



Finance and Accounting in Football

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Introduction

During the last century, football has evolved from a noble sport - played for reasons of entertainment - to a major form of business. With globalisation there has been an accelerated period of growth in the development of the football industry, by reducing the barriers and differences between countries and emphasising the connections between them. This has led to the building of more than a game to form an industry that has global appeal and one that major commercial bodies seek to be part of. Consequently, such development has increased academic commentary on the financial elements of the game, particularly in European football where substantial increases in revenue have been well documented in recent years. Indeed, the European football market continues to show resistance to wider economic pressures, growing by almost 13% to €24.6 billion in 2015/16. Despite this, the industry persists with the accumulation of debt, at individual club level, as costs continue to rise in line with, and in some cases more quickly, than increases in revenues. This imbalance between revenues and costs is pivotal to the research agenda in this field. The business of football is not ordinary. The emphasis on profit making, so often at the core of mainstream organisations, is routinely substituted with maximising on-field success. As such, football clubs have been leveraged by significant levels of debt - often in the form of 'soft (or interest-free)' loans from their owners with a high proportion of club revenue normally spent on player acquisitions and wages. The advent of tougher regulatory practices such as Financial Fair Play encourages clubs to spend within their means or 'break-even' seeks to redress this balance but, at the time of writing, is only in its infancy.

Against this backdrop, this chapter will consider the role that finance and accounting plays in shaping the business of football, incorporating a number of key themes which include; regulatory frameworks and legal requirements, the balance between income and costs (including the asset valuation of players), exploring financial strategies and performance and examining financial health through recognised industry techniques which enable us to evaluate the business performance of football clubs and the potential for future growth in the industry.

Regulatory Frameworks and Legal Requirements

The international aspect of accounting is of vital importance to sport given that many areas of the industry are not confined strictly within UK businesses. Indeed, as mentioned above, the globalisation of sport, particularly the integration of various multinational and intercultural

sponsors and broadcasters has provided a platform to establish and maintain a worldwide audience, putting international accounting and the financial performance of football clubs firmly in the spotlight. Yet the foundations for all clubs are the same. From a regulatory perspective, football clubs, along with general businesses, have to conform to a set of International Financial Reporting Standards (IFRSs) that have been established by The International Accounting Standards Board (IASB). Companies have been required to publish their financial statements using IFRSs rather than domestic standards since January 2005.

As Chopping (2010) simply puts it, financial statements are the accountant's summary of the performance of a company over a particular period and of its position at the end of that period. Performance providing details of what money has been generated and what has been spent, leaving behind a profit or loss, and position establishing the net worth of an organisation once all of the items that it owns and all of the items that it owes have been calculated. Such financial statements are prepared using a number of basic principles as defined by the IASB and are mandatory for all listed companies.

The statement of principles

The Statement of Principles describes fundamental rules but does not contain requirements on how financial statements should be prepared or presented - this is done under the requirements of company law and the accounting standards outlined above. However, the primary aim of the Statement of Principles is to help the respective accounting standard board(s) to review existing accounting standards and to develop new ones. The Statement of Principles contains and deals with the following key characteristics of accounting information:

- The objectives of financial statements
- The qualitative characteristics of financial information
- The elements of financial statements
- Recognition in financial statements
- Measurement in financial statements
- Presentation of financial information
- Accounting for interests in other entities.

Furthermore, it is vitally important, in the context of making effective business decisions, that the financial information used or the way in which it is presented and recorded is useful to the respective target audiences and various stakeholders. Financial information is deemed useful if it is:

- Relevant - information has the ability to influence the economic decisions of users and is provided in a timely fashion to influence such decisions
- Reliable - information should be representationally faithful in a sense that it should report what it sets out to report or could be reasonably expected to represent
- Comparable - information enables users to compare the similarities and differences between financial information over time and against other entities
- Understandable - information can be perceived by users that have a reasonable knowledge of business, economic activities and accounting.

The impact of a Regulatory Framework on Football

History tells us that financial problems have been prevalent during the development of most professional team sports and professional football has not been exempt. These problems have included issues such as tax avoidance, non-payment of liabilities and creative accounting techniques. One such recent example witnessed a high profile case in the English Premier League, where Newcastle United Football Club was accused by the tax authorities of extensive tax evasion on player transfers. The allegations suggested an elaborate scheme to evade income tax, VAT and national insurance relating to the club's part in the transfers of players including Demba Ba, Moussa Sissoko, Papiss Cissé, Sylvain Marveaux and Davide Santon. Her Majesty's Revenue and Customs (HMRC) said Newcastle had "systematically abused the tax system" with the use of "sham" contracts that disguised the true recipients of agents' fees. Newcastle United was not the only club indicated in the scheme but the case demonstrates the complex methods used by organisations to maintain strong profit margins or financial control, legal or otherwise. Without a strong regulatory framework it would be increasingly difficult to ensure that football clubs were playing by the rules.

Although some of the practices are improving based on the involvement of professional advisers, greater financial awareness and increased media interest, it is still conceivable that the unique nature of the football business and the increasing opportunities for money to be made will lead to further issues. The future development of accounting policies and

regulatory frameworks will directly influence professional team sports as the two are inextricably linked, particularly within the United Kingdom (UK) where, for example, all companies are required to produce financial statements consistent with the regulatory framework in place. However, such frameworks have to be watertight so that they cannot be easily manipulated. The uniqueness of the football business is further underlined by an example from Italian football when Morrow investigated the effects of the so-called *salva calcio* decree in 2006, introduced by the Italian government. The decree effectively permitted clubs to amortise (gradually write off the initial cost of (an asset)) the asset of players' registration rights over an arbitrary time period of ten years rather than over the length of the players' contracts, thus improving clubs' reported financial position and performance (Morrow, 2006).

Most issues with football and accounting (like the example above) are concerned with the valuation of player contracts and this is where we find evidence in relation to accounting principles. However, while we will discuss the valuation of players as assets to the football business in more detail later in the chapter, from a regulatory perspective, there has been one single piece of legislation that has become one of the most important changes to the world of sport business and in particular professional team sports. The method of reclassifying the way in which professional clubs could value their players and record them on the balance sheet, came about following the introduction of Financial Reporting Standard (FRS) 10. Previously, clubs had begun to develop ways of including the costs and purchases of players without valuing them on the balance sheet, despite the fact that they were valuable assets. This is important when considering the characteristics of financial information mentioned earlier in the chapter. Such a practice was at direct odds with the concept of financial information being relevant, reliable and understandable and it was clear that a regulatory change was necessary to try to combat this particular issue.

The introduction of FRS 10 provided a degree of consistency in the area of intangible assets and comparisons between the financial results of professional sports teams can now be undertaken with greater confidence and a stronger level of comparability, as all clubs should be operating in the same way. Essentially, a fundamental principle of FRS 10 is that football clubs should record the player registration fee on their balance sheets as an amortised value based on the length of the player's contract (e.g. if a player is purchased for £50million and signs a 5-year contract, then the value recorded on the accounts is £10m per annum for that particular player). This is similar to the concept of Net Book Value which dictates that an

asset is depreciated equally over the course of its useful life span whereby at the end of the time period the asset holds no value to the business. Thus, at whichever point in time we are focusing on, the asset has a (net) value at that particular point.

Furthermore, owing to high profile scandals and business collapses in recent years, witness the demise of a number of established football clubs such as Leeds United, Sheffield Wednesday, Portsmouth and Coventry City for example, accounting bodies, accountants, institutional investors and audit firms amongst others, have begun to place an increasing emphasis on 'corporate governance' (see Hamil and Chadwick, 2010; Wilson, 2011). The Corporate Governance Code in the UK sets out standards of good practice for listed companies on issues related to board composition, shareholder relations and accountability and audit matters. Whilst it is aimed at listed companies the principles should apply to any organisation (Wilson, 2011). Again, as with accounting policies, corporate governance is a global issue and many countries have developed their own ideas of corporate governance, some of which, the US for example, are more rigid and rule-based than others. Sport organisations, much like any normal business, will have their own governance frameworks and these should conform to the principles of fairness, transparency, responsibility, independence, accountability, discipline and social responsibility. The threat of litigation almost forces the larger scale organisations to disclose how they consider corporate governance on an annual basis (Wilson, 2011).

Income Statements and Balance Sheets

As noted at the outset, each and every sport organisation has a responsibility to produce financial statements: the legal requirements for which, will be determined by the nature of the company (i.e. whether they are a sole trader or a public company). There are two main financial statements that need to be drawn up by financial accountants: the balance sheet and income statement. Briefly the *Balance Sheet* provides a list of all assets owned by the business and all of the liabilities owed by a business at a specific point in time. It is often referred to as a 'snapshot' of the financial position of the business at a specific moment in time (normally at the end of a financial year) and therefore is only really useful on the day on which it is produced.

The Income Statement by contrast provides a statement showing the profits (or losses) recognised during a period. The profit is calculated by deducting expenditure (including charges for capital maintenance) from the income generated during the accounting period,

normally one calendar year. In simple terms, these documents help define a company's operations against the key financial equation;

$$\text{Assets} - \text{Liabilities} = \text{Capital}$$

It is worth mentioning here that 'assets' are resources that the business owns, for example buildings, machinery and vehicles. Such resources will be used by the business in its operations. There may also be bank balances and cash. These will hold the funds that the business needs to operate. However, the business may also owe money to its owners, other people or organisations – these are called liabilities. A limited company will produce an income and expenditure statement for the period of one year. However, it is not uncommon for internal users to produce income statements on a quarterly or even monthly basis. Income statements that you come across are likely to be in annual reports and will therefore be for a twelve-month period.

Asset Valuation of Players to the Football Business

For the purpose of this section, we use the UK for context in relation to how football players are recorded as assets to the business. Financial Reporting Standard 10 *Goodwill and Intangible Assets* sets out the principles of accounting for the measurement and recording of goodwill and intangible assets.

For clarity, goodwill is a long-term (or non-current) asset categorized as an intangible asset (for a definition of that, read on). Goodwill arises when a company acquires another entire business. The amount of goodwill is the cost to purchase the business minus the fair market value of the tangible assets, the intangible assets that can be identified, and the liabilities obtained in the purchase. A key component of goodwill is Intangible Assets. By definition these are assets that you cannot necessarily touch. Examples of intangible assets will include copyrights, patents, mailing lists, trademarks, brand names, domain names, and so on. Often, the market value of an intangible asset is far greater than the market value of a company's tangible assets such as its buildings and equipment.

Based on this, the key objectives of FRS 10 is to ensure that:

- capitalised goodwill and intangible assets are charged in the income statement account in the periods in which they are depleted; and

- sufficient information is disclosed in the financial statements to enable users to determine the impact of goodwill and intangible assets on the financial position and performance of the reporting entity.

To take this all a stage further, one of the main issues surrounding accounting policies and professional football is the classification of football players, as assets to the football club, and therefore, their subsequent value to the business. The majority of sporting related literature and accounting policies covers this issue particularly the work of Gerrard (2005) and Morrow (1996). The former puts forward a resource-utilisation model of a professional sports team where teams optimise the stock of athletic resources (i.e. playing talent), subject to ownership preferences, over sporting and financial performance. Gerrard (2005) meanwhile, considers the theory surrounding a resource based view (RBV) which emerged in the strategic management literature partly as a reaction to the more economics-based approaches in which the strategic decisions of firms are seen as primarily driven by competitive forces. The resource-utilisation model of a professional sports team consists of five basic relationships: (1) the team-owner objective function; (2) the sporting production function; (3) the profit function; (4) the revenue function; (5) the cost function. All of these functions are subsequently translated into mathematical formulae before ordinary least squares (OLS) multiple regression is used, alongside performance ratio analysis, to determine the efficiency of the model.

