment				
MLB Team	Date of Purchase	Purchase Price	2004 Market Value	Annual Rate of Return
		($ millions)	($ millions)	(%)
Pittsburgh Pirates	1996	90	217	11.6
San Diego Padres	1994	106	265	9.6
San Francisco Giants	1992	100	368	11.5
Seattle Mariners	1992	106	396	11.6
St. Louis Cardinals	1996	150	314	9.7
Tampa Bay Devil Rays	1995	130	152	1.8
Texas Rangers	1998	250	306	3.4
Toronto Blue Jays	2000	112	169	10.8
Washington Nationals	2002	120	145	9.9
average rate of return				10.7
length of ownership (years)				9.7

N/A represents a decrease in value, or insufficient time to calculate a value.
Data Sources: Street & Smith's Sports Business Journal April 3-9, 2000 Vol. 2, Issue 50
MLB market valuation data were found at www.forbes.com/lists/results
Recent MLB franchise sales found at various websites (available on request).

REVIEW OF THE NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

Alarmed by deaths and injuries of students playing collegiate football, President Theodore Roosevelt encouraged colleges and universities to take steps to improve the safety of the game. As a result, the Intercollegiate Athletic Association of the United States was created in 1906. This private, not-for-profit organization changed its name to the National Collegiate Athletic Association in 1910. In 1973, the NCAA organized its members into three divisions: Division I, Division II, and Division III. Schools in each division are subject to the regulations created for that division by the NCAA. Violation of these regulations by any of the 1024 active member institutions can result in severe fines and punishment by the NCAA.

The NCAA is the largest organization of its type in the world. Its core purpose is "to govern competition in a fair, safe, equitable and sportsmanlike manner, and to integrate intercollegiate athletics into higher education so that the educational experience of the student-athlete is paramount."[9]

Incidents like the University of Kentucky's point shaving scandal in 1951 forced the NCAA to expand its mission from exclusively player safety to including the oversight of academic standards, the promotion of student athletics, the enforcement of rules for gender equity, and the negotiation of multi-million dollar media contracts for member institutions.[10] To accomplish these objectives, the NCAA has implemented policies to standardize student and university behavior among member institutions.

The attributes of a typical cartel are formal agreements between firms in the same industry, side payments, limiting supply, monopsony behavior, monitoring of cheating, and barriers to entry. How well do these characteristics apply to the NCAA?

The Formal Agreements between Suppliers

At the top of the NCAA organizational structure is its Board of Directors made up of college and university presidents. The Board of Directors receives legislation from the Management Council that consists of representatives (e.g., athletic directors and faculty advisors) from the schools. At its annual conferences, the athletic directors of competing NCAA institutions meet with NCAA officials to set policies for player behavior, game scheduling, and institutional ethics. The meetings allow university representatives the opportunity to discuss issues and formulate decisions on issues that could divide them during the season. Colleges and universities that violate the rules established by the governing board are in danger of forfeiting their membership privileges and being placed on probation. Probation could inhibit the schools' ability to participate in NCAA-sponsored championship tournaments, or disqualify them from revenue distribution.[11] Potential athletes steer away from schools on probation for the fear of being associated with a scandalous program, or a program that has limited exposure to television audiences. The NCAA has also established financial incentives to members who maintain good standing and abide by the rules established by the Board.

Although "money" is not mentioned in the NCAA Statement of Purpose, in 2005 cash and marketable securities accounted for 70% of the NCAA's assets, totaling over $248 million.[12] While the NCAA claims that its plan for the

distribution of revenue enables it to accomplish its goals of fairness, student athlete public awareness, and leadership,[13] this cash also motivates schools to conform to the standards established by the NCAA and encourages major conference allegiance to the NCAA.

Revenue Sharing

Cartels must formalize an arrangement that encourages their most prominent members to abide by the cartel's rules. The approach the NCAA adapts to instill this commitment is revenue distribution. Major conferences have the potential to withdraw from the NCAA and unite together in some alternative association. Since the NCAA needs these powerful conferences to maintain its control over intercollegiate sports, it distributes the majority of its generated funds to the largest conferences. The conferences then pass on their money to their member schools.

In 2003 the Big Ten, the largest revenue-producing conference, received $26.1 million from the NCAA, while at the other end the less imposing Big South Conference was granted only $2.6 million. In total, nearly $264 million in side payments were distributed to member conferences and universities that year.[14] Of the thirty one conferences in Division I, the top six receive nearly half of the revenue distribution. Much of this revenue comes from football bowl games in which the major conferences are guaranteed the opportunity to participate. The four Bowl Championship Series (BCS) games dwarf the other bowl games in terms of revenues and are dominated by the six "power conferences."[15] The NCAA argues that even though the institutions in major conferences obtain a greater share of the revenue distribution, all institutions, regardless of their conference affiliation, have a more equal playing field because of its sanctions established by the Board.

Limiting Supply

The NCAA's cartel power extends to its product market through schedule restrictions. Each NCAA sport is given specified starting and ending dates for regular season games, and every season concludes with a tournament or championship. During the specified period, NCAA teams can only play a limited number of games. The limited schedule established by the NCAA and endorsed by its member institutions results in the maximization of collective profit for the participating schools. Similar to other cartels that limit supply, the schedule restrictions are in place to benefit the universities as a whole rather than allow a

particular university to maximize its own profit. On the demand side, schools are given freedom to set their own prices for tickets and build stadiums to add to their profit base. During the 2006 college football season, student prices per game ranged from $1 at University of Arkansas to $29.50 per game at Notre Dame. General public ticket prices ranged from $6 per game at New Mexico State to $59.00 per game at Ohio State.[16]

Monopsony Behavior

Clearly, the revenue generated from NCAA football tilts the playing field in favor of successful Division IA football universities. Even with uniform scheduling some schools have the financial ability, fan base, and endowments to provide greater fringe benefits (e.g., better facilities and more recognition) to players than do other schools. That means some universities have the ability to attract talent in a manner comparable to the New York Yankees. Fortunately for the minor universities, the NCAA provides some restrictions on the more successful schools by enforcing policies that promote a level playing field for all universities. For example, participating institutions are limited to a specific number of scholarships per sport, players cannot be paid by the school or receive outside endorsements, players cannot receive money for their sport as a professional athlete, and former professional players are ineligible to participate in intercollegiate sports. Without such policies there would be bidding wars for players in terms of salaries, scholarships, and other forms of benefits.

Using data from 1985 through 1987, Brown (1993) estimated the market value of an NFL-bound college football player to be $538,760 per season. Adjusting for inflation, that value of this professional bound player would exceed $1.2 million in 2004. The difference between the cost of a scholarship and Brown's estimated market value provides an indicator of the monopsony power of the NCAA over high-level players. Scholarship limits and other restrictions make it possible for a school with 6,000 students and limited resources to compete more effectively with a university with 40,000 students and multi-million dollar endowment funds. These restrictions give the smaller schools a better chance of competing than would be the case in the absence of such controls.

Monitoring Cheating

For parity to be achieved, all participating NCAA universities must buy into the concept of equity. If one school dominates a sport or disgraces the image of that sport, particularly a revenue-producing sport, the entire NCAA membership loses. Fans will lose interest and advertisers will spend their dollars elsewhere. To insure survival, the NCAA has established a loyalty within its group. Schools are so concerned with maintaining a positive image (and avoiding heavy penalties for violations) that they monitor themselves and other schools voluntarily. In fact, there are only about 350 NCAA staff members monitoring the 1024 active NCAA member schools, with multiple athletic teams.

Many institutions contact the NCAA when a violation at their school has been brought to their attention. The NCAA appears to assign a lighter sentence to universities that acknowledge their own negligence. Member institutions also monitor each other by evaluating the outcomes of competing schools. Schools that experience sudden success can attract attention and be identified as potential cheaters (see Fleisher, Goff, Shughart, and Tollison, 1988). Convicted cheaters can be placed on probation by the NCAA, and subsequently lose millions of dollars by being banned from tournaments or championship play.

Barriers to Entry

In football there are no leagues other than the NCAA for professional scouts to view potential players. The NFL does not allow its team to employ players under 20 years old. This policy leaves attending college as the only viable choice of the top high school football players. Since no other competitive outlets exist for young athletes to showcase their talent, the NCAA is able to maintain a long-run profit in football. In basketball, the NCAA's monopsony power is a bit weaker since the NBA's age minimum is 19 years of age. In baseball, many players are drafted from high schools and minor league teams, thus reducing the monopsony power of the NCAA in that sport.

NCAA LITERATURE REVIEW

Economists have long recognized the cartel behavior of the NCAA.[17] Previous research has addressed the cartel characteristics of monopsony behavior, cheating, member cooperation, and supply limits of the NCAA and its members.

This research has provided evidence supporting the claim that the NCAA embodies cartel attributes.

Perhaps the most referenced cartel attribute of the NCAA is its monopsony power in the market for athletes. As mentioned above, Brown (1993) estimated the significant magnitude of this monopsony power by computing the economic rent (that portion of an athlete's pay that is greater than the amount needed to keep the athlete in his/her current occupation) generated by a "premium" college football player.

Another strand of research emphasizes cheating among member institutions. After noting the financial benefits of attracting better quality players, Fleisher, Goff, Shughart, and Tollison (1988) concluded that the NCAA has a built-in enforcement mechanism by which members assume that sudden improvements in on-the-field performance by some other member are positively correlated with cheating. Humphreys and Ruseski (2000) support this hypothesis. Their model, which incorporates game theory analysis, predicts the probability of an institution being placed on probation for violating the NCAA's code of conduct. The greater the possibility of being caught and the greater the punishment, the less likely is it that cheating will take place.

Eckard (1998) calls to attention the efforts of the NCAA to limit the supply of its product. Since 1952, the NCAA has restricted output by capping the number of games a member institution could play in a season. At that time, the NCAA also limited the number of a school's games which can be broadcast. But since 1982 conferences have had the freedom to negotiate television and media contracts on their own. Independent schools, such as Notre Dame in football, also are free to negotiate their media packages.

