

A Financial Analysis of Publicly Traded Professional Sports Teams

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Abstract

Throughout history there have been a number of professional sports teams that have been publicly traded. Many fans and followers of sports may jump at these opportunities to own a part of their favorite teams. This paper analyzes stock performance of past and current publicly traded teams to determine whether these stocks constitute a sound financial investment or only derive their value from the sentimental value stockholders place on the ownership. Monthly and yearly stock returns of both American and European companies were compiled, analyzed, and compared to popular stock market indexes. Much of the analysis was done using Microsoft excel regression, correlation, and descriptive statistics functions. Our findings indicate stocks of publicly traded professional sports teams show that they can provide some investment value for investors, although not all of them can be recommended as a sound financial investment. Value is contributed by the way of high returns in some periods and significant portfolio diversification benefits. Since stocks of publicly traded professional sports teams have shown the ability to provide investors with value, future opportunities may merit serious consideration when they become available.

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I. Introduction

An initial public offering (IPO) is defined as the first sale of stock by a private company to the public ("Initial public offering," 2010). Businesses primarily initiate an IPO to generate capital in order to fund their operations and growth. Professional sports teams throughout the world are no different. Several teams have used IPO's in the past but there are currently no American professional sports teams that are publicly traded. Since the late 1990's there have been several cases of professional sport franchises issuing initial public offerings (IPOs) to the general public. The issuances of such IPOs have been carried out in a variety of ways: Publicly traded teams, general corporate ownership, and community-based ownership. It is important to determine whether transitioning from being a private to public company would be beneficial to owners of the team and/or investors. This paper will look at past cases of professional sports teams initiating an IPO; determine how much capital was raised and whether the process was worthwhile for owners and investors. Also, in order to determine if purchasing stock in a professional sports team would be beneficial, this paper will use stock returns of previous cases to analyze the performance of the stock and the potential diversification benefit of including a professional sports stock in investor portfolios.

II. Advantages and Disadvantages of Initial Public Offerings

a. Owners.

Advantages.

An initial public offering can be a great way for an owner to raise large amounts of capital that can be valuable for several reasons.

Stadium construction/renovation. It has become commonplace in professional sports for teams to build the most up to date, state of the art facilities as possible. These stadiums can be extremely pricey and cost upwards of a billion dollars. For example, according to Forbes.com Madison Square Garden and the new Yankee Stadium cost \$1.1 and \$1.3 billion respectively (Egan, 2008). This is an incredible amount of money that may not be able to be funded solely by private owners. Offering stock to the public could be a great way to hedge these huge costs and make the construction or renovation of a facility possible. In the past it was common practice for a city or municipality to either pay some or all of these costs in order to keep their team in town (Keating, 1999). For example, during the twentieth century \$15 billion came directly from local governments to subsidize sports facilities (Keating, 1999). However, recently there has been a sharp decline in these subsidies. Tax payers are becoming reluctant to increase their taxes in order to help a rich individual build a stadium for their team (Kane, 1999).

Players. The idea of selling stock to the public in order to fund the purchase of free agents and players has been used by British soccer teams (Smith, 2003). Top caliber players can be very expensive and this can be an effective way to make such purchases possible, especially for smaller market teams. In 2010, according to Forbes.com, the top three revenue generating teams in Major League Baseball (New York Yankees, New York Mets, Boston Red Sox) average \$325 million in revenues while the bottom three (Oakland Athletics, Pittsburgh Pirates, Florida Marlins) average \$148 million. Likewise, in the NFL, the top three teams in terms of revenue (Dallas Cowboys, Washington Redskins, and New England Patriots) averaged \$364 million while the last three (Jacksonville Jaguars, Oakland Raiders, Detroit Lions) average \$216 million. As seen here, there is a difference of over \$100 million in revenues between the big market and small market teams in these professional leagues. In 2007, Alex Rodriguez signed a

10 year contract with the New York Yankees worth \$275 million according to espn.com ("Rodriguez finalizes \$275m," 2007). In 2008, CC Sabathia signed a 7 year \$161 million contract with the New York Yankees, according to NBCsports.com ("Lefty ex-cy young," 2008). Since small market teams cannot generate the same of revenues as the larger market teams, it puts them at a disadvantage when it comes to signing expensive free agents such as Rodriguez and Sabathia. However, if small market teams used an IPO to increase their capital and cash available, they may be able to make a run at some of these free agents and improve their team's chances of winning.

Liquidation. Professional sport franchises can be worth hundreds of millions of dollars, making them very difficult to change hands. What does a private owner do when they are looking to sell their team but cannot find a buyer right away? One solution to this problem would be the sale of an IPO in order to liquidate some of their investment in the meantime without giving up their control of the team. In this case, the money received from the sale of stock is referred to as "early money" (Schaffer, 2006). By selling some of the team to the public, owners receive a large lump sum of money right now, but earn less when the team is sold outright because shareholders need to be compensated as well. This technique of an owner cashing in on their investment before they are able to sell the team to another private investor has little downside and great advantages.

Increase brand loyalty. Furthermore, the sale of stock to the general public presents the opportunity for a sport franchise to increase its loyal fan base (Schaffer, 2006). This brand loyalty can be beneficial to the owner in the form of increased merchandise purchases, website visits, season ticket sales, and revenue in general. Parents and grandparents may purchase stock as gifts for kids, which in turn could start them young and make them fans for life (Schaffer,

2006). This increased revenue is not enough for an owner to offer an IPO in itself; however, it could be a contributing factor in the decision process (Schaffer, 2006).

Disadvantages. Although a very large amount of capital can be raised from initiating an IPO, there are many challenges and costs associated with going public as well.

League Opposition. The policies on going public are different depending on which professional league a particular team operates in. In the NHL, league officials review proposals regarding the sale of stock and have generally been compliant as long as one shareholder maintains majority control at all times (Schaffer, 2006). In 1997 Major League Baseball franchise owners voted to allow the sale of stock once registered with the U.S. Securities and Exchange Commission ("baseball owners ok," 1997). Like the NHL, and MLB owner that initiates an IPO must maintain majority control over the team at all times, meaning that they can sell up to 49% of the team. The NFL, however, is a different story. The NFL constitution prohibits corporate ownership within its league and all transfer of ownership among private parties must be approved by 75% of the current owners (Schaffer, 2006). With this said, there is some controversy over whether or not this NFL rule would stand against a law suit under the Sherman Anti-Trust Act if an owner chose to do so. The problem is, however, law suits can be costly, time consuming, and owners will have to take a close look at if they want to try and sue an organization that they are actually a part of. This could create tremendous resentment by other owners throughout the league.

Costs. A very valid criticism against a professional sport franchise selling stock to the public is the cost it would take to actually carry out the IPO and maintain the team as a public corporation. One study states that, in general, the costs of carrying out an IPO will cost around 15% or more of the capital actually generated (Kratofil, 1999). 15% is a very large sum of

money when you consider the amount of capital that is being raised. For example, in the case of the Cleveland Indians IPO, the owner raised \$60 million from the sale but had expenses of \$6.2 million in the process (Kadlec, 1998). This is not quite 15% that was mentioned earlier; however, this \$6.2 million in expenses is money that owner, Richard Jacobs, will lose on the value of his franchise. He collected \$53.8 million in “early money,” but lost \$6.2 million on the expenses that he would have collected in the final sale of the team to a private investor in 2000, had he not gone public.

Most of the expenses of initiating an IPO are attributed to the investment bankers who are responsible for actually pricing, marketing, and selling the securities to the general public (Schneider, Manko, & Kant, 1981). Also expensive are the attorneys necessary to create filings for the Securities and Exchange Commission and handle various legal issues throughout the process. In addition, certified accountants are needed to prepare financial statements that are required by the Securities and Exchange Commission (Schneider, Manko, & Kant, 1981). This is not a onetime expense, accountants and attorneys will be needed on staff permanently in order to prepare and maintain these filings and statements each year in order to comply with SEC regulations. Aside from the many monetary costs, there will also be many opportunity cost incurred throughout the process. An example of this is the time commitment that key personnel of the organization will have to attribute to the sale of stock (Schaffer, 2006). Executives will need to spend much time meeting with lawyers, accountants, and financial advisors throughout the process; taking them away from their normal day-to-day responsibilities. The process of going public is not a short one; it takes at least three months and can even exceeds six months (Schneider, Manko, & Kant, 1981). This could hurt the short term operations of the organization and put them at a competitive disadvantage during this duration of time (Schaffer, 2006). The

management of the organization prior to the sale of an IPO often has to go on “road shows” in order to promote the sale and gain awareness (Cheffins, 1999). This, again, occupies key personnel and can have negative effects of short term operations and efficiency.