The valuation of football players as assets has traditionally been a grey area when it comes to professional football clubs and the accounting literature, often due to the confusion surrounding which accounting practices should be followed. Using a more simplistic methodology than Gerrard (2005), Morrow (1996) considered whether the prospective services provided by a football player on behalf of the club holding his registration could be recognised as an accounting asset. This was based on the fundamentals of human resource accounting. Since the 1960s this type of accounting has been dominated by two issues - firstly, can human resources be satisfactorily defined and recognised as accounting assets and secondly, can a satisfactory valuation methodology be provided to reflect those assets (Morrow, 1996). To bring this together, Morrow (1996) put forward four valuation methods in an attempt to answer such questions; the historical cost model, the earnings multiplier model, the directors' valuation model and the independent multiple player evaluation model. The consideration around these valuation methods is of particular relevance here as the value

of assets (most normally in the form of players) to a professional football club will have some influence on the financial performance of the club in question. The valuation of assets (players) to a professional football club is particularly relevant if a club is in a perilous financial situation or close to liquidation or administration. Here, a club may wish to sell some of its most prized assets (players) to cover costs or to lower debt levels. Consequently, it's worth examining each of Morrow's valuation models in turn.

The historical cost model (method 1), involves capitalising players acquired by the club via the transfer market on the balance sheet at their cost of registration (capitalising simply means that the cost to acquire an asset is expensed over the life of that asset rather than in the period in which it occurs). The earnings multiplier model (method 2), involves applying a multiplier to a player's earnings to produce a current valuation of that player. The directors' valuation model (method 3) involves capitalising the players at a value provided jointly by the Chairman and Manager whilst the independent multiple player evaluation model (method 4), involves various informed and knowledgeable sources providing a value for the players of the club in question. The latter is based on a model set out by Biagoni and Ogan (1977; cited in Morrow, 1996) for valuing US professional team sports.

All of these methods have their respective strengths and weaknesses, although methods 3 and 4 become increasingly difficult to implement without internal access to a specific club and industry experts, or in most cases the Chairman and the Manager. Furthermore, method 3 is likely to be far more susceptible to window dressing by management, as clubs are unlikely to wish to disclose a low valuation in respect of their players to the outside world. As a result, methods 1 and 2 present the most relevant approach to use when valuing football players as assets, although the earnings multiplier model (method 2) is also open to critique. It's also worth noting here that there is no universal acceptance of the theoretical conditions that would justify the use of wages and salaries as surrogate measures of human resource value that exist in practice (Morrow, 1996).

Similarly, Amir and Livne (2005) also analysed the topic of accounting, valuation and duration of football player contracts with reference to the guidelines outlined in FRS 10 and concluded that given the high degree of uncertainty associated with such contracts, it is not clear that this treatment is consistent with asset capitalisation criteria. Common to FRS 10 is the presumption that assets acquired in an arm's length transaction should be capitalised. The rationale behind this presumption is that the transaction price provides reliable evidence

about the fair value of the acquired assets. However, this overlooks the possibility that certain fixed assets, tangible or intangible, represent speculative investments in that their recoverability and association with future economic benefits are highly uncertain. This is particularly relevant in relation to the nature of the professional football industry and it is possible to question the applicability of this presumption by demonstrating that the relationship between arm's length investment in player contracts by football companies and future benefits may be tenuous. FRS 10 requires that all purchased intangibles should be capitalised separately from goodwill and that all intangibles shall be amortized over their useful economic lives, unless useful life is indefinite, but the analysis here suggests that the rate of economic decline in the value of player contracts is higher than the rate of amortization and impairment reported by sample firms under FRS 10.

