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THE FINANCIAL STRUCTURES OF PREMIER LEAGUE FOOTBALL CLUBS

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ABSTRACT

The English Premier League is widely recognized as one of the most prominent football (soccer) associations in the world. The League attracts topmost talent and generates massive revenues each season. Many of the Premiership clubs also carry large debt burdens as a defining feature of their financial structures.

This thesis examines the debt of the top four Premier League clubs – the Big Four. It considers the circumstances behind their debt burdens and evaluates the health of their financial positions. Three different analyses are included: a ratio analysis using standard financial ratios, an analysis of club rankings in various categories, and an examination of the ability to cover interest payments as this relates to on-the-field performance. Taken together, these analyses seek to determine if debt burdens are negatively impacting the financial health of the clubs. The methods and results of this research will be revealed and discussed in the following pages.

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I. BACKGROUND

History of the Premier League

The Premier League is a relatively young association, beginning play in 1992 after a decade of popular dissatisfaction with English football. Deteriorating stadiums and rampant hooliganism – unruly fighting and intimidation between opposing fans – characterized the sport throughout the 1980’s (Foer). Bouts of violence landed English clubs a five-year ban from European play and resulted in the deaths of 96 fans at Hillsborough Stadium. The First Division, England’s top level, stood far behind comparable leagues in Italy (Serie A) and Spain (La Liga), and many top players “would not even contemplate playing in England” (“A History of the Premier League”).

English football began to transform. After the Hillsborough disaster, Lord Justice Taylor recommended the removal of standing room sections in stadiums. These construction requirements, combined with a renewed desire to attract fresh talent, placed top clubs under significant financial pressures. It became clear that the existing structure of the First Division was not equipped to effectively capitalize on the revenue generating potential of the sport (“A History of Premier League”).

As a result of this changing environment, the first division clubs resigned from the Football League and formed the Premiership. This new League received commercial independence from the Football League and the freedom to negotiate its own sponsorship and broadcast agreements (“A History of the Premier League”). Today’s Premier League is comprised of England’s top twenty professional teams. These include worldwide phenomena Manchester United, Chelsea, Arsenal, and Liverpool (Patrick), four teams collectively referred to as The Big Four. The League currently falls under the worldwide leadership of the Fédération

Internationale de Football Association (FIFA) and the Union of European Football Associations (UEFA), the European governing body of football.

Premier League Revenues

The financial implications of Premier League football are astounding. Combined annual revenues of the twenty clubs are now more than eleven times those of the original teams in 1992 (Deloitte 2) and were recorded at £1.9b for the 2007/2008 season (Deloitte 24). This figure signifies a 26% revenue increase over the previous season (Deloitte 24).

League revenue is generated through three main streams – matchday, broadcasting, and commercial. Matchday largely results from gate receipts. Broadcasting includes television and radio revenues from both domestic (the Premier League contracts with BSkyB) and international competitions. Commercial is comprised of sponsorship, merchandising, and other revenues (Deloitte 26). The Big Four clubs also receive considerable revenues from the UEFA Champions League.

Of these revenue sources, broadcasting revenue was the main driver of Premier League growth in 2007/2008. The League – similar to the National Football League in the United States – sells its broadcasting rights on a collective basis, with half of all revenues distributed equally among the twenty teams. This stream is also poised to remain the most stable moving forward. Domestic broadcasting deals have already been fixed through 2012/2013. Deloitte expects the total value of broadcasting rights, once completed, to be worth over £3b – a feat considered “stellar performance” considering the economic climate (Deloitte 33).

Maintaining and growing the other two sources of revenue may be more difficult in the current economic climate. 2008/2009 club attendances are down, and ticket-pricing strategies

will become more and more important as clubs look to maintain match-day revenue in the wake of the current recession (Deloitte 28). An impact on commercial revenues is also expected as sponsors reevaluate their financial capabilities (Deloitte 32).

Premier League Expenses

Premiership operations generate significant expenses. Wages and transfer fees represent the greatest portion of Premier League spending. Wage costs soared to £1.2b in 2007/2008, the first time costs have broken the £1b mark (Deloitte 34). This represented a 23% increase in wage costs since the previous season (Deloitte 34).

Transfer fees also play a large in role total player costs. Transfer fees are the prices that clubs pay each other for allowing players to sign with different teams (Patrick). In 2007/2008, Premier League clubs spent £664m on transfer fees – a record high and 35% increase over the previous season (Deloitte 45). Of this £664m, £351m (55%) was paid to non-English clubs, and net transfer spending leaving the Premier League rose 13% from 2006/2007 and 2007/2008 (Deloitte 45).

Wage costs have been able to grow to such high levels, in part, because of a lack of regulation and salary caps in the League (Patrick). Three major professional sports associations in the United States – the NFL, National Basketball Association, and National Hockey League – each have salary caps. However, these Leagues are in unique positions, as they have monopoly power over their respective sports. In other words, there are no competing Leagues at the top level of play. Due to the high level of competition for players between European Leagues and the general ability of clubs to cover their spending, no salary cap has been introduced into the Premier League (Deloitte 47).

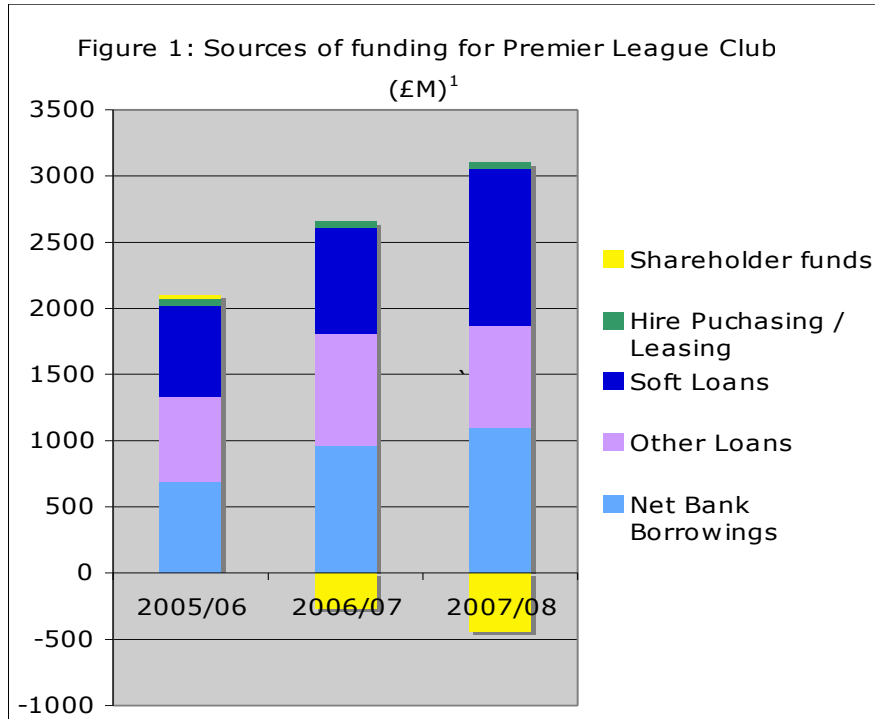
Major League Baseball, the fourth major professional sport in the United States, handles salaries regulation in a slightly different manner than the other three professional sports leagues. The MLB has adopted a luxury tax, where clubs whose payrolls exceed the allowed threshold are taxed on the amount by which they exceed the payroll ceiling (Singer). As is the case with the traditional salary cap, the Premier League has made no moves to adopt a luxury tax. The reasons are likely the same: salary caps could discourage the best players from entering and remaining with the Premier League, and teams have generally been able to cover their expenses.

Finally, stadium development is an important contributor to club expenditures. Though many teams have shied away from landmark projects in recent years, teams still spent £134m on stadium and facility development in 2007/2008 (Deloitte 48). Two of the League's biggest spenders include Chelsea, who spent £21.5 on training ground and stadium improvement, and Liverpool, who spent £22.2 on plans for a new stadium (Deloitte 49).

II. INTRODUCTION

Premier League Debt

Premier League teams employ a variety of financing options to fund their operations. These are illustrated in Figure 1 below. Note that total shareholder funds are negative, which results because losses were greater than inflows of shareholder funds (Deloitte 59).



As Figure 1 indicates, significant debt burdens are a key feature in Premier League financial structures. The League's total net debt in 2008 eclipsed the £3 billion mark to total £3.1 billion. The Big Four clubs – Manchester United, Chelsea, Liverpool, and Arsenal – accounted for £2b, or almost 2/3, of total League debt (Deloitte 59).

¹ Figure 1 adapted from Chart 5.2: Sources of funding for Premier League clubs – 2003/2004 to 2007/2008 (£m) (Deloitte 59).

The Meaning of Debt

Debt financing has both benefits and drawbacks. Interest payments are tax deductible and debt can be repaid with “cheaper dollars” in an inflationary economy. However, debt can strain the risk position of a firm. Additionally, interest payments are restrictive, as they must be met according to binding contractual obligations (Block 507). According to Kieso, Weygandt and Warfield, extreme debt levels can translate into significant interest costs, which in turn cut into profitability (702).

Debt analysis plays an important role in determining the financial stability of firms. Debt ratios can indicate the health of a long-term operating model. Additionally, creditors often look to debt analysis to determine an entity’s ability to pay its interest payments and the face value of its debt at maturity (Kieso, Weygandt and Warfield 713).

This thesis examines how four Premiership teams – referred to as the Big Four – came to carry their respective debt burdens. It then investigates and evaluates the health of their financial positions through three separate financial analyses. Taken together, these analyses seek to determine if debt burdens are negatively impacting the financial health of the clubs.

A Note on The Big Four:

This thesis examines the finances of what many consider the Big Four Premier League football clubs. The Big Four – Arsenal, Chelsea, Liverpool, and Manchester United – are so named because of their dominance in the years since the League’s inception. Deloitte uses a points system to rank Premier League clubs, with 20 point allocated to the winner, 19 to second position, etc. each year. Cumulative totals over the past 17 years rank the clubs as follows²:

² Points system taken from Deloitte appendix, pg 12.

Manchester United – 331 points

Arsenal – 295 points

Liverpool – 287 points

Chelsea – 265 points

These clubs have amassed the dominant point positions in the years since Premier League play began, and have thus earned their collective title of The Big Four.

III. BIG FOUR DEBT SCENARIOS

The following analysis examines how each of the Big Four teams came to carry their respective debt burdens. In order to further understand the nature of the debt, each team's ownership structure is also discussed.

Arsenal

Arsenal is owned by its parent company, Arsenal Holdings Inc., which is traded infrequently on a specialist market, PLUS (PLUS). Additionally, there have been recent talks of a possible takeover by American billionaire Stanley Kroenke or Russian oligarch Alisher Usmanov (Clegg).

Arsenal's debt has primarily developed around the construction of the club's new Emirates Stadium. This debt amounts to £250m in long term financing bonds. The annual service costs of these bonds, including repayment of capital, are approximately £20m. Arsenal also carries financing for the construction of property on the site of their old stadium (Deloitte 61).

Chelsea

Chelsea's ownership is in the hands of billionaire Roman Abramovich. The club's debt is primarily financed through soft loans from the owner. As of June 2008, Abramovich has provided Chelsea with £701m in interest free loans (Deloitte 60). Though the loans are not due to creditors, Football Association chairman Lord Triesman marks them as a concern because Chelsea could be vulnerable to changes in owner circumstances (Conn). Chelsea would also be at risk should Abramovich decide to walk away from Chelsea and demand the return of his investment.

Liverpool

Liverpool owners George Gillett and Tom Hicks purchased the team in 2007. The two Americans paid approximately £219m to takeover the club, and pledged an additional £215m for a new stadium (R. Mills).

Liverpool's debt comes from a £350m financing arrangement secured in 2008. The figure contains £105 of club-level-debt to fund transfers and working capital. The 2008 borrowing arrangement also provided £245 to refinance the debt from the Gillett and Hicks acquisition and the loan associated with the purchase of the club's shares. An additional £58m loan came from a non-UK group company (Deloitte 61).

Manchester United

American billionaire Malcolm Glazer – who controls the NFL team Tampa Bay Buccaneers – currently owns Manchester United. Glazer assumed control of the club in 2005 after acquiring United shares in a leveraged buyout valued at approximately £790m (Thomson and Clegg). The club had been listed on the London Stock Exchange since 1991, but Glazer's share acquisition allowed him to take the club into private ownership (US Tycoon).

According to Ryan Mills, writing for *Bloomberg*, the Glazer takeover was financed by senior debt, hedge-fund debt, and equity. The senior debt, totaling approximately £509m, was leveraged against the club, while the family was responsible for paying the £138m hedge-fund loan, also called a payment-in-kind facility (R. Mills). Current figures report that Manchester United's debt is split between this senior loan, totaling approximately £509m, and the payment-in-kind, which carries a 14.25% interest rate (Thompson). The payment-in-kind has grown to its current £202m due to the high rate of interest.

Latest Deloitte figures, taken from the 2007/2008 season, attribute the debt to net bank loans of £469m (loans of £519 net of £50m cash at bank), with additional loans that relate to the principle facility (£138m) and accrued interest (£40m) (Deloitte 60-61). The differences between the Deloitte and Bloomberg figures likely results from the time elapse since 2008.

IV. FINANCIAL HEALTH: TWO POSSIBILITIES

Stable Financials

Various debates have surfaced around the meaning of Premier League debt. Some claim that the League's large debt burdens are simply "the nature of football" and are not cause for significant concern. Deloitte's Wages/Revenue Analysis³, in particular, suggests that three of the Big Four are operating under effective cost management:

According to Deloitte, the wages/revenue ratio indicates the health of a club's operating model and is a commonly used indicator for football teams (36). Deloitte sets out benchmark comfort levels as follows⁴:

55% - effective cost management

70% - warning level

100% - danger level

According to Deloitte's analysis, the Big Four receive the following rankings:

Manchester United – 47%

Arsenal – 48%

Liverpool – 55%

Chelsea – 81%

League as a whole – 62%

This analysis places each of the Big Four teams, with the exception of Chelsea, in the category of effective financial management. Chelsea, the team at the warning level, operates under a unique

³ Wages/Revenue Analysis from Deloitte 36-37.

⁴ In previous years, Deloitte suggested these benchmark levels for club business models. The firm insists that it is "important to understand factors specific to individual clubs when using the ratio to form a judgment about a club's operating efficiency or when making comparisons across clubs" (36).

financial situation, as its owner has infused over £700m of interest free loans into the club. This suggests that while Chelsea carries a considerable amount of debt, the club has relatively minimal interest payments and owes little money to creditors.

Cause for Concern

Opposing sources support the argument that Big Four clubs are operating under unhealthy financial management. Various governing bodies have indeed expressed concern on the state of the League. UEFA president Michel Platini recently announced the consideration of new financial rules that would require clubs to break even in the future or face being barred from the Champions League. The rules are designed to stop clubs from spending more on players and wages than they generate in soccer related income, and specifically addresses the inability of clubs to repay their debt (Dunbar).

Additionally, recent developments indicate that interest payments are becoming a problem for Manchester United. The club recently announced the launch of a £500m bond to help refinance existing debt. According to *The Wall Street Journal*, the key concern behind the bond issue is cutting the annual interest burden, as “interest repayments have threatened to derail a juggernaut that has dominated European football in recent years” (Thomson and Clegg). Moreover, United fans have expressed concern with the club’s finances and ability to sign new players since the Glazer takeover (R. Mills).

In a similar scenario, Liverpool postponed plans for a new stadium after the club was unable to secure financing (Smith). Though Liverpool spent £22m on design and preparation in 2007/2008, it halted the project and pushed back an expected opening to 2012 (Deloitte 49).

V. ANALYSIS

Methods

The following financial analysis assesses the finances of the Big Four clubs in an effort to determine their financial health and offer a financial examination of their debt scenarios. Three different analyses are included: a ratio analysis using standard financial ratios, an analysis of club rankings in various categories, and an examination of the ability to cover interest payments as this relates to on-the-field performance.

Presented financial figures are taken from Deloitte's Annual Review of Football Finance, published in 2009. All figures are from the latest edition, which covers the 2007/2008 season. These quantities may have changed slightly since the publication; however, in consideration of consistency and completeness, presented amounts will reflect 2007/2008 conditions.

The financial analyses presented in this thesis are based on Table 1 below⁵:

Table 1: Big Four Financial Information (£'000)

	Revenue	Wage Costs	Operating Profit	Pretax Profit	Net Income	Debt	Interest	Net assets/ (liabilities)	Assets
Arsenal	209,294	101,302	48,473	36,668	25,726	318,078	17,000	159,100	477,178
Chelsea	213,648	172,096	-30,878	-84,504	-83,773	710,562	2,000	-414900	295,662
Liverpool	164,222	90,438	28,350	-40,905	-42,571	299,838	35,000	-75,659	224,179
ManU	257,116	121,080	71,758	-44,780	-46,594	649,429	69,000	24,529	673,958

Notes:

1. Net Income is not presented directly in the Deloitte publication. For the purposes of this thesis, the figure was calculated as "Pretax profit – Tax charges".

⁵ Table 1 adapted from "Appendix 1: Premier League clubs' financial information" (Deloitte appendix, 2).

A. Ratio Analysis

According to relevant financial sources, including Kieso, Weygandt and Warfield, and Block, Hirt and Danielsen, the presented ratios are frequently used to assess financial health. The four ratios presented were chosen because of their relevance to debt examination, their use in providing an overall financial picture of an institution, and their correspondence with available financial information. The ratios were calculated from values in Table 1.

In order to analyze the meaning of the ratios calculated in this thesis and provide a base for comparison, descriptions and typical ratios for other firms are presented. Two sources were used for comparison purposes, based on availability of data.

For the “Debt/Total Assets”, “Times Interest Earned”, and “Return on Assets” ratios, Moody’s “The Distribution of Common Financial Ratios by Rating and Industry For North American Non-Financial Corporations: July 2006” is used. This document provides average ratios for corporations with different levels of credit ratings, from A to Caa-C, with A being the highest credit rating and Caa-C being the lowest. It is acknowledged that European entities may differ slightly from North American entities; however, the data should provide an acceptable benchmark for analyzing the nature of the ratios. Additionally, of the fourteen industries Moody’s examines, “Entertainment and Leisure” is the most similar to a sports business and was chosen for presentation in this thesis. In the interest of broader comparison, both “Entertainment and Leisure” and “Aggregate” figures (encompassing all of the fourteen industries) are presented and examined.

For the Debt/Equity ratio, an examination of leverage by industry for European Firms was used. This data was collected by INSEAD, The Business School for the World, for

Executive Education, and reflects 2005 values. The presented comparison figures are taken from the “Professional Sports” category.

Table 2: Calculated Financial Ratios

	Debt / Total Assets	Times Interest Earned	Debt/ Equity	Return on Assets
Arsenal	0.67	2.85	2.00	0.05
Chelsea	2.40	-15.44	-	-0.28
Liverpool	1.34	0.81	-	-0.19
ManU	0.96	1.04	26.48	-0.07

For the purpose of these calculations, the following assumptions were made:

- *Total Assets:* This figure is approximated by “Net Assets + Debt”. In standard accounting, Net Assets = Total Assets – Total Liabilities (“Net assets definition”). Thus, Total Assets = Net Assets + Debt.
- *Equity:* This number is approximated by Deloitte’s “Net Assets/(Liabilities)” figure. In standard accounting, Net Assets is defined as “Total Assets – Total Liabilities” (“Net assets definition”). As the basic accounting equation gives Equity = Assets – Liabilities, Net Assets serves as a close approximation to Equity.

1. Debt / Total Assets:

This ratio measures the percentage of assets provided by creditors. The higher the ratio, the greater the risk that an entity may not be able to meet its credit obligations (Kieso 713).

Moody’s presents an Asset Coverage Ratio, which is defined as (Total Assets – Goodwill – Intangibles) / Total Debt. Taking the reciprocal of this Asset Coverage Ratio yields a

Debt/Total Assets ratio. This is assumed to be closely equivalent to the Debt/Total Assets ratio calculated for each of the Big Four clubs in Table 2.

Table 3: Debt/Total Assets – Moody’s⁶

	Leisure and Entertainment	Aggregate
A	0.40	0.42
Baa	0.45	0.43
Ba	0.59	0.50
B	0.91	0.77
Caa-C	1.11	1.00

Table 3 suggests that strong performers have Debt/Assets ratios below 0.5, and certainly well below one. In contrast, riskier corporations have ratios approaching, or even eclipsing, one.

Arsenal (0.67): The club has the lowest ratio among the four. 0.67 is well below one, and though the figure would not rank Arsenal above B quality, the ratio is acceptable.

Chelsea (2.40): At well over two, Chelsea’s ratio is exceedingly high. Considering that Moody’s lowest rated teams produced ratios approaching one, Chelsea’s ratio is extremely elevated and raises questions about the health of the club’s financials. It must be noted that most of the club’s debt comes in the form of interest free loans from owner Abromovich. However, as previously mentioned, this arrangement still raises significant concerns in regards to the health of the club.

⁶ Table 3 adapted from Moody’s “The Distribution of Common Financial Ratios by Rating and Industry For North American Non-Financial Corporations: July 2006” (24 and 28). Figures were calculated by taking the reciprocal of Moody’s Asset Coverage Ratio.

Liverpool (1.34): Liverpool has a high ratio, at well over one. Drawing on a comparison with the Moody's data, Liverpool would be poorly rated and carries an unhealthy level of debt.

This higher ratio opens up the possibility that Liverpool may not be able to meet its credit obligations.

Manchester United (0.96): Though Manchester United's ratio is not as high as those of Chelsea and Liverpool, the club still sits dangerously close to the 1:1 mark. This would place the club on the lower end of the performance scale in relation to the Moody's data, and raises questions concerning the club's ability to pay creditors.

2. Times Interest Earned:

This ratio is calculated as operating profit / interest expense. It measures a company's ability to meet interest payments as they come due (Kieso 713). A higher ratio is more desirable, as it generally indicates that a company can afford to take on more debt, or at least cover its interest payments (Berman 143-144). Furthermore, ratios approaching one are generally considered a negative indicator, as the majority of the company's profit is being used to pay off interest (Berman 143-144).

Moody's presents an Interest Coverage Ratio equal to $(\text{EBIT} - \text{Interest Capitalized} + (1/3) * \text{Rental Expense}) / (\text{Interest Expense} + (1/3) * \text{Rental Expense} + \text{Preferred Dividends} / 0.65)$. The term Interest Coverage ratio is synonymous with Times Interest Earned.

The Big Four ratios presented in Table 2 of this thesis are calculated as operating profit / interest expense. Though the Moody's calculations involve additional variables, they are assumed to provide a rough equivalent for comparison purposes.

Table 4: Times Interest Earned – Moody’s⁷

	Leisure and Entertainment	Aggregate
A	6.4	8.6
Baa	4.3	5.4
Ba	2.7	3.7
B	1.3	1.9
Caa-C	0.9	0.7

The data in Table 4 suggests that strong performers are able to cover their interest expense multiple times. Weaker performers approach one, with the lowest rated corporations falling below one – i.e. unable to cover their interest expense with operating profits.

Arsenal (2.85): The club’s 2.85 indicates a relatively safe level of interest coverage. The club can more than cover its interest payments, and has the most desirable ratio of the Big Four teams.

Chelsea (-15.44): This is an extremely unhealthy ratio. Even the lowest rated firms in Moody’s analysis maintained a positive ratio, and Chelsea falls considerably below zero. This situation would be even worse if Chelsea paid a market rate of return on the £700m interest free loans they have received from Abramovich.

Liverpool (0.81): Liverpool’s ratio is below one, which places the club in a low performance category. This number indicates that operating profits are not sufficient enough to cover interest payments, and points to a poor financial condition.

Manchester United (1.04): This ratio indicates the club can barely cover interest payments. With a ratio just over one, Manchester United is approaching the dangerous territory where operating profits would not be sufficient to cover interest expense.

⁷ Table 4 adapted from Moody’s “The Distribution of Common Financial Ratios by Rating and Industry For North American Non-Financial Corporations: July 2006” (24 and 28).

3. Debt / Equity:

The ratio demonstrates the extent to which a business relies on debt financing. A high leverage ratio indicates a possible difficulty in paying interest and principle while obtaining more funding. An upper limit is generally considered to be 2 (Debt to Equity Ratio).

Data taken from INSTEAD lists 35.33%, or 0.3533, as a typical debt to equity ratio in the category of “Professional Sports” (“Leverage and Tax Rates By Sector”).

Arsenal (2.0): The ratio is right at the upper limit of 2. This would place Arsenal within the generally acceptable range. However, Arsenal’s ratio is considerably higher than the average debt/equity ratio in European professional sports.

Chelsea (Undefined): The ratio is undefined, as the club has a negative equity position.

Consequently, their debt position far outweighs their equity. This raises questions about Chelsea’s ability to obtain more funding in the event of a shift in owner circumstances or change in club ownership.

Liverpool (Undefined): The ratio is undefined, as the club has a negative equity position.

Consequently, the club’s debt position far outweighs their equity. This leverage position raises financial concerns, specifically relating to the club’s ability to raise additional capital while servicing its debt.

Manchester United (26.82): Manchester United is extraordinarily leveraged, and this figure sits high above the generally accepted level of two and the average level of 0.3533. As is the case with Liverpool, this elevated leverage position raises financial concerns, specifically relating to the club’s ability to raise additional capital and service its debt.

4. Return on Assets:

This figure was calculated as Net Income / Assets. This ratio indicates the rate of return a company achieves through its assets (Kieso, 561). A larger ratio is more desirable.

Moody's defines return on assets as "Net After-Tax Income Before X-Items / 2 Year Average Assets." In calculating the Big Four ratios presented in Table 2, only assets for one year (2008) were included. However, the Moody's figures are assumed to be roughly comparable.

Table 5: Return on Assets – Moody's⁸

	Leisure and Entertainment	Aggregate
A	0.064	0.075
Baa	0.069	0.053
Ba	0.048	0.044
B	0.015	0.017
Caa-C	0.002	-0.021

The data in Table 5 suggest that a higher Return on Assets is generally indicative of a higher rated firm. Corporations producing very low or negative returns receive lower credit ratings.

Arsenal (0.05): The club produced an impressive 5% return. This is the highest among the Big Four and places Arsenal in a moderate position on the Moody's scale. This figure indicates that Arsenal is effectively using its assets to generate a positive return.