As mentioned earlier, the costs of going public do not end once the sale of the IPO is complete. In addition to the cost of lawyers and accountants to prepare documents for the SEC on a regular basis, there will be costs to prepare annual shareholder meetings, distribute materials to shareholders, and maintaining a registry of shareholders (Schaffer, 2006). These may sound simple and insignificant but the nature of sports stock in the past makes them expensive and hard to deal with. For example, in the case of the Boston Celtics, they had 90% of shareholders owning 10 shares or less (Lebowitz, 1996). This greatly increased the size and cost of shareholder meetings, paperwork that needed to be distributed, and made the job of maintaining a shareholder registry extremely difficult (Lebowitz, 1996).

Disclosure. In the event of going public, the owner of the professional sport franchise would be required, by the SEC, to make all of their financial operations public. We live in an age where every action, or non-action, of a professional sports team is highly publicized and criticized by the media (Schaffer, 2006). All of this newly public information would give sports journalist and talk show hosts an opportunity for more criticism and negative press toward that franchise. Also, by making the team’s profits public, the owner may hurt themselves in regards to negotiations of player’s contracts and city subsidies for stadium construction (Schaffer, 2006). Player’s agents and cities will be able to see exactly how much money the team is actually making instead of simply having to rely on the owner’s word or estimated figures.

Owners have the ability to raise incredible amounts of capital in the process of selling stock to the public, but they need to carefully weigh the benefits of this decision against both the monetary and opportunity costs that will be incurred from the sale.

Investors. An initial sale of a stock by a sports company requires two parties; there needs to be a team offering the sale and individuals willing to purchase shares. Without proper demand for stock being sold, the sale will be a failure and no real capital will be raised. Past IPO's by professional sports teams have primarily been purchased by fans of that particular team (Schaffer, 2006).

Advantages. The nature of past sports stock IPO's have made the advantages of owning shares in the team psychological rather than monetary or tangible (Schaffer, 2006). The primary advantage is the sense of pride that one will gain in owning a piece of their favorite professional sport franchise. It is no secret that sports teams can mean a lot to the fans in their community, and having the opportunity to own a part of that team is something fans have taken advantage of when available. Fans hold sentimental value in their ownership and have been documented to have bought stock as gifts and pass down shares as a family heirloom.

An important tangible benefit of owning shares of stock in a professional sport franchise is the opportunity to attend annual shareholder meetings (Schaffer, 2006). For example, the 2005 Green Bay Packers shareholders meeting drew a crowd of 9,700 people and a shareholders-only practice the day before attracted over 14,000 viewers (Fedotin, 2005). As seen here, shareholders seem to enjoy the opportunity to attend special events that put them closer to the team.

Disadvantages. The primary and most common argument brought up in the opposition of owning stock in a professional sport franchise is the idea that it is a bad financial investment

(Cheffins, 1999). When teams offer an IPO, such as the Cleveland Indians and Florida Panthers, the owners make it clear to the public that they have no intention of paying dividends on the stock (Lascari, 1999). The Boston Celtics did pay dividends in their first couple years of being public but the returns were nothing extraordinary by any means (Krupa, 1998). Some say that the best opportunity for a shareholder to realize a return on their purchase of stock is when the team is actually sold and they earn capital gains. This was the case with the Cleveland Indians when the team was sold and shareholders received a 50.7% return over the two years (Lubinger, 2000). Generally, however, those who purchase stock in a professional sports team do not expect nor actually realize any monetary return on their investment. As the analysis in this paper suggests, there may be diversification benefits for an investor as well.

Also, due to league rules that require one individual maintain majority control, shareholders do not gain anything in regards to voting rights in the team's operations (Schaffer, 2006). Shareholders technically are awarded a vote in the operations but the owner's vote is worth more than every other shareholder's combined.

Furthermore, shareholders do not receive any additional perks for being an owner. Historically, there has been no free merchandise or tickets, opportunity to meet the staff, or priority purchasing for playoff tickets.

III. Types of Public Ownership

Since the late 1990's there have been several cases of professional sport franchises issuing initial public offerings (IPOs) to the general public. The issuances of such IPOs have been carried out in a variety of ways: Stock market teams, general corporate ownership, and community-based ownership.

a. **General corporate ownership.**

It has become commonplace for public corporations to purchase sports franchises in the NBA, MLB, and NHL. In this case, the sports teams are just a fraction of the corporations overall operations. Purchasing stock in one of these corporations would not assure an investor that any of their money will go toward improving the sports team that they own. A fan looking to invest in or support a specific team would not necessarily do so under this ownership style. Examples of general corporate ownership are as follows:

Comcast Corporation. Comcast Corporation is a provider of cable, entertainment and communication products and services which owns such companies as: E! Entertainment Television, Versus, Golf Channel, G4, and Style Network among others ("Comcast cable networks," 2010). In 1996 they purchased the Philadelphia 76ers and Philadelphia Flyers to add to this list ("Corporate overview," 2010).

Cablevision System Corporation. Cablevision system is a telecommunications, media and entertainment company which owns and operates Madison Square Garden, Inc along with companies such as AMC, IFC Entertainment, Rainbow Media Holdings, and News 12 Network among many others ("About cablevision," 2010). Madison Square Garden, Inc., which is traded on the NASDAQ under the ticker symbol MSG, has a portfolio of investments that includes three segments: MSG Media, MSG Sports, and MSG Entertainment. In 1997, the company purchased the New York Knicks and New York Rangers to add to their MSG Sports segment. Therefore, because these two teams are such a small portion of Madison Square Garden, Inc's entire business, owning MSG stock would not directly contribute to the operations of these teams.

b. Community-based ownership.

This ownership style takes place when non-marketable securities are sold to the public and the community owns the majority of the shares ("2010 shareholders meeting," 2010). The term non-marketable securities means that the shares cannot be traded and owners are not allowed to make a profit from them.

Green Bay Packers. The Green Bay Packers very unique in that they are the only American professional sport franchise to be owned by individual shareholders. Since 1923 they have been a publicly owned, non-profit organization that is now owned by 112,158 stockholders holding a total of 4,750,937 shares ("2010 shareholders meeting," 2010). Stockholders do not receive any dividends or preferential treatment for their ownership and support of the team. Stockholders do have the right to vote for the members of the board of directors which in turn elects a seven member executive committee. Individual shares can only be accumulated by purchasing them during an IPO or in the case of inheriting shares from a death in one's immediate family. Throughout their history, the Green Bay Packers have carried out four stock sales: 1923, 1935, 1950, and 1997. The most recent sale was of roughly 120,000 shares at \$200 per share, raising over \$24 million for the team. This large influx of capital ensured that the team would stay afloat for the next 25 years. Although they generated such a large amount of capital, it is not as much as they would have hoped; the team had planned on selling 400,000 shares. The fact that they could not even sell half the amount that they wanted shows that it is possible to saturate the market of fans willing to spend money to support their team.

c. **Publicly traded teams.**

A stock market team is one in which the revenue and profits generated by that team are the primary source of revenue for the corporation that owns that team. These corporations issue marketable securities to the public, in the form of an IPO, which are then traded on the New York Stock Exchange (NYSE) or National Association of Securities Dealers Automated Quotations (NASDAQ) or other stock market. Three teams that can be classified as publicly traded teams are the Boston Celtics of the National Basketball Association (NBA), the Cleveland Indians of Major League Baseball (MLB), and the Florida Panthers of the National Hockey League (NHL) (Cheffins, 1999).

Boston Celtics. The Boston Celtics carried out a public offering in 1986 in which forty percent of the team was put up for sale to the public by its three general partners: Don Gaston, Alan Cohen and Paul Dupee. Investors purchased the shares in the master limited partnership at an IPO price of \$17.50 per share on the New York Stock Exchange (NYSE) under the ticker symbol BOS (Bailey, 1989). In 1998, following the expiration of the tax advantages available to the master limited partnership, the Celtics partnership was reorganized into two entities: a public limited partnership, taxable as a corporation; and a private limited partnership. Units of the new public partnership continue to be listed for trading on the NYSE until 2002 when the team was fully purchased by private investors (Krupa, 1998).