This highlights how diverse an industry football is compared to other areas of business and how difficult it would be to compare football clubs to other businesses in other industries. At the outset there would be a differentiation between asset amortisation in football clubs compared to other businesses where assets are more tangible, meaning that what is being measured would not be like for like. Despite there being a regulating standard in place (FRS 10 in this instance) there would still be inconsistency in the reporting of asset valuation across industries, further highlighting the discrepancies within the conceptual framework for accounting.

Prior to FRS 10, UK football companies could elect between capitalisation and amortisation of players' transfers and immediate expensing of those transfers. As noted by Amir and Livne (2005) companies that elected the capitalization method categorised player transfers as intangible assets and amortised these intangibles over the period of the contract. The introduction of FRS 10 has meant that football clubs can no longer exploit the vagueness that was present in regulatory guidance to immediately write transfer fees off as expenses. However, the case of unusual assets such as football player contracts makes it increasingly difficult to estimate useful economic life and amortisation. Consider, for example, Manchester City's acquisition of a young player with high potential such as Gabriel Jesus in 2016. He may be allowed time to develop early in his contract, and his skill set may diminish later in his career so that the net benefit obtained will be relatively small at the beginning and end of his playing career and highest in the middle years giving rise to a low-high-low pattern of amortisation. This makes it increasingly difficult to classify the exact value of intangible

assets to a football company and the inconsistency that still surrounds accounting policies and principles further confuses the situation.

Certain methods of valuation offer a solution to the question "How much is this player worth at this moment in time" but whilst players are bought and sold in some sort of a market, certain methods do not always correspond to the financial meaning of the market. This is due to value of the market, or a specific player for example, changing over time. As club revenues, broadcasting deals and ticket prices have increased in professional football over the last twenty years, so too has the amount for which football players are bought and sold. Therefore, the value of player at a specific moment in time will not remain constant at a different point in time. Additionally, it is clear that there is work to be done here to further our understanding about this particular concept of asset valuation of players in professional football as there have been very few academic pieces of research conducted on it over the last few years. Given that the nature of the industry has altered quite dramatically during the last decade, and club revenues and player transfer fees are at an all-time high, it is pertinent to re-visit this topic of discussion moving forward to provide further insights into the current financial performance and position of elite professional football clubs.

The Role of Finance Linked to Strategy

The Problem with Objectives

Sport teams have to balance twin objectives (in most cases financial and sporting) and the very nature of professional football requires this same balance. However, there are also other factors that determine the objectives of professional sports teams that will have an impact on business and sporting performance. Primarily, in professional football clubs, there is a pragmatic problem with the objectives of owners which could be further muddled by a change of ownership that may influence a change of business objectives over time. This is perhaps best evidenced by the case of Chelsea, Manchester City and Manchester United in English football. When Roman Abramovich purchased Chelsea FC in 2003 (at a time when there were no real financial restrictions or regulations on owner spending) he primarily invested money into securing the best playing talent in an attempt to improve sporting performance. A similar scenario occurred at Manchester City in 2008 when they were purchased by the Abu Dhabi Group although the introduction of FFP has since meant that Manchester City must now balance the books as well. The acquisition of Manchester United in 2005 by the Glazer family was slightly different as they purchased the club through a

method of debt finance. It was suggested at the time that this was the first example of an American owner exerting profit maximisation principles on a UK professional sports team and Manchester United have since floated on the New York stock exchange in an attempt to raise further funds. Additionally, there has been recent investment from the Middle East and Asia into the game with Paris Saint Germain currently owned effectively by a Qatar organisation that is state funded by the Qatari government and several football clubs in England, Netherlands and Spain have seen significant investment from Chinese business in recent years.

Given this context it is difficult to ascertain indefinitely what the objectives of clubs truly are. It is not necessarily about trying to say that clubs are profit maximisers (i.e. prioritising financial performance and attempting to make a profit over prioritising sporting performance) or utility/win maximisers i.e. (prioritising sporting performance and wins on the pitch over financial performance) rather that they show the traits of these extremes to a greater or lesser extent. Debates around this topic can be discussed using examples such as Chelsea, Manchester City, Manchester United and Paris Saint Germain amongst others although ownership investment and objectives in European football has been altered somewhat in recent years owing to the introduction of tighter financial regulation such as Financial Fair Play.

On-Field/Off-Field Performance Dichotomy

Owing to the fact that contemporary sporting competition involves an abundance of statistics, football has become an ideal laboratory in which to test various economic theories (Sloane, 2015). Such statistics need not be exclusively confined to the field of play. Indeed, as the field of sports economics has grown, there has been increasing interest surrounding the off-field objectives and performance of, most notably, professional football clubs across Europe.

This interest has been stimulated, in part at least by substantial increases in revenue in European football in recent years. In 2015/16 the cumulative revenue of the 'big five' European leagues (the English Premier League in England, the Bundesliga in Germany, La Liga in Spain, Serie A in Italy and Ligue 1 in France) totalled €13.4 billion, driving the total value of European football market revenues to €24.6 billion (Deloitte, 2017). However, despite these positive revenue figures debt accumulation of European football clubs is an increasing source of concern for football authorities (Drut and Raballand, 2012). Of the five

major European leagues, the English Premier League remains, by a distance, the highest revenue generating league (€4.86 billion (£3.63 billion) in 2015/16). This figure is €2.15 billion more than the next best revenue generating league in Europe (the Bundesliga in Germany) and during the last five years the EPL has established itself as the league with the highest turnover in world football. At individual club level, however, the figures are less positive. With reference to the EPL, financial data shows that clubs are leveraged by significant levels of debt, often in the form of interest free loans from their owners. In 2016 the total debt of EPL clubs was £2.2 billion with 'soft loans' from owners totalling £1.7 billion (Deloitte, 2017). Despite EPL clubs' revenue totalling £3.63 billion, clubs are spending £2.27 billion (63%) on wages and academics have confirmed similar imbalances between revenue and costs for clubs across Europe in recent years.

In an attempt to address this imbalance, the Union of European Football Associations (UEFA) has introduced Financial Fair Play (FFP) regulations across the European game in an attempt to reduce the reliance on debt and borrowings and to make clubs spend within their means. The cornerstone of UEFA's FFP regulations is the break-even requirement, which aims to help clubs across Europe achieve a more sustainable balance between their costs and revenues whilst also encouraging investment for the longer-term benefit of football. The regulations, applied in UEFA competitions for the first time in 2013/14, cover clubs' results from the 2011/12 and 2012/13 seasons and there have recently been high profile examples of fines handed to clubs who have not fulfilled the break-even requirement such as Manchester City in England and Paris St. Germain in France.

The advent of UEFA FFP has brought about an increase in pressure on clubs to become more financially prudent and sustainable. Additionally, the effect of investment and ownership structure within clubs is also being analysed as part of FFP. Surrounding these areas is the issue of how we assess the long-term viability of professional sports leagues and the future proofing of individual businesses, as arguably, from a fundamental business position, professional sports teams should be looking to operate as sustainable businesses focusing on long-term growth as opposed to seeking short-term gain and trophy acquisition through immediate cash injections. The problem with sports teams, as noted in the section opening, is that they are ultimately guided by twin objectives. One is financial, in relation to business operations, and the other is sporting, in relation to on-pitch performance and trophy success. This strategic dilemma is a product of the phrase 'peculiar economics' in relation to

professional team sports. Central to this dilemma are the principles of competitive balance, uncertainty of outcome and profit and utility maximisation; all underlying themes present in contemporary sports economics literature. In addition to measuring financial performance, the examination of the relationship between financial and sporting performance and whether or not the two concepts are interlinked or mutually exclusive is important.