⁸ Table 5 adapted from Moody's "The Distribution of Common Financial Ratios by Rating and Industry For North American Non-Financial Corporations: July 2006" (24 and 28).

Chelsea (-0.28): The club produced a negative return that is the lowest among the Big Four. This indicates that Chelsea is not effectively using its assets to generate profits, and a negative ROA indicates poor performance.

Liverpool (-0.19): The club produced a significant, -19% return. This indicates that Liverpool is not effectively utilizing its assets to generate profits. The club’s negative ROA indicates poor performance.

Manchester United (-0.07): The club produced a negative return. As is the case with Chelsea and Liverpool, this indicates that Manchester United is not effectively using its assets to generate profits and is performing poorly financially.

B. Rankings Analysis

Part two of this report’s financial analysis examines the rankings of the Big Four teams in selected financial categories. Table 6 reports the rankings of the teams, with respect to the full League, in four categories:

Table 6: Rankings of Big Four Teams⁹

	Revenue	Wage Costs	Operating Profit	Pretax Profit
Arsenal	3	3	2	1
Chelsea	2	1	19	19
Liverpool	4	4	3	17
Manchester United	1	2	1	18

The Big Four clubs hold the top four revenue positions in the League. With the exception of Chelsea (by far the largest spender on wages), they maintain these rankings in the operating profit category. However, both Manchester United and Liverpool drop to the bottom

⁹ Table 6 adapted from “Appendix 5: Premier League clubs – comparative league tables – on and off the pitch 2007/08.” (Deloitte appendix 5).

in pretax profit. This discrepancy was analyzed within the context of two definitions:

1. Deloitte defines operating profit as “operating profit excluding amortization of player registrations, profit/(loss) on player disposals, amortization of goodwill on acquisition and certain exceptional items” (Appendix 2).

2. By name, operating profit and pretax profit are defined as follows (Net Profit):

Operating profit = as Gross profit – overheads and other indirect costs

Pretax Profit = Operating Profit – one off items and redundancy payments, staff restructuring – interest payable

Taken together, these definitions indicate that a combination of interest and a handful of other expenses are responsible for the difference between operating and pretax profit.

Table 7: Impact of Interest (£'000)

	Operating Profit / Pretax Difference	Interest	% Accounted for by Interest
Arsenal	42,900	17,000	39.6%
Chelsea	53,626	2,000	3.7%
Liverpool	69,255	35,000	50.5%
ManU	116,538	69,000	59.2%

Table 7 calculates the percentage of the difference accounted for by interest. The results indicate that interest is a significant factor in determining the pretax profits of Liverpool and Manchester United. “Significant” was considered to be amount equal to or greater than 50%.

The rankings analysis suggests that Liverpool and Manchester United are suffering financially as a result of interest expenditures. In other words, interest is a significant factor in

lowering the clubs' positions from the top rankings in operating profit to the bottom rankings in pre-tax profit. Consequently, debt burdens ARE creating a significant negative financial impact for these clubs.

Notes

1. Arsenal maintains a high ranking in pretax profit. This indicates that interest is not exerting a large financial impact on the club.
2. Chelsea must be considered with attention to its interest free loans, as its owner has infused over £700m into the club. These loans have funded Chelsea's large wage costs and resulted in its low ranking in the operating profit category. Additionally, as these loans are interest free, very little of Chelsea's expenditures relate to interest payments (thus, the 3.7% figure).

C. On-Field Performance

The third portion of this report's financial analysis examines the finances of the clubs with particular attention paid to their on-field performance.

Interest Coverage:

The money that clubs can allocate to transfers and other non-operating expenses comes from the difference between operating profit and interest expense. This figure is an important factor in determining financial health. According to *The Wall Street Journal*, Manchester United's interest expense poses a viable financial risk because their operating profits barely cover their interest expenditures (L. Mills). Table 8 below indicates these figures:

Table 8: Coverage of Operating Profits (£'000)¹⁰

	Operating Profit	Interest	Difference
Arsenal	48,473	17,000	31,473
Chelsea	-30,878	2,000	-32,878
Liverpool	28,350	35,000	-6,650
Manchester United	71,758	69,000	2,758

Arsenal: With a £31m buffer, the club is in a good position to cover transfers and any other outstanding expenditures.

Chelsea: Chelsea's negative operating profit leaves no cushion to cover the club's minimal interest expense. This figure would be extremely damaging if Chelsea had to pay a standard rate of interest on its £710m debt.

Liverpool: Liverpool's operating profit is not sufficient enough to cover its interest. This indicates an unhealthy financial position and poor financial management.

Manchester United: The club has just fewer than £3m to cover transfers and other expenses. Considering the level spending prevalent in the sport and by Manchester United in particular, this cushion is relatively small.

On-Field Performance:

These buffers can instantaneously change as a result of on field performance, as some revenues are dependent on game success. Much of this performance revenue is driven by participation in the UEFA Champions League. UEFA is recognized as one of six continental soccer federations, and is comprised of 53 national football associations. Participants in the League receive significant monetary award; in the 2007/2008 season, UEFA contributed an

¹⁰ Table adapted from Table 1 on pg. 14

average 1/5 of big four revenue (Deloitte 29). Champions League monetary rewards are broken down in Table 9 (in £m).