Cleveland Indians. In 1998, Owner of the Cleveland Indians, Richard E. Jacobs, sold four million shares of stock at \$15 each to raise \$60 million (Kadlec, 1998). Jacobs retained all voting rights for the team and offered no benefits in regards to dividends or preferential ticket treatment. The company did not plan to pay any dividends or compensate shareholders in any

similar manner. The team was then sold in 2000 for \$320 million and resulted in all of the shares of stock being bought back for \$22.61 per share (Lubinger, 2000) (proxy statement).

Florida Panthers. In 1996 Florida Panthers Holding Inc. carried out an IPO that constituted nearly 6 million shares and 49% ownership of the franchise. (Lascari, 1999). The price of the IPO fluctuated between \$10 and \$12 dollars per share on NASDAQ under the ticker symbol PUCK and generated \$67.3 million (Golden Panthers). To owner Wayne Huizenga, a man who built Waste Management Inc. and Blockbuster video into billion-dollar ventures, \$67.3 million was a large amount of capital considering that the team was valued at \$45 million by Financial World magazine only 6 months earlier (Golden Panthers). The IPO was structured in such a way that investors were required to purchase a minimum of 100 shares of the Class A Common Stock and could not purchase more than 1,000 shares.

In the summer of 1997, Huizenga instituted another IPO of Class A Common Stock; however, this time the shares were to be traded on the NYSE under the ticker symbol PAW. However, soon after their IPO Florida Panthers Holding Inc. began purchasing hotels and resorts and moved from being a stock market team to more of a general corporate ownership style.

There are various structures of publicly traded professional sports franchises and each has its own benefits and drawbacks to owners and investors. Each individual case needs to be analyzed on its own in order to accurately determine its potential value to an owner or an investor.

IV. European Public Ownership

The idea of operating a professional sports team as a publicly traded corporation is by no means isolated to the United States. Throughout history there have been many soccer clubs that

have raised capital through an IPO and have had their stock traded on a securities exchange; even the famed Red Devils of Manchester United and Gunners of Arsenal have operated this way.

Teams in the FA Premier League, which is a league of the top 20 teams in England such as Manchester United and Arsenal, have traditionally been owned by very wealthy individuals as a sense of civic pride rather than financial investment. It was seen as a game for the working class fan, represented through inexpensive ticket prices, who tied fandom with their personal identity. Owners did not expect to experience investment gains from their teams but rather used the soccer club to promote themselves and other organizations that they were associated with (Nauright and Ramfjord, 2010).

Recently, however, there has been a movement towards commercialization within the European leagues as owners see investment opportunities. Such opportunities in this industry can exist in the forms of incredible media and television contracts, increased ticket prices, concession sales, and luxury seating. Included in this commercialization is a movement by foreign owners, particularly Americans, to take European teams private and abandon their standing as publicly traded corporations. Football clubs that have been taken private by American owners include: Manchester United by Malcolm Glazer (also owns the Tampa Bay Buccaneers of the NFL), Aston Villa by Randy Lerner (also owns the Cleveland Browns of the NFL), Liverpool by Tom Hicks (also owns the Texas Rangers and Dallas Stars) and George Gillett. Additionally, Stan Kroenke (also owns the Denver Nuggets of the NBA, Colorado Avalanche of the NHL, and US soccer team Colorado Rapids, among other things) has been building up a stake in already privately held Arsenal.

V. Dead Companies

This section will look into the performance of stock for companies that were at one time publicly traded, but have since become privately owned. Financial terminology for such companies is “dead companies” which includes companies that were taken private or have filed for bankruptcy. Some of these companies have been mentioned already in this paper (Boston Celtics, Florida Panthers, and Cleveland Indians), while a few are new to this discussion (Manchester United and Aston Villa). Historical stock returns will be examined and compared to market indexes, using regression and correlation analysis, to determine the investment performance of the stock in relation to the market. This will help determine whether or not any of these companies would have been a viable investment during the time they were publicly traded. This will provide insight into whether stocks of publicly traded sports teams, in general, can constitute a good investment.

a. Boston Celtics Limited Partnership

Stock for the Boston Celtics Limited Partnership tipped off its trading on the New York Stock Exchange, under the ticker symbol BOS, in the final months of 1986. Throughout its time being publicly traded, from December 31, 1986 to December 31, 2002, BOS had experienced an average annual capital gain of 9.81% (Table 1.0). The company, unlike many publicly traded professional sports teams, paid out dividends to its shareholders on a regular basis. From 1986 to year end 2002, BOS paid out an average annual dividend of \$1.18 to shareholders. When dividend income is taken into account, total annual return of Boston Celtics stock over that period increases to 16.44% and a standard deviation of 42.65%. When compared to the average yearly return of the S&P 500, a stock market index of 500 large-cap common stocks actively traded in the United States, over the same period of 9.67%, BOS provided a significantly higher

return. Comparing stock performance to the S&P 500 is useful because it is a stock market index of 500 large company common stocks actively traded in the United States, is one of the most widely used investment benchmarks for the US stock market, and shows the general movement of the market as a whole. This comparison shows that while it was being traded, BOS gave investors the opportunity to realize significant gains, outpacing the market by nearly 7%. A large portion of the high returns for BOS can be attributed to an incredible jump in the stock's price in anticipation of its privatization. This event officially occurred on April 30, 2003, when the company's shares were purchased from stockholders for \$27 per share.

Typically, the reward of common stocks having the potential to realize abnormally high returns relative to the market does not come without risk. This risk is primarily measured by the beta of a stock which measures the volatility of the stocks returns in relation to the market. The beta of a stock is usually listed on a stock's quote summary; however, since the companies discussed here are no longer publicly traded, this information is not available. In order to compute a value for the stock's beta, a simple regression analysis can be used. When comparing the monthly returns of the Boston Celtics' stock, from December 31, 1986 to December 31, 2002, to the monthly returns of the S&P 500 over the same period, using an OLS regression analysis, the x-variable coefficient (beta) of BOS was estimated at 0.15. This is extremely low and suggests that the stock is a very stable, safe investment even though it has provided average yearly returns that outpace the market by a significant margin. This value, however, should be given little consideration given the fact that the r squared value of the regression analysis is a mere 0.62%. The r squared value is used to show how much of the variability in the y variable (BOS) is explained by the change in the x variable (S&P 500). A significant r squared is

normally in the range of 75-100%; thus a value of .62% shows that the beta number configured in the analysis has very little relevance.

Boston Celtics' stock had a high average annual return in comparison to the S&P 500; however, it appears that this was a result of the risk associated with the stock and not risks related to market factors. This is shown by using the Sharpe ratio, which is calculated by taking the average annual return minus the risk free rate, divided by the standard deviation. A higher Sharpe ratio number is considered better because it shows that the stock experienced higher return for its level of risk, as measured by the stock's standard deviation. A lower Sharpe ratio would show that the stock does not yield much return compared to the riskiness of the stock. Boston Celtics' Sharpe ratio was 0.27 while the S&P 500's was 0.3. This shows that relative to the amount of risk that was associated with each, as measured by standard deviation, the S&P 500 outperformed BOS on a risk-adjusted basis. Although the Boston Celtics' stock had returns that were significantly greater than that of the S&P 500, when the total risk is taken into account, it does not appear as attractive of an investment.

Another value that needs to be considered is the correlation coefficient of the stock's returns in relation to the market. This is, again, done using the S&P 500 as a benchmark and measures the relationship between the movements in the two variables. The correlation coefficient ranges from +1 (perfectly correlated) to -1 (perfectly uncorrelated). A correlation coefficient of 0 shows that there is absolutely no relationship between movement in the stock's price and movement in the market index. Boston Celtics' stock delivered a correlation coefficient of .07 in relation to the S&P 500 stock index. This number is very close to 0, indicating that there is very little relationship between the two. Having a very low, or even negatively, correlated stock can be very helpful to an investor when considering portfolio

management, due to the concept of diversification. This concept revolves around the idea of assembling a group of negatively or uncorrelated investments that will mitigate risk without a corresponding sacrifice of expected return. One wants to group stocks that perform differently in relation to one another as to offset any outrageous declines with abnormal gains. The fact that Boston Celtics' stock had a low correlation coefficient made it an attractive option for diversification purposes because it was little affected by changes in the market as a whole.

There seems to have been some real value in using the Boston Celtics' stock as an investment while it was being traded publicly. The stock posted modest capital gains and a very healthy dividend on a yearly basis, but investors had to be willing to accept a higher level of risk. However, if one's portfolio is properly diversified, a lot of this risk could be mitigated. Boston Celtics' stock provides additional diversification benefits due to its low correlation coefficient.

b. Cleveland Indians Baseball Company

Although the Cleveland Indians' stock was only publicly traded for a short length of time, it performed very well over that period. From June 30, 1998 to January 1, 2000, the company's stock, traded under the ticker symbol CLEV, increased 107.56% (Table 2.0). A buy-and-hold strategy over this two year period would have resulted in impressive capital gains for shareholders. The average annual return in this case was 46.18% with a standard deviation of 35%. Over the same period, the S&P 500 had an average annual return of 12.22% and a standard deviation of 7.03%. This shows that that the Cleveland Indians' stock was providing much higher returns, but investors were required to carry much more risk in order to achieve these gains. The results of the Sharpe ratio show that the amount of risk one was required to carry was not excessive in regards to its returns. The Cleveland Indians' Sharpe ratio was 1.13

and the S&P 500's was 0.79; meaning that the risk adjusted return for the Cleveland Indians' was greater than that of the index.

Another benefit of owning this stock would be its fairly low correlation to the S&P 500 index of 0.2. This shows that the Cleveland Indians' stock generally did not move in the same direction or to the same extent as movements in the S&P 500. This fact contributes the benefit of diversification to this stock when it is used in a portfolio of other assets.

Cleveland Indians' stock, in the short time it was publicly traded, showed some potential as an investment. There was a definite opportunity to realize extraordinary capital gains while holding a reasonable level of risk and ability to diversify one's portfolio by utilizing this asset in a portfolio.

c. Florida Panthers Holdings Incorporated

The Florida Panthers became a publicly traded company on November 31, 1996 under the ticker symbol PUCK. They remained a publicly traded team until August 31, 1999 when they became just a minor fraction of the much larger Boca Resorts Incorporated, traded under the ticker symbol RST. This paper will just focus on the performance Florida Panthers' stock when it was a stand-alone stock market team. Over this period of time, from late November 1996 to late August 1999, Florida Panthers Stock had an average annual return of 12.14% and a standard deviation of 67.42% (Table 3.0). The Florida Panthers' average annual return is lacking when compared to the 20.76% average annual return of the S&P 500 over the same period. Although the stock returned 12.14%, it actually decreased in value, from November 31, 1996 to August 31, 1999, going from \$10 to \$9.94. The reason that the company still had a positive average annual return over the period is because it performed very well in its first year, increasing 88%. During

that first year, the stock actually reached a high of \$32.13 per share (on January 31, 1997) which would have equated to over a 221% increase from its original IPO price. This shows that investors had the opportunity to realize incredible capital gains in a very short period of time if they bought into the stock as an IPO and sold off their shares after just a few months.

A regression analysis of Florida Panthers' stock compared to the S&P 500 showed much the same results seen in the Boston Celtics' stock. Such a regression shows that the Florida Panthers had a beta of .24, which is very low and would indicate that the stock is very stable and safe. However, the r squared value associated with this beta is an extremely low 0.5%, meaning that the beta given by the regression does not hold much weight and is of little real value to an investor.

In addition to having an average annual return that was below that of the S&P 500, the Florida Panthers' stock underperformed the index in regards to risk adjusted return. The Florida Panthers' stock had a Sharpe ratio of 0.11 while the S&P 500 posted a mark of 1.39. This shows that the Florida Panthers' stock did not perform well, given its level of risk, compared to the S&P 500. The reason for the large disparity between the two values is the high standard deviation associated with the Florida Panthers (67.42%) as compared to the S&P 500 (11.58%).

Most of the value associated with owning Florida Panthers' stock as an investment would exist in the form of diversification. Although it is a short time frame to look at, Florida Panthers' stock had a correlation coefficient of 0.07 as compared to the S&P 500 index. This shows a very low relationship between the two and an opportunity to use this stock as a diversification tool.

As a whole, Florida Panthers' stock did not constitute a valuable investment while it was being publicly traded. The stock underperformed the S&P 500 in terms of average annual return and, at the same time, was a riskier asset as measured by standard deviation. As mentioned

earlier, the only real value in this stock would be its diversification benefits as measured by its low correlation coefficient.

d. Manchester United PLC

Manchester United is one of the most popular and successful soccer teams in the world. Their successes include 18 titles in the UK's Premier League and 11 in the FA Cup. The team was founded in 1887 and currently plays its home matches at Old Trafford stadium. Revenues are generated through ticket sales, concessions, broadcasting rights, and merchandise. Since 2003, the team has been operated under the American owner Malcolm Glazer. In 2005 Glazer ended Manchester United's long standing as a publicly traded company and took the team private.

This paper will analyze the performance on Manchester United's stock, traded on the London exchange under the ticker symbol MNU, from January 1, 1997 to June 21, 2005. Over this period of time, Manchester United PLC stock lost 54.2% of its value, dropping from 6.55 to 3.00 British pound sterling (Table 4.0). Although the stock dropped in value as a whole, it resulted in an average annual return of 9.46% in its domestic currency and a standard deviation of 65.11%. A very small portion of this return is attributed to annual dividends paid out by the company. When currency exchange rates are taken into account for an American investor, in total, the stock had an average annual return of 9.46% and a standard deviation of 65.11%. This shows that, in general over these nine years, the currency exchange rate worked in favor of the USD and strengthened the asset's returns. When compared to the FTSE 100, a stock market index of 100 well-established companies listed on the London exchange, Manchester United's stock performed quite well. Over this same period of time, the FTSE 100 had an average annual

return of 3.54% and a standard deviation of 18.38%. Although Manchester United's stock realized larger returns than the major stock index, it was also much riskier. This is shown by the large disparity in the standard deviation of the two. Manchester United's standard deviation is very high, thus showing that the stock has large fluctuations and has high price volatility.

When compared to the movement in the FTSE 100, Manchester United's stock shows very little correlation. The correlation coefficient related to these two variables was -0.03. This negative coefficient shows that in general, the stock moved slightly in the opposite direction of the market index. This is incredibly beneficial in diversifying one's portfolio of assets. By including an asset that moves opposite the market, one can lessen the losses associated with a downturn in the overall market.

This analysis shows that there was, in fact, some value in owning Manchester United's stock over this nine year period. It provided an investor the opportunity to achieve average yearly returns that outpaced the market; however, such an investor would have to be willing to accept a much higher level of risk on a standalone basis. The main benefit of this stock lies in its negative correlation to the major stock index and ability to help an investor diversify their portfolio of assets.

e. Aston Villa PLC

Aston Villa PLC is an English soccer team that competes in the UK's Premier league. Formed in 1874, Aston Villa has won 5 league championships and 7 FA cups. They play their home matches at Villa Park in Birmingham and have been owned by American, Randy Lerner, who bought and took the team private in 2006.

In the past, Aston villa PLC has had stock traded on the London exchange under the ticker symbol ASV. From October 6, 1997 to October 16, 2006, Aston villa PLC had an average annual return of 5.03% and a standard deviation of 45.04% over the period in its domestic currency (Table 5.0). Although the stock had a positive average annual return, over the entire ten years it lost 35.85% of its value dropping from 8.48 to 5.44 British sterling pounds. A very small portion of the stock's annual return comes from a small dividend that was paid out in 1998 to 2002. When the total return in GBP is combined with the currency yield to USD over the ten year period, it would have lowered the returns to an American investor. The average annual return after this conversion would have dropped to 4.21% with a lower standard deviation of 40.83%. Although the standard deviation dropped about five percent when converting the prices to US dollars, this is still a very large value and shows the price volatility of the stock. When compared to the FTSE 100, which had an average annual return of 3.81% and a standard deviation of 16.49%, ASV's stock yielded a higher return but contained more price volatility than the index.

The correlation coefficient associated with Aston Villa's stock and the FTSE 100 is -0.07. Because the stock had a very low negative correlation to the major index and even had some tendency to move in the opposite direction, this stock had valuable diversification benefits.

It should be noted that up until 2003, Aston Villa PLC had negative returns every year dating back to 1997; but from 2003 onward, each year resulted in positive annual returns. Such a turnaround may be based on an announcement of privatization of the team. When teams transition from being public to private companies, shareholders are often paid a premium for their stake in the company. This means that the shares are usually bought back at a price above

their normal market value. Knowing this, investors want to own the shares when the transition is made in hopes that they can realize significant capital gains in a short period of time.

As a whole, Aston Villa PLC was not a profitable investment. It had very volatile average annual returns that barely outpaced the market. There is the opportunity, however, to use this stock to help diversify an investor's portfolio due to its slightly negative correlation to the major market index. In addition, price appreciation was a possibility for an investor who purchased the stock in 2003 as the company was approaching privatization.

VI. Select Current Publicly Traded Teams

Even with all the privatization of soccer clubs, there are still several that maintain their public ownership, including Juventus, Roma, Tottenham, and Watford (Nauright and Ramfjord, 2010).

a. Juventus F.C. S.p.A

Juventus F.C, founded in 1897, is one of the most popular and successful soccer clubs in Italy's National Professional League. Since 1923 the team has been controlled by the Agnelli family, which started and continues to own 30% of automaker Fiat. They have won two Champions League titles, three UEFA Cups, and a record 27 Serie A league championships. Even with all of this success, Juventus F.C. has faced some adversity. In 2007 the team was relegated to a lower level of competition, Serie B, after being investigated in a match fixing scandal. It was found that team executives colluded with league officials to appoint preferential referees for Juventus' games. In addition to this, the investigation uncovered some accounting irregularities that lead to the resignation of the company's entire board of directors. (Hoovers)

Juventus F.C. S.p.A has common stock traded on the Milan exchange under the ticker symbol JUVE.MI. According to Reuters.com, as of April 21, 2011, Juventus' stock was being traded at .82 euro a share with 201.55 million shares outstanding and a market capitalization of 167.29 euro (Table 6.0). According to Reuters.com, Juventus has a beta of .75, which is a measure to indicate the amount of variability in the company's stock return compared to the market. The market has a beta of 1.0, meaning that Juventus' stock price is more stable than average; however, it is more volatile than the industry average beta of .71. Over the past nine years, from January 1, 2002 to January 3, 2011, Juventus' average yearly return on its stock has been -7.54% with a standard deviation of 30.87%. In total, over the past nine years, Juventus stock has dropped 74.93% from 3.47 euro to .87 euro per share (Table 7.0).

The company's growth rates do not show any more promise than their recent stock returns. Their sales in the first quarter of 2010, as compared to the first quarter from the year before, have dropped by 33.44%. Also, their 2010 sales as a whole have dropped 19.52% from 2009, resulting in a five year growth rate in sales of just .88% (Table 8.0).

Earnings per share, which measures the amount of profit for every individual share outstanding, has dropped an incredible 1,145.58% from the year end 2009 to the year end 2010. It also appears that Juventus may have a difficult time meeting its short term debt obligations with its current assets. This is shown by their current ratio of .35, meaning that they have \$0.35 of current assets for every \$1 of current liabilities on their balance sheet. In addition, Juventus has a debt-to-equity ratio of 85.71, which is outrageous compared to the industry average of 29.51.

In 2010, Juventus F.C.'s profitability was very poor. They had an operating margin of -29.6% and a five year average of -3.12%. Furthermore, their 2010 net profit margin was -

33.29% resulting in a five year average of -6.57%. These ratios show that Juventus is unable to turn any of their revenues into profits. As of 2010, Juventus had a return on assets (ROA) of -21.44 and a five year average ROA of -5.29 percent. Return on investment (ROI) was -37.27 with a five year average of -9.48 percent. Finally, they had a return on equity (ROE) of -91.48 with a five year average of -17.51 percent. These three measures (ROA, ROI, and ROE) are commonly used to measure the effectiveness of management to use assets, equity, and other investments to generate profits for the company. Not only were they unable to generate profits in 201, but the negative five year averages show that it is a trend for the company in the recent past.

Juventus F.C. would not constitute a valuable investment opportunity. They have poor sales growth, habitual losses, and a large amount of debt in their capital structure. Something significant in the company needs to change before Juventus should be looked at as an investment.

b. A.S. Roma S.p.A

Founded in 1927, A.S. Roma is a professional soccer club that, like Juventus F.C., competes in Italy's National Professional League Serie A. The club has been owned and controlled by Italy's Sensi family since 1993, but has recently put its 67% ownership of the team up for sale in 2010. Roma has been fairly successful throughout its existence, winning three Serie A championships and nine Italian Cups. The team competes in a very large, 72,700 seat, Olympic Stadium in Rome.

A.S. Roma has stock that is traded on the Milan exchange under the ticker symbol ASR.MI. As of April 21, 2011, Roma's stock was being traded at 0.75 euro per share, had a beta

of 1.25, 132.52 million shares outstanding, and a market capitalization of 97.07 million euro (Table 6.0). In the past nine years, Roma's stock has lost 56.16% of its value and had an average annual return of -1.24% with a standard deviation of 34.46%. However, over the past five years the stock has performed well. Over this period, investors have seen a 98.36% increase in the stock's price with an average annual return of 20.29% and a standard deviation of 16.94% (Table 9.0).

Sales for A.S. Roma have surged of late, increasing 9.04% compared to the industry average of 5.53% in regards to the first quarter of 2010 versus the first quarter of 2009 (Table 8.0). This seems to be a recent trend, however, because Roma's five year sales growth rate is a minuscule 0.78% compared to the industry average of 11.13% over that same period. Although sales seem to be increasing for the company, they have been unable to turn them into profits. Their operating margin in 2010 was -22.33%; far behind the industry average of 12.36%. On average, over the past five years, the company has been able to turn a positive operating margin of 3.33%; however, it still lags well behind the industry average of 12.25% over the same period. Net profit margin is a similar situation, strongly negative in 2010 (-22.85%) and on average very low over the past five years (.85%).

Compared to the industry averages, Roma is less liquid than most. Liquidity refers to a company's ability to convert its assets to cash and pay its short term liabilities in a timely manner. In 2010 Roma had a quick ratio of 0.51 and a current ratio of 0.53, which were far less than the industry averages of 1.19 and 1.45 respectively. This shows that, in the short term, Roma has less short-term capital on hand to fund its day-to-day operations and may have a difficult time paying off their short term debt obligations.

In 2010, the company's management was ineffective in using its assets and investments to make any sort of return for the company. ROA was -23.85 % and ROI was -184.42%; obviously disappointing when compared to the industry averages of 0.72% and 1.04% respectively. Over the past five years; however, they have seen some positive, yet small, improvements in these ratios. On average over this period the company has had .89% ROA, 5.22% ROI, and 40.58% ROE. All of these ratios still lag behind the industry average except ROE, which is much greater than the industry average of 13.65%.

Although Roma has seen very healthy stock returns in the past five years, its high beta and inability to turn increasing sales into profits is a concern. This ineffective nature of management may change however; with the announcement that 67% and control of the team will be purchased by a newly constituted company led by United States businessman Thomas Di Benedetto (Keiper, 2011). Benedetto is familiar to sports ownership, having been a partner of New England Sports Ventures which owns the Boston Red Sox Major League Baseball team and English Premier League side Liverpool. Talks of this takeover have been going on for some time and may account for the recent surge in Roma's stock price. Now, as required by Italian law, the new ownership will have to make a public offer to purchase the remaining 33% of shares outstanding. This means that there could be an opportunity to realize capital gains in the short term if shares are purchased at a healthy premium.

c. Tottenham Hotspur PLC

Tottenham Hotspur F.C., founded in 1882, is one of the UK's Premier League's best teams. The majority owner of Tottenham F.C. is ENIC International, an investment vehicle controlled by billionaire Joe Lewis, which owns about 85% of the team. The Hotspur's

successes include two Premier league titles and eight FA Cups, with its last coming in 1991. The team currently competes at White Hart Lane in London with a capacity of 36,310; however, in 2009 they announced plans to build a 56,000 seat stadium in London. This new stadium includes plans to create a hotel, residential housing, and retail space as well (Hoovers).

Tottenham Hotspur PLC has common stock that is traded on the London exchange under the ticker symbol TTNM.L. As of April 21, 2011, their stock was being traded at 62 pounds per share, had a beta of .53, with 213.86 million shares outstanding, and a market capitalization of 128.32 million pounds (Table 6.0). The stock also had a PE ratio of 20.6, according to Reuters.com, which means that an investor would have to pay \$20.60 for every \$1 in earning per share that the company generates. When compared to the industry average of 17.06, it is shown that Tottenham's stock is a little more expensive relative to its industry.

Over the past eight years, from January 1, 2003 to January 1, 2011, Tottenham's stock has had an average annual return of 30.39% and a standard deviation of 88% (Table 10.0). In total, the stock has risen 225% and 176.83% over the past eight and five years respectively. These abnormally high returns are partly skewed, however, by a 247% increase in the stock price from January 1, 2008 to January 2, 2009.

Over the past five years, Tottenham's sales have grown 11.17%, which is nearly identical to the industry average of 11.13% (Table 8.0). In 2010, and over the past five years, Tottenham has been able to translate this sales growth into profits. This can be seen by their operating margins and net profit margins in 2010 and over the past five years. Their operating margin in 2010 was well behind the industry average of 12.36, but was still positive at 4.71%. This is similar to the average operating margin over the past five years but at a much smaller margin, with the industry at 12.25% and Tottenham at 11.87%. Net profit margin (NPM) is much the

same; Tottenham had a NPM of 2.54% in 2010 and a five year average of 6.68%, while the industry's average NPM was 8.97% in 2010 and 7.8% over the past five years. This has translated into increases in earnings per share for 2010 of 97.16% compared to 2009.

Although sales and earnings are growing, the company is still not financially strong. For example, Tottenham's quick ratio of .3 and current ratio of 0.32 are lacking compared to the industry averages of 1.19 and 1.45 respectively. Furthermore, Tottenham is carrying a lot of debt in its capital structure, as seen by its long term debt-to-equity ratio of 62.51; which far exceeds the industry average of 29.51. This may indicate that Tottenham may have trouble meeting both their short-term and long-term debt obligations at some point in time.

The effectiveness of company management, in terms of ROA, ROI, and ROE seem to be improving. Over the past five years Tottenham's ROA and ROI have trailed industry averages. However, ROA, ROI, and ROE all outpaced the industry averages in 2010. This shows that the management has learned how to better gain profitability for the company in relation to the same amount of assets, equity, and other investments.

Of all the publicly traded European football clubs listed in this paper, Tottenham appears to be the best investment opportunity. The stock has shown tremendous growth historically, yet is very safe with a beta of 0.53. They have shown the ability to turn profits from their increasing sales which translates into improving returns for shareholders.

d. Watford Leisure PLC

The Watford Football Club was founded in 1881 as the Watford Rovers, but has since changed their name to the Hornets. The team made its first appearance in England's Premier League in 2000 and currently competes in the Champions League. The team is sponsored by the

British loan company, Loans.co.uk, and plays at Vicarage Road Stadium which seats 22,000 (Hoovers).

Watford Leisure PLC has common stock traded on the London exchange under the ticker symbol WFC.L. As of April 21, 2011, according to Reuters.com, their stock was being traded at 2.0 pounds per share, with 43.89 million shares outstanding, a market capitalization of 0.88 million pounds, and a beta of 0.4 (Table 6.0). Over the past seven years, from April 1, 2004 to April 1, 2011, Watford has seen an average annual stock return of -31.98% and a standard deviation of 35.56% (Table 11.0). In total, over the past seven years, their stock price has lost 98.28 percent of its value, dropping from 65 pounds to 1.12 pounds.

Watford's sales have not shown much promise either. In the past five years, Watford's sales have grown a mere 5.71%; very small compared to the industry average of 11.13% (Table 8.0). In effect, Watford has struggled to be profitable in 2010 across the board. Their operating margin over the past five years has averaged -0.97%, including -49.3% in 2010. Net profit margin shows a similar story. Watford's NPM of -55.46% is terrible compared to the industry average of 8.97%. Moreover, they have had an average NPM of -3.42% over the past five years while the industry has averaged 7.8% over that same period. This poor profitability is magnified even more by the company's ROA, ROI, and ROE which are -35.54, -187.76, and -768.58 respectively. Not only are these values negative in 2010, but each of these three ratios, on average, have been negative over the past five years. This has caused their earnings per share to take a huge hit in 2010 by dropping 4,944% from 2009.

The company's liquidity ratios are quite grim. They have a quick ratio of 0.12 while the industry average is 1.19. Likewise, they have a current ratio of 0.12 while the industry average

is 1.45. This shows that Watford carries excessive short term liabilities on their balance sheet in comparison to their short term assets.

In sum, Watford Leisure PLC has a historically poor stock performance, shrinking sales growth and profit ability, and is relatively illiquid. For these reasons WFC.L is not a viable investment right now or in the near future. The only possibility to make a profit off of this stock seems to be if Watford follows the trend of privatization in Europe and the shares are bought back from investors at a premium.

As a whole, these publicly traded European sports teams do not show much value as financial investments. Most of them show poor growth and ability to turn profits consistently. The profit potential of such teams lies in the event of privatization. If these companies, like many others before them, transition to private ownership then there is a chance that their shares will be purchased back at a higher price than their market value. In this event, shareholders could possibly realize significant capital gains. However, holding such stock in anticipation of such an event could take many years and be very costly, in terms of carrying costs, to an investor.

VII. Conclusion

Initial public offerings (IPOs) have been carried out in a variety of ways by a number of teams that compete in different sports leagues all over the world. IPO's give owners the opportunity to raise large amounts of capital to fund various operations having to do with the team or the company in general. This capital can be used towards renovating or building a new stadium, paying new players, or helping owners liquidate some of their investment. Issuing an IPO can have downsides such as opposition from other owners and the league itself, increased costs of

operating the business, and an increased level of disclosure about their operations. An owner must weigh the positives and negatives of such a move in order to determine whether or not a move to public ownership would be beneficial for their team/company. Many individuals that take part in an IPO by a sports team are fans that simply want the opportunity to own a part of their favorite team. There is a sense of pride that fans receive from owning a portion of a team that means so much to them as a person. On the flip side, when owners have initiated IPOs, they have often stated that they have no intent of paying dividends or making extraordinary efforts to increase shareholder's returns. An analysis of publicly traded professional sports team's stock shows that there can be some opportunities to realize significant capital gains, however, these stocks are very volatile and risky investments. The majority of these capital gains can be made when there is announcement that the company will be buying out shareholders and making a move to privatize. The main benefit of owning such a stock is in the diversification benefits that it can give investors when the stock is placed in a portfolio of assets. These stocks tend to have very low correlation to the market and, in some cases, have a tendency to move in the opposite direction. Therefore, investors looking for a high-risk, high-return stock with high benefits of diversification could look to stock in publicly traded professional sports teams. In future public offerings, investors seeking benefits other than that of pride and emotional well-being should pay close attention to ownership structure and the possibility of the company eventually being taken private. This is where most of the value lies for publicly traded professional sports teams.