A key objective of the NCAA is to enforce the cooperative agreements established by its Rules Committee. Eckard (1998) analyzed the collusion between the NCAA and its member institutions. His study investigated the dichotomy between the competitive balance propagated by the NCAA and the inevitable inequality among cartel members with the strongest members faring better over time. His findings indicated that since the NCAA formally implemented its cartel-enhancing policies in 1952, the competitive balance objective of the NCAA has not been achieved. (The 1952 policies provided regulation of player eligibility, recruiting, and financial aid. It also created an enforcement mechanism.) In other words, Eckard found the introduction of cartel-like policies, implemented to promote parity, actually discouraged a competitive balance within each sport. His findings highlight the unbalanced impact of cartels on their affiliates. We feel the

imbalance recognized by Eckard would have been even greater without the NCAA regulations and cooperative policies.

THE GOAL OF PARITY FOR THE NCAA AND THE NFL

The cartel qualities of revenue sharing, collusive behavior of governing boards, standardized rules among competitors, and monopsonistic control of labor encourage parity among the teams. The benefits of parity are recognized by NFL players and owners. Gene Upshaw, Executive Director of the NFL Players Association stated that in terms of teams' won-lost records, "everyone was close enough to keep it fair."[18] His statement reveals the preference of the players to have parity among the teams. There is evidence of improvements in parity among NFL teams. From 1993 to 2006, on average 23 of the 32 NFL teams still had an opportunity to win the Super Bowl with three weeks left in the season. Furthermore, 17 different teams have played for the Super Bowl and 9 different teams have won it over that time frame. From the players' perspective, the parity increases the pool of funds available for salaries. From an owners' perspective, team parity enlarges the fan base and increases profit. With both sides recognizing the benefits of parity, the owners and players are united in their purpose.

On the college level, assuming that competing universities have comparable facilities, academic standards, and access to professional leagues, every school should have equal access to the top high school players. Under such assumptions, the on-the-field parity of college teams should be improved.

There is evidence that the policies implemented by the NCAA have promoted equity among member institutions. In Division I basketball, 17 different universities won the National Championship in the 22 years from 1983 to 2004, while 38 different schools advanced to the Final Four. This balance among teams has heightened fan interest, increased gate receipts, and promoted media contracts with the major networks. Television revenue increased by 62 percent over the period from 2000 to 2004**.** It is in the best interest of the NCAA and its member institutions to stand behind the cartel and enforce the policies that encourage parity.

CONCLUSION AND RECOMMENDATIONS:

One of the NCAA's primary objectives is parity among its member universities in athletic events. This parity is embedded in the fabric of the NCAA through its enforced policy restrictions on player recruitment and compensation,

revenue distribution, and standardized scheduling. But parity is a difficult concept to quantify. The NFL owners' association uses similar cooperative policies to create an environment of parity and profit. The owners mandate salary caps on teams, negotiate league media contracts, govern player legislation, control schedules, and share revenue. The NFL's soaring capacity percentages, increasing profits, substantial market capitalization growth, and high rates of return are due, at least partly, to the league's parity policies.

Both the NCAA and the NFL have constructed regulations to promote parity that might appear contrary to the "beat out your competition" principles of pure capitalism. Their interesting approaches to "level-the-playing-field" have proven successful for two organizations that appear to have completely different objectives.

This model of cooperation has been adopted by Major League Soccer. Recently, the league bought an internationally recognized player in an effort to enhance league recognition. The team owners selected Los Angeles as the most lucrative venue for this world renowned player. They understood that the best platform to market him, and essentially the MLS was LA. Other professional and amateur leagues should consider implementing cooperative policies. This parity objective appears to attract fans and improve the prospects for success regardless of how success is measured.

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ENDNOTES

[1] Doug Hamilton, former President of the Los Angeles Galaxy, personal interview, January 18, 2005

[2] Dean's List, amusing musings on sports September 12, 2004. http://deans-list.net/articles_details.php?ID=9

[3] "NFL Owners Approve Labor Pact, Raising Salary Cap", Washington Post, March 9, 2006, page E01.

[4] This information was obtained from an interview with Richard Thigpen, General Council of Carolina Panthers.

[5] See Kowalewski and Leeds (1999)

[6] Street & Smith's Sports Business Journal Vol. 8, Issue 21, 2005, p.20

[7] All MLB and NFL profit data was found at www.forbes.com/lists/results

[8] Ibid 21, data from 2004

[9] www.ncaa.org

[10] According to the NCAA, in 2004-2005 their Television and Marketing Rights fee produced $436,609,819

[11] Depken and Wilson (2004) provide an aggregate study on the Cost of Probation.

[12] http://www.ncaa.org

[13] http://www.ncaa.org

[14] http://www1.ncaa.org/finance/revenue_distribution_plan

[15] Atlantic Coast Conference, Big East, Big Ten, Big Twelve, Pac Ten, South Eastern Conference

[16] Data was acquired from their respective ticket offices.

[17] See Becker (1987)

[18] www.phillyburbs.com/pb-dyn/articlePrint.cfm?id=390655