

**INTANGIBLE ASSET ACCOUNTING AND ACCOUNTING POLICY
SELECTION IN THE FOOTBALL INDUSTRY**

by

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ABSTRACT

The main aim of this thesis is to evaluate the feasibility of intangible asset accounting in financial reporting with particular reference to the football industry. It also examines related accounting policies. Lack of reliable measurement is the major obstacle to the recognition of intangible assets. The measurement of intangible assets is problematic due to a lack of verification through reference to an active market. However, drawing on Human Resource Accounting, the thesis argues that identifying and measuring human resource assets may be possible in the football industry. The human resource asset, the player registration, is subject to sufficient control through unique industry structures to justify recognition as an intangible asset. The existence of an active market for player registrations facilitates reliable measurement.

In the football industry, a wide variety of accounting policies are employed in accounting for player registrations and other material transactions. Hypotheses regarding the reasons for selecting particular accounting policies are developed and tested. Findings suggest that institutional pressure which influences perceptions of legitimacy and credibility can affect the selection of accounting policies.

The thesis also develops and tests a model to value player registrations as intangible assets where they are not subject to market transactions. The ability to reliably measure intangible assets is regarded as crucial to their recognition in financial reporting. In addition, it will lead to the acceptance of intangible asset policies as legitimate and credible, despite the market orientated bias of traditional financial reporting.

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INTRODUCTION

One of the main aims of this thesis is to evaluate the feasibility of intangible asset accounting in financial reporting with particular reference to the football industry. It therefore focuses on Human Resource Accounting which is concerned with the process of identifying and measuring human resource assets. The football industry provides a unique case where reliable recognition and measurement of human resource assets may be possible. The other main aim of this thesis is to examine related accounting policy-making issues in the football industry. This includes an empirical study designed to identify the factors that influence accounting policy choice. In addition, the thesis contains further empirical work aimed at providing a model for valuing internally generated human resource assets in a manner acceptable for financial reporting purposes.

Much of the recent debate over intangible asset accounting has focused on accounting for brands. The main points of contention concern the identification of a single brand asset and the measurement of internally generated brand assets. Similar issues are prevalent in the football industry. Some football clubs have recently begun to apply Human Resource Accounting techniques in accounting for transfer fees. This results in player registrations being recognised as intangible fixed assets. Thus, debate over intangible asset accounting is also particularly relevant in this industry.

The football industry has experienced a period of rapid growth in the last decade. Several clubs have recently been listed on the London Stock Exchange, and thus their finances are coming under greater scrutiny. There has been little financial research in the football industry, particularly in the light of industry changes.

The thesis also aims to contribute to current knowledge on the relationship between economic and organisational variables, and accounting policy choice. Previous empirical research has tended to focus on particular types of organisation; the largest firms listed on a stock exchange. The universal applicability of existing theories can be explored given the unique setting of the football industry. Existing theories of accounting policy choice can be argued to be entrenched in paradigms. For example, positive accounting theory is dependent upon the values of 'Chicago School Economics'. This thesis explores common elements of existing theories. Furthermore, it seeks to develop new social and organisational variables which may influence accounting policy choice. This includes investigating indirect influences of accounting policies (and standards) upon cash flows. Thus, this work aims to provide a possible contribution to the practical considerations relating to the regulatory framework of accounting as well as other broader socio-economic and political issues.

Chapter 1 examines the nature and treatment of intangible assets. It first considers the definition of intangible assets. This is followed by a review of the growth and development of intangible asset accounting, including its relationship with changing economic structures and the current system of financial reporting. It then describes the development of financial reporting standards on intangible assets. The final section explores the current generally accepted accounting principles for intangible asset accounting in the UK and internationally.

Chapter 2 examines various methods of measuring intangible assets. It starts by describing the current measurement criteria for financial reporting purposes. Various methods of measuring intangible assets are then evaluated. These include acquisition costs, current costs, estimates of economic value, exit prices, market values, opportunity costs and

qualitative measures. The aim is to assess which types of measure may be suitable for financial reporting purposes. Finally, it describes the amortisation of intangible assets.

The relevance of Human Resource Accounting is explained in Chapter 3. HRA is intended to measure the contribution of labour to an accounting entity. This chapter evaluates the existence of a human resource asset and explores the applicability of Human Resource Accounting in financial reporting. The intangible benefits of labour and their relevance in organisational decision-making and regulation are outlined. Various measurement approaches designed specifically for human resource assets such as wage based valuation models, are explored. Finally, the potential uses of human resource accounting information are evaluated.