References

- 2010 shareholders meeting.* (2010). Retrieved from <http://www.packers.com/community/shareholders.html>
- About cablevision.* (2010). Retrieved from <http://www.cablevision.com/about/index.jsp>
- Bailey, D. (1989, October 29). Team owners successfully calling the shots. *Boston Globe*.
- baseball owners ok sale of stock to public. (1997, September 19). *The Fort Worth Star Telegram*, p. S5.
- Comcast cable networks.* (2010). Retrieved from <http://www.comcast.com/corporate/about/pressroom/comcastcablenetworks/comcastcablenetworks.html>
- Cheffins, B. (1999). playing the stock market: 'going public' and professional team sports. *Journal of Corporation Law*, 24(3), Retrieved from D:\Problems in SM\Playing the Stock Market, Going Public and Professional Team Sports.htm
- Corporate overview.* (2010). Retrieved from <http://www.comcast.com/corporate/about/pressroom/corporateoverview/corporateoverview.html>
- Egan, A. (2008, July 6). *World's most expensive stadiums.* Retrieved from http://www.forbes.com/2008/08/06/expensive-stadiums-worldwide-forbeslife-cx_ae_0806sports.html
- Fedotin, J. (2005, July 27). *packers showcase practice skills for shareholders.* Retrieved from <http://www.packers.com/news/stories/2005/07/27/2/>
- Gitman L, Joehnk, M, & Smart, S. (2011). Fundamentals of investing. Boston, MA: Prentice Hall.*
- Initial public offering.* (2010). Retrieved from <http://www.investopedia.com/terms/i/ipo.asp>
- Kadlec, D. (1998). An unhittable pitch. *Time*, 151(23), 50. Retrieved from Business Source Complete database.
- Kane, M. (1999). stadium financing increasingly using private fund sources. *New York Law Journal*

- Keating, R. (1999). Sports pork: the costly relationship between major league sports and government. *Pol'y Analysis*, Retrieved from <http://www.cato.org/pubs//pas/pa-339es.html>
- Kratofil, G. (1999). direct public offerings can fill business' capital needs. *Kansas City Business Journal*, 17(42),
- Krupa, G. (1998, April 18). Celtics plan reorganization. *Boston Globe*.
- Lascari, S. (1999). The latest revenue generator: stock sales by professional sport franchises. *Marquette Sports Law Journal*, Vol ##(Iss ##), Retrieved from <http://www.lexisnexis.com/hottopics/lnacademic/?verb=sr&csi=140721>
- Lebowitz, L. (1996, September 6). panthers stock: \$1,000 minimum. *Sun-Sentinel*
- Lefty ex-cy young award winner gets richest contract ever for pitcher.* (2008, December 10). Retrieved from <http://nbcsports.msnbc.com/id/28155485/>
- Proxy Statement. (2000, January 5). Cleveland Indians baseball co.
- Rodriguez finalizes \$275m deal with yankees.* (2007, December 13). Retrieved from <http://sports.espn.go.com/mlb/news/story?id=3153171>
- Schaffer, R. (2006). a piece of the rock (or the rockets): the viability of widespread public offerings of a professional sport franchises. *Virginia Sports and Entertainment Law Journal*, 5(2),
- Schneider, C., Manko, J., & Kant, R. (1981). going public: practice, procedure, and consequences. *Villanova Law Review*, 1(8),
- Smith, B. (2003). how different types of ownership structures could save major league baseball teams from contraction. *Journal of International Business and Law*, 86, 92-93.

Table 1.0. Boston Celtics Limited Partnership Stock Returns

Boston Celtics' (BOS) Stock from Year End 1986 to April 30, 2003

Year	Divided/year	Shares Out.	Price	Capital Gain	Total Yearly Return	S&P 500 Yearly Returns
12/31/1986		6435	\$15.75			
12/31/1987	\$1.60	6435	\$11.50	-26.98%	-16.83%	6.15%
12/30/1988	\$1.60	6435	\$13.75	19.57%	33.48%	15.72%
12/29/1989	\$1.05	6435	\$18.13	31.82%	39.45%	10.63%
12/31/1990	\$2.40	6435	\$17.88	-1.38%	11.86%	4.51%
12/31/1991	\$2.25	6435	\$20.00	11.89%	24.48%	18.86%
12/31/1992	\$1.25	6435	\$17.00	-15.00%	-8.75%	7.34%
12/31/1993	\$1.25	6400	\$19.00	11.76%	19.12%	9.76%
12/30/1994	\$1.50	6400	\$21.75	14.47%	22.37%	-2.32%
12/29/1995	\$1.50	5641	\$23.13	6.32%	13.22%	35.20%
12/31/1996	\$2.50	5876	\$22.38	-3.24%	7.57%	23.61%
12/31/1997	\$1.00	5346	\$20.19	-9.78%	-5.31%	24.69%
12/31/1998	\$1.00	2704	\$10.31	-48.92%	-43.96%	30.54%
12/31/1999	\$0.00	2704	\$10.00	-3.03%	-3.03%	8.97%
12/29/2000	\$0.00	2704	\$7.75	-22.50%	-22.50%	-2.04%
12/31/2001	\$0.00	2704	\$11.00	41.94%	41.94%	-17.26%
12/31/2002	\$0.00	2704	\$27.50	150.00%	150.00%	-19.57%
4/30/2003	\$27.00					

Year	10 yr T-Note
2002	5.04%

BOS

Mean	16.44%
St Dev	42.65%

R Square	0.0062
Coefficients	0.1483

Correlation	0.0786
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Sharpe Ratio	0.2674
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S&P 500

Mean	9.67%
St. Dev	15.35%

Sharpe Ratio	0.3018
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Table 2.0. Cleveland Indians Baseball Company Stock Returns

Cleveland Indians' (CLEV) Stock Information

Date	Shares Out.	Price	Yearly Return	S&P 500 Yearly Return
6/30/1998	4139	\$10.75		
6/30/1999	4139	\$18.38	70.93%	17.19%
1/31/2000	4139	\$22.31	21.43%	7.24%

Year	10 yr T-Note
2000	6.66%

CLEV

Mean	46.18%
St. Dev	35.00%

R Square	0.0396
Coefficient	0.9559

Correlation	0.1990
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Sharpe Ratio	1.1290
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S&P 500

Mean	12.22%
St. Dev	7.03%

Sharpe Ratio	0.7901
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Table 3.0. Florida Panthers Holding Company Stock Returns

Fl. Panthers Holding Company's (PUCK & PAW) Stock

Date	Shares Out.	Price	Yearly Return	S&P 500 Yearly Returns
11/29/1996	23393	\$10.00		
11/28/1997	31685	\$18.81	88.13%	28.19%
11/30/1998	34890	\$11.19	-40.53%	26.67%
8/31/1999	40551	\$9.94	-11.17%	7.42%

Year	10 yr T-Note
1999	4.72%

PUCK & PAW

Mean	12.14%
St. Dev	67.42%

R Square	0.0052
Coefficient	0.2357

Correlation	0.0718
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Sharpe Ratio	0.1101
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S&P 500

Mean	20.76%
St. Dev	11.58%

Sharpe Ratio	1.3852
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Table 4.0. Manchester United PLC Stock Returns

Manchester United PLC's (MNU) Stock Information

Date	Shares Out	Div (GBP)	Div Growth	Price (GBP)	Cap Gain (Loss)	Total Ret (GBP)	Currency Yield	Total Ret (USD)	FTSE Yearly Ret
1/2/1997	64942010			£6.55					
1997	259600000	0.0776		£1.59	-75.80%	-74.62%	-3.66%	-78.28%	27.66%
1998	259800000	0.0213	-72.55%	£2.23	40.69%	42.04%	-4.75%	37.29%	8.02%
1999	259800000	0.02	-6.10%	£2.03	-9.08%	-8.18%	-2.40%	-10.58%	6.32%
2000	259800000	0.0211	5.50%	£2.30	13.44%	14.48%	4.27%	18.75%	0.46%
2001	259800000	0.0222	5.21%	£1.42	-38.26%	-37.30%	9.56%	-27.74%	-17.99%
2002	259800000	0.0344	54.95%	£1.04	-26.76%	-24.34%	5.16%	-19.18%	-30.93%
2003	261068040	0.0444	29.07%	£2.64	153.85%	158.12%	-3.38%	154.74%	23.08%
2004	263328732	0.0295	-33.56%	£2.75	4.17%	5.28%	-13.82%	-8.54%	10.51%
6/21/2005	265192483	0.0147	-50.17%	£3.00	9.09%	9.63%	3.42%	13.05%	4.74%

Man. United

Mean (GBP)	8.83%
St. Dev	63.84%

FTSE 100

Mean	3.54%
St. Dev	18.38%

Mean (USD)	9.46%
St. Dev	65.11%

R Square	0.0007
Coefficient	-0.0769

Correlation	-0.0268
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Table 5.0. Aston Villa PLC Stock Returns