Performance Measurement

The unique nature of football means that performance measurement techniques used in more general businesses are not always the most appropriate tools for analysis. Consequently, this section, and the case study that follows, utilises excerpts from a paper written by the co-authors which was published in 2017. The primary aim of this paper was to develop an alternative method for analysing financial and sporting performance in English professional football clubs. There are many recognised techniques regarding financial analysis (ratio analysis being a principal example) yet that there is no set definition of which variables to actually measure. It is clear that ratio analysis is an important tool for benchmarking and that it makes good business sense for organisations to benchmark themselves against their direct competitors. However, in the context of sport, and more specifically professional football, this is difficult to replicate. For example, both Manchester United and Brighton & Hove Albion were in the EPL in the 2017/18 season, yet it is unrealistic that the two clubs would be in direct competition in a financial context. Furthermore, the use of tools such as ratio analysis alone (even considering the case for benchmarking) may not tell the true story of performance for football clubs given that they operate under twin objectives.

Consequently, this section details an alternate approach to performance measurement in professional team sports and one which has been adapted and applied across other professional team sports including Rugby Union and Rugby League. Using football, and the EPL, as an example, the model builds on UEFA's approach to FFP, and can be used by academics, practitioners and analysts to draw conclusions about club performance. It is important to note that the model is not used as a predictor for future performance, rather it is an analytical tool that can be used to check for performance health markers (both financial and sporting) to detect where clubs may be considered at risk. It outlines a composite index score that highlights how a club is performing in relation to its competitors. This composite index score is derived from eight variables (five financial and three sporting) which were developed during an initial pilot model, comprising eighteen variables (nine financial and

nine sporting). The initial model was tested using football club data and then the model was reduced by using a factor analysis which measured whether or not certain variables were strongly correlated with each other (that is to say, test whether the same variables were double counted). For a more detailed account of how the model was produced you can read the full paper by Plumley, Wilson & Shibli (2017) (full reference in the reference list at the end of the chapter). The final Performance Assessment Model (PAM) is outlined in figure XX.1, where a hypothetical example is provided to show how it works in practice and to derive the final OPS (Overall Performance Score) for the football club.

Dimension	Sub domain				Dimension		OPS
	<i>Indicator</i>	<i>League rank</i>	<i>Weight</i>	<i>Score</i>	<i>Score</i>	<i>Weight</i>	
Financial	Revenue	2	0.15	0.30			
	Pre-tax profit/(loss)	4	0.15	0.60			
	Net assets/(liabilities)	3	0.15	0.45	4.15	0.625	3.59
	Net funds/(debt)	8	0.15	1.20			
	Wages/Turnover	4	0.40	1.60			
Sporting	League Points	5	0.333	1.665			
	Total Game Variance	2	0.333	0.666	2.66	0.375	
	Attendance Spread	1	0.333	0.333			

Figure XX.1

Case Study: Applying the PAM - An Analysis of English Football Clubs since the Inception of the EPL

The results include data from 21 clubs in total and covered the period 1992-2013. In relation to the overall performance score in table **XX.1** below a lower score is more desirable and a perfect score would be 1. The results indicate that Manchester United was the best performing club on average throughout the years studied. The club has recorded one of the largest net debt figures in recent years (primarily due to the levels of borrowing attached to the takeover of the club by the Glazer family in 2005) but its ability to generate revenue and profit remains unrivalled and its position at the top of the EPL and historically strong performance in both domestic and European cup competitions consolidates its position as the best performing club in England. A similar scenario can be found at Arsenal although its net

debt figure has been one of the highest across all clubs since 2003. This debt must be considered in context however. It was in large part due to the construction of a new stadium which was necessary to help Arsenal bridge the gap to clubs with higher attendances such as Manchester United. Despite Chelsea ranking 3rd for sporting performance, the club ranked 6th in relation to the overall performance. This was because of poorer financial performance for which Chelsea ranked 13th. The three worst performing clubs in the study were Middlesbrough, Fulham and Coventry City (see table xx.1).