Table 9: Champions League Monetary Awards (£m)¹¹

Participation Bonus	2.37
Match Bonus	1.90
Match Victory	0.47
Match Draw	0.24
Participation in Round of 16	1.74
Quarter-Finalist	1.98
Semi-Finalist	2.37
Runner-up	3.17
Champion	5.54
TV Distribution	Related to value of national TV market

In 2007/2008, the clubs finished in the following positions and received the following monetary awards (in £m):

Table 10: Big Four Champions League Awards (£m)¹²

	Final Position	Total Award
Arsenal	Quarter Final	18.4
Chelsea	Final	28.8
Liverpool	Semi Final	21.2
Manchester United	Champion	34.0

¹¹ Table 9 adapted from “Appendix 19: UEFA Champions League revenue distributed to clubs – 2007/08” (Deloitte appendix, 14). Figures were converted from € to £ using the exchange rate applied by Deloitte. For 2007/2008 figures, Deloitte used the rate of £1 = €1.2632 (Deloitte 10).

¹² Table 10 adapted from “Appendix 19: UEFA Champions League revenue distributed to clubs – 2007/08” (Deloitte appendix, 14). Figures were converted from € to £ using the exchange rate applied by Deloitte. For 2007/2008 figures, Deloitte used the rate of £1 = €1.2632 (Deloitte 10).

As Table 10 indicates, Manchester United won the Champions League, receiving close to the maximum possible payoff. The other Big Four Clubs also performed remarkably well. Chelsea played Manchester United for the first all-English final in the history of the tournament, and both Arsenal and Liverpool advanced out of the group stage.

These UEFA revenues provide a considerable boost to operating profit. Manchester United and Arsenal – the two clubs able to successfully cover their interest expenditures in 2007/2008 – received considerable UEFA contributions. However, would this change if the teams failed to advance as far in the tournament?

For Arsenal, the answer is no. Even if the team had failed to qualify for the Champions League, the club could have covered their interest expenditures. Their cushion of £31m would have remained a positive figure without the £18.4m received from UEFA.

Manchester United's position is very different. If the club had failed to make the finals, they would have forfeited £5.54m of their 2007/2008 revenue. This would have rendered their operating profit insufficient to cover their interest.

This is an extremely risky position, particularly considering the on-field difficulties that likely await Manchester United in the near future. The club recently sold its star player and has yet to reinvest any significant portion of the transfer fee. According to *The Wall Street Journal*, Manchester United has been very limited in its transfer spending under Glazer ownership, leading many to believe that transfer spending is restrained by interest payments (Thompson).

According to Alex Fynn, a football consultant who has advised the club, Manchester United is in danger of falling behind its closest rivals in on-field performance if it is unable to spend in the transfer market. "Manchester United's era of pre-eminence in Europe is certainly under threat. It is already falling behind Manchester City in the transfer market, and in Europe it

has been overtaken by Real Madrid both in terms of world-wide popularity and turnover”
(Thompson). This analysis suggests that large interest burdens may lead to significant financial difficulties and inferior on field performance in years to come.

VI. CONCLUSIONS

The three financial analyses presented in the previous section point out key factors in the health of the Big Four Premier League clubs. Based upon these analyses, the following conclusions have been drawn:

1. Arsenal is in an acceptable financial condition, and occupies the best position of the Big Four clubs. The club tops the league in pretax profit, and all of its calculated ratios demonstrate healthy financials. Arsenal's ability to cover its interest expense is not excessively dependent on its on-field performance. Additionally, the club's debt burden stems from a tangible asset, namely the construction of its new Emirates Stadium, and is not a result of poor financial management. Taken together, these analyses indicate that Arsenal operates under stable financing and relatively healthy financials.

2. Chelsea is the largest club spender. Though the nature of its loans may not place the club in immediate financial peril, it can be argued that the club is performing poorly financially. Not only does Chelsea's wages/revenue ratio place the club in warning status, but each of its calculated financial ratios stand significantly below generally accepted levels. Despite a very successful run in the Champions League, the club suffered an operating loss in 2007/2008. Additionally, the extraordinary size of Chelsea's debt makes the club vulnerable to changes in ownership or fluctuations in owner circumstances.

3. Liverpool is suffering financially as a result of its debt burden. The club sits near the bottom of the League in pretax profit rankings, though it is one of the highest in revenue generation.

The club's ratios indicate poor financial health, and its operating profit was insufficient to cover its interest expense in 2007/2008. This conclusion is supported by Liverpool's inability to obtain financing for its new stadium. These combined findings suggest that Liverpool's debt burden is hampering club operations and places the club in a state of financial concern.

4. Manchester United is suffering financially as a result of its debt burden. The club is easily the top revenue generator in the League, yet occupies a bottom position in pretax profit. The calculated ratios indicate poor performance and unhealthy levels of debt. Despite winning the 2008 Champions League, the club barely generated enough operating profit to cover its interest expense. Should Manchester United's on field performance drop in coming years – a scenario that analysts find plausible given the club's reluctance to spend in the transfer market – the club could have trouble covering its growing interest expense.

This conclusion is further supported by the club's recent issuance of a £500m bond to help refinance existing debt. Numerous sources point to a crippling interest burden and concerns over the club's financing. Further supporting the conclusion of poor financial health is the nature of the club's debts, which stem from the Glazer takeover as opposed to a tangible asset (i.e. stadium construction).