Aston Villa PLC's (ASV) Stock Information

Date	Shares Out.	Div (GBP)	Price (GBP)	Cap. Gain (Loss)	Total Ret. (GBP)	Currency Yield	Total Ret. (USD)	FTSE 100 Yearly Ret
10/6/1997	11449245		£8.48					
1997	11449245		£7.13	-15.93%	-15.93%	-3.66%	-19.59%	12.73%
1998	11449245	0.11	£6.85	-3.86%	-2.32%	-4.75%	-7.07%	8.02%
1999	11449245	0.0977	£4.30	-37.23%	-35.80%	-2.40%	-38.20%	6.32%
2000	11449245	0.0977	£2.68	-37.79%	-35.52%	4.27%	-31.25%	0.46%
2001	11449245	0.0977	£1.60	-40.37%	-36.72%	9.56%	-27.16%	-17.99%
2002	11449245	0.0855	£1.23	-23.20%	-17.84%	5.16%	-12.68%	-30.93%
2003	11449245		£1.73	41.22%	41.22%	-3.38%	37.84%	23.08%
2004	11449245		£3.55	104.91%	104.91%	-13.82%	91.09%	10.51%
2005	11449245		£4.73	33.29%	33.29%	6.77%	40.06%	18.71%
10/16/2006	11449245		£5.44	15.03%	15.03%	-5.99%	9.03%	7.15%

Aston Villa

Mean (GBP)	5.03%
St. Dev	45.04%

Mean (USD)	4.21%
St. Dev	40.83%

R Square	0.0049
Coefficient	-0.1776

Correlation	-0.0696
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FTSE 100

Mean	3.81%
St. Dev	16.49%

Table 6.0. Overview of Select Publicly Traded European Professional Sports Teams

as of April 21, 2011

Company	Ticker	52 Wk High	52 Wk Low	Close	Avg. Volume	Beta	Shares Outstanding (Mil)	Market Cap (Mil)
Juventus F.C. S.p.A	JUVE.MI	€1.00	€0.73	€0.82	115,560	0.76	201.55	€167.29
A.S. Roma S.p.A.	ASR.MI	€1.29	€0.67	€0.75	2,479,344	1.25	132.52	€97.07
Tottenham Hotspur PLC	TTNM.L	£77.00	£58.00	£62.00	9,059	0.53	213.86	£128.32
Watford Leisure PLC	WFC.L	£11.25	£1.10	£2.00	58,729	0.40	43.89	£0.88

Table 7.0. Juventus F.C. SpA Stock Returns

Juventus F.C. SpA (JUVE.MI)		
Date	Adj Close	Returns
12/20/2001	3.53	
1/1/2002	3.47	-1.70%
1/1/2003	1.5	-56.77%
1/1/2004	1.71	14.00%
1/3/2005	1.39	-18.71%
1/2/2006	1.33	-4.32%
1/2/2007	1.94	45.86%
1/2/2008	0.86	-55.67%
1/2/2009	0.8	-6.98%
1/4/2010	0.88	10.00%
1/3/2011	0.87	-1.14%

Percent change (9 yrs)	-74.93%
Percent change (5 yrs)	-55.15%

Mean	-7.54%
St. Dev	30.87%

Table 8.0. Financials of Currently Traded Professional Sports Teams

as of April 21, 2011

		Roma	Tottenham	Watford	Juventus	Industry	S&P 500
Valuation	P/E Ratio (TTM)	--	20.6	--	--	17.06	17.93
	P/E High - Last 5 Yrs.	5.88	128.05	21.63	24.91	45.57	94.17
	P/E Low - Last 5 Yrs.	5.54	6.51	1.24	24.91	23.84	12.35
	Beta	1.27	0.53	0.4	0.75	0.71	1.29

Growth	Sales (MRQ) vs Qtr. 1 Yr. Ago	9.04	49.04	5.31	-33.44	5.53	8.05
	Sales (TTM) vs TTM 1 Yr. Ago	1.12	30.83	-33.16	-19.52	2.92	10.66
	Sales - 5 Yr. Growth Rate	0.78	11.17	5.71	0.88	11.13	7.52
	EPS (MRQ) vs Qtr. 1 Yr. Ago	-66.12	102.5	-1,360.05	-344.31	1,305.07	59.5
	EPS (TTM) vs TTM 1 Yr. Ago	-138.23	97.16	-4,994.08	-1,145.58	--	--

Fin. Strength	Quick Ratio (MRQ)	0.51	0.3	0.12	--	1.19	0.65
	Current Ratio (MRQ)	0.53	0.32	0.12	0.35	1.45	0.98
	LT Debt to Equity (MRQ)	--	62.51	--	85.71	29.51	105.39
	Total Debt to Equity (MRQ)	--	103.51	--	123.5	38.82	149.59
	Interest Coverage (TTM)	--				0.65	17.64

Table 8.0. Financials of Currently Traded Professional Sports Teams
as of April 21, 2011

(Continued)

Profitability	Gross Margin (TTM)	85.09	--	-17.41	5.27	4.62	32.38
	Gross Margin - 5 Yr. Avg.	88.04	95.25	3.05	62.66	62.9	30.28
	EBITD Margin (TTM)	-5.89	34.12	-33.69	11.87	--	--
	EBITD - 5 Yr. Avg	17.5	41.71	16.29	14.19	18.28	19.24
	Operating Margin (TTM)	-22.33	4.71	-49.3	-29.6	12.36	--
	Operating Margin - 5 Yr. Avg.	3.33	11.87	-0.97	-3.12	12.25	14.74
	Net Profit Margin (TTM)	-22.85	2.54	-55.46	-33.29	8.97	11.42
	Net Profit Margin - 5 Yr. Avg.	0.85	6.68	-3.42	-6.57	7.8	10.58
	Receivable Turnover (TTM)	1.19				86.6	8.87
	Inventory Turnover (TTM)	2.51				12.32	7.55
	Asset Turnover (TTM)	1.04				0.13	0.55

Management	Return on Assets (TTM)	-23.85	1.28	-35.54	-21.44	0.72	5.96
	Return on Assets - 5 Yr. Avg.	0.89	3.44	-3.2	-5.29	5.87	5.73
	Return on Investment (TTM)	-184.42	2.14	-187.76	-37.27	1.04	7.61
	Return on Investment - 5 Yr. Avg.	5.22	5.8	-10.95	-9.48	9.62	7.49
	Return on Equity (TTM)	--	4.76	-768.58	-91.48	1.8	17.4
	Return on Equity - 5 Yr. Avg.	40.58	14.68	-24.44	-17.51	13.65	14.93

**Table 9.0. A.S. Roma Stock
Returns**

A.S. Roma SpA (ASR.MI)		
Date	Price (euros)	Returns
12/24/2001	2.91	
1/1/2002	2.76	-5.15%
1/1/2003	1.15	-58.33%
1/1/2004	1.39	20.87%
1/3/2005	0.57	-58.99%
1/2/2006	0.5	-12.28%
1/2/2007	0.61	22.00%
1/2/2008	0.6	-1.64%
1/2/2009	0.67	11.67%
1/4/2010	0.84	25.37%
1/3/2011	1.21	44.05%

% change (9 year)		-56.16%
% change (5 year)		98.36%

Mean (9 yr)	-1.24%
St Dev	34.46%

Mean (5 yr)	20.29%
St Dev	16.94%

Table 10.0. Tottenham Hotspur PLC Stock Returns

Tottenham Hotspur PLC (TTNML)		
Date	Price (GBP)	Yearly Returns
1/1/2003	20	
1/1/2004	23.48	17.40%
1/3/2005	23.48	0.00%
1/2/2006	23.48	0.00%
1/1/2007	23.48	0.00%
1/1/2008	23.48	0.00%
1/2/2009	81.5	247.10%
1/4/2010	74.2	-8.96%
1/4/2011	65	-12.40%

Percent change (9 years)	225.00%
Percent change (5 years)	176.83%

Mean	30.39%
St. Dev	88.00%

Table 11.0. Watford Leisure PLC Stock Returns

Watford Leisure PLC (WFC.L)		
Date	Price (GBP)	Returns
3/11/2004	80	
4/1/2004	65	-18.75%
4/1/2005	45	-30.77%
4/3/2006	29	-35.56%
4/2/2007	20	-31.03%
4/1/2008	28	40.00%
4/1/2009	12	-57.14%
4/1/2010	7.5	-37.50%
4/1/2011	1.12	-85.07%

Percent change (7 years)		-98.28%
Percent change (5 years)		-94.40%

Mean	-31.98%
St Dev	35.56%