Table XX.1 - Average OPS for all clubs 1992-2013

Rank	Club	Average Finance Score	Average Sporting Score	Average OPS
1	Manchester United	2.89	3.08	2.96
2	Arsenal	6.20	3.65	5.24
3	Tottenham Hotspur	5.10	8.16	6.25
4	Liverpool	8.27	6.30	7.53
5	Newcastle United	9.48	7.86	8.87
6	Chelsea	11.79	5.71	9.51
7	Aston Villa	9.30	12.24	10.40
8	Leeds United	9.36	12.81	10.65
9	West Ham United	10.72	11.37	10.96
10	Everton	11.49	11.97	11.67
11	Manchester City	12.23	10.79	11.69
12	Southampton	11.75	12.17	11.91
13	Sunderland	10.26	14.71	11.93
14	Bolton Wanderers	12.55	12.13	12.39
15	Leicester City	12.79	13.51	13.06
16	Charlton Athletic	13.17	13.03	13.12
17	Sheffield Wednesday	11.26	16.32	13.16
18	Blackburn Rovers	14.24	11.40	13.17
19	Middlesbrough	14.81	11.95	13.74
20	Fulham	16.25	11.67	14.53
21	Coventry City	15.57	15.25	15.45

Further statistical analysis revealed a positive correlation between financial performance and sporting performance ($r=0.44$). Whilst this is not a strong correlation in absolute terms, it is statistically significant ($p<0.05$) which means that the probability of achieving a correlation coefficient of this magnitude by chance is remote. This in turn indicates the presence of a real relationship rather than a statistical quirk. Superficially at least, better financial health is moderately and positively associated with better sporting performance in the EPL.

A time series analysis for each club was also conducted and found evidence that, for the majority of clubs, overall performance, as measured using a mix of financial and sporting indicators, varies over time in cycles. Thus, football club performance often runs in cycles, where sometimes clubs have a successful period spanning a number of years before declining for a period of time.

Implications and the need for application

Success (in team sports) is a function of a strong stream of revenue primarily because teams have to pay the best wages to secure the best playing talent. As such, irrespective of what owner(s) actually want to do, they must balance the financial and sporting objectives of the club accordingly in order to maximise playing success. Financial fair play regulations have had a further impact on financial development as it should force clubs to operate as sustainable businesses moving forward.

The findings suggest that financial and sporting performance are not dichotomous variables but a continuum along which clubs place themselves and move backwards and forwards to a greater or lesser extent. The aim of the model produced is not to attempt to predict future performance but to pinpoint health markers to ascertain warning signs for when clubs may appear to be performing badly. The model should be used to quantify club objectives and help analysts outline in what way clubs are performing based on economic principles. The model could also be used by governing bodies and decision makers within respective sports in order to inform policy and set new regulations.

Summary

This chapter has introduced you to the concepts surrounding finance and accounting and the way in which they impact the business of professional football. Against the objectives of the chapter, you should now understand and appreciate the importance of finance and accounting in football and the uniqueness of football compared to other mainstream businesses.

Finance and accounting in football is still very much, and will continue to be, an ongoing matter for sport managers and researchers. It should continue to consider the role that finance plays links to strategy and the different techniques that can be used to measure performance against sport objectives. This in turn will allow football clubs to use financial information effectively, with the end goal of using good financial information and performance measurement techniques to drive strategic business decisions. Furthermore, the rapid rate of

expansion and growth within the football industry during the last two decades means that the consideration of financial performance is even more important to football clubs.

This chapter has outlined the current position of finance and accounting within the football industry although it is clear that there is still further work required in the field to progress the research agenda. Future research should focus on how performance measurement models that utilise financial performance (like the one used in the case study) can be developed to focus on wider variables that also impact club performance so that the notion of viewing performance of football clubs in a more holistic style comes fully into focus.

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