5. Though large debt burdens are prominent in the sport, they are not a requirement for successful financial management of a football club. Arsenal consistently finds success on the field and occupies a rightful place in the Big Four. The club is also managed well financially. Though Arsenal appears to be an exception, the club proves that strong performance and healthy finances are not mutually exclusive.

It appears that various concerns about the financial condition of many clubs, including those coming from UEFA, creditors, and owners, are more than warranted. Manchester United and Liverpool, in particular, demonstrate the lack of a healthy operating model and a great deal of financial instability. The debt burdens of Premier League teams are a considerable problem and warrant significant attention from the League, as well as individual team owners and stakeholders.

Works Cited

- Block, Stanley B., Geoffrey A. Hirt, and Bartley R. Danielsen. *Foundations of Financial Management*. Boston: McGraw-Hill Irwin, 2009. Print.
- Clegg, Jonathan, and Dave Kansas. "Big Guns Are Aiming for Arsenal." *The Wall Street Journal*. 16 Dec. 2009. Web. 4 Jan. 2010.
- Conn, David. "Premier League to bring in test for clubs overloaded with debt." *Guardian.co.uk*. 25 Mar. 2009. Web. 15 Apr. 2009.
- "Debt to Equity Ratio." *Bizwiz Consulting*. Web. 04 Jan. 2010. <http://www.bizwiz.ca/leverage_ratio_calculation_formulas/debt_equity_ratio.html>.
- Dunbar, Graham. "UEFA Threatens Clubs in Debt of Champs League Ban." *ABCNews/ESPN Sports*. 27 Aug. 2009. Web. 15 Feb. 2010.
<<http://abcnews.go.com/Sports/wireStory?id=8424756>>.
- Foer, Franklin. *How Soccer Explains the World: An Unlikely Theory of Globalization*. New York: Harper Perennial, 2005.
- "A History of the Premier League." *The Official Site of the Barclays Premier League*. Web. 20 Oct. 2009.
- Jones, Dan, ed. *Safety in Numbers Annual Review of Football Finance 2009*. Publication. 18th ed. Manchester: Deloitte Sports Business Group, 2009. Print.
- Kieso, Donald E., Jerry J. Weygandt, and Terry D. Warfield. *Intermediate Accounting*. 13th ed. Hoboken, NJ: John Wiley & Sons, 2010. Print.
- Leverage and Tax Rates by Sector." INSEAD. Web. 26 Mar. 2010. <<http://faculty.insead.edu/peyer/FFE/Leverage%20by%20industry%20European%20Firms.doc>>.
- Mertz, Albert. *The Distribution of Common Financial Ratios by Rating and Industry For North*

American Non-Financial Corporations: July 2006. Rep. no. 98551. Moody's Investors Service, Inc, Aug. 2006. Web. 24 Mar. 2010. <<http://www.moodys.com/cust/content/content.ashx?source=StaticContent/Free%20pages/Credit%20Policy%20Research/documents/current/2005700000436062.pdf>>.

Mills, Lauren. "Manchester United's Debt Weighs Heavy on Premiership Club." *The Wall Street Journal*. 11 Jan. 2010. Web. 15 Feb. 2010.

Mills, Ryan. "Gillett and Hicks Buy Liverpool FC for \$343 Million." *Bloomberg.com*. 6 Feb. 2007. Web. 4 Jan. 2010.

"Net assets Definition." *InvestorWords.com - Investing Glossary*. Web. 08 Feb. 2010. <http://www.investorwords.com/3235/net_assets.html>.

"Net profit: Definition from Answers.com." *Answers.com*. Web. 04 Jan. 2010. <<http://www.answers.com/topic/net-profit-1>>.

Patrick, Aaron O., and Dana Cimilluca. "English Soccer's Morning After." *The Wall Street Journal*. Dow Jones & Company, Inc., 28 May 2009. Web. 8 June 2009.

"PLUS - Quoted Profile." *PLUS stock exchange*. Web. 04 Jan. 2010. <<http://www.plusmarketsgroup.com/overview.shtml?ISIN=GB0030895238/GBX/PLUS-exn>>.

Singer, Tom. "Yankees, Tigers Hit with Luxury Tax." *The Official Site of Major League Baseball / MLB.com: Homepage*. 28 Dec. 2008. Web. 19 Mar. 2010. <http://mlb.mlb.com/news/article.jsp?ymd=20081222&content_id=3726222&vkey=news_nyy&fext=.jsp&c_id=nyy&partnerId=rss_nyy>.

Smith, Rory. "Liverpool still waiting on new Stanley Park stadium." *Telegraph.co.uk*. 11 June 2009. Web. 7 Feb. 2010. <<http://www.telegraph.co.uk/sport/football/leagues/premier>>.

league/liverpool/5498058/Liverpool-still-waiting-on-new-Stanley-Park-stadium.html>.

Thomson, Ainsley, and Jonathan Clegg. "Manchester United's Bond Goal." *The Wall Street Journal*. 13 Jan. 2010. Web. 13 Jan. 2010. <<http://online.wsj.com/article/SB10001424052748703652104574651821203718010.html>>

"U.S. tycoon takes control of Manchester United." *MSNBC*. 16 May 2005. Web. 8 Feb. 2010. <http://www.msnbc.msn.com/id/7829433/>.

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PROFESSIONAL EXPERIENCE

PricewaterhouseCoopers, Philadelphia, PA *Summer 2009*
Intern: Advisory - Financial Management and Analysis

- Collaborated with team members to complete IRO pharmaceutical testing and prepared corresponding client deliverables.
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