Chapter 4 describes recent developments and special issues in the football industry. This industry has unique structures and transactions to which Human Resource Accounting is particularly applicable. It is also an object of study in its own right. The structure, funding and financing of the industry are examined in the light of its recent growth and commercialisation. The first section describes labour market restrictions and income sharing agreements. The second considers sources of funding, income streams and the main items of expenditure in the football industry. The final parts of the chapter focus on the special characteristics of transfer fees, signing-on fees and stadium redevelopment.

Chapter 5 reports the results of a survey into the accounting policies used by football clubs. This is generated from the 1995 financial statements of 102 English and Scottish football clubs. It examines the accounting policies used for four material types of transactions. Namely, transfer fees, signing-on fees, capital grants and stadium depreciation.

Chapter 6 explains the theoretical framework used to generate the hypotheses relating to the selection of accounting policies in the football industry. It examines the different explanations put forward in the existing literature relating to the associations

between economic variables and accounting policy choice. The thesis then seeks to combine some of these theories, which it is argued, are not mutually exclusive. Finally, six hypotheses are generated relating to underwriter pressure, debt contracting costs, youth development, ownership structure, normative accounting influences and political contracting costs.

Chapter 7 describes the methods of data collection and analysis. It starts by explaining the methodology for studying the selection of accounting choices. The sampling and data collection techniques, including the responses to two postal questionnaires, are then outlined. Finally, it also describes the construction of variable measures and the statistical tests used.

The results of the accounting choice study are analysed in Chapter 8. Statistical test results and qualitative analysis are used to assess the validity of the proposed hypotheses.

Chapter 9 considers, in detail, the legitimacy of identifying and recognising football player registrations as intangible assets in financial reporting. It evaluates the possibility of reliably measuring intangible assets in the absence of a market transaction. In doing so, it presents a valuation model for internally generated football player registrations.

Finally, conclusions are drawn relating to the future of financial reporting in the football industry, factors influencing the selection of accounting policies and the feasibility of intangible asset accounting. This chapter also highlights areas for future research and suggests implications for accounting policy making.

CHAPTER ONE

THE NATURE AND TREATMENT OF INTANGIBLE ASSETS

Introduction

This chapter reviews the current and possible future accounting treatment of intangible fixed assets in financial reporting. It starts by examining the nature of intangible assets. It then goes on to explain the importance of intangible assets in the modern economy. The relationship between the nature of intangible assets and the present method of financial reporting is explored. The bulk of the chapter then reviews the development of standards in accounting for intangible assets in the UK and other developed countries.

1.1 The Nature of Intangible Assets

Intangible assets are defined as fixed assets of an intangible nature. To meet the definition of an asset, access to the future economic benefits it represents are controlled by the reporting entity, either through legal protection or physical custody. They are intangible in that they have no physical substance and are non-financial. The asset must be identifiable in that it is capable of being disposed of or settled separately, without disposing of a business of the entity [ASB, 1997]. Intangible assets entail expectations of economic benefits that carry no legal rights, or legal rights in relation only to persons at large rather than to specific persons. Common examples of intangible assets include licences, quotas, patents, copyrights, franchises and trade marks.

For the purposes of this thesis, the definition of intangible assets excludes goodwill, leases or development expenditure. These items are, where appropriate, dealt with separately due to their differing nature. Separate financial reporting standards exist for development

expenditure and leases. Goodwill is assumed to differ from intangible assets in that it is not separately identifiable; it cannot be disposed of separately without disposing of a business of the entity¹.

1.2 The Importance of Intangible Assets

At present there is little consensus over the treatment of intangible assets in financial reporting. The increasing significance of intangible assets has fuelled discussion over their nature and treatment. The lack of consensus over their treatment leaves scope for manipulation and results in a lack of comparability.

Generally accepted accounting principles were established under a predominantly manufacturing-based, economic structure. Hence, emphasis has been placed on the tangible assets of an entity and intangible assets have been largely ignored. It can be argued that due to changing technology, this type of economic structure and the accounting rules that are derived from it are outdated.

These rules ignore many of the flows of the modern, knowledge-based economy. In the latter half of the twentieth century, there has been a qualitative transformation to technology intensive industry where different blends of resources are used. In this environment, value is principally comprised of intangible rather than tangible factors. For example, a feature of the modern economy is the creation of added value through product differentiation. However, such flows are, at present, ignored by accounting standard setters.

It is argued that the gap between book values and market values of organisations in the UK is growing. A 1990 study by Higson found the amount paid for goodwill as a

¹ This distinction is not universally held. Goodwill and intangible assets are often grouped together for the

percentage of an acquirers net worth rose from 1% in 1976 to 44% in 1987 [ASB, 1993b].

This represents an increasing number of factors which are valuable to a buying organisation but are not recognised in financial reporting. Under current accounting practice, it is difficult to assess rates of return on intangible assets or evaluate shifts in their characteristics [Lev, 1997]. It is argued that a historical cost framework cannot accommodate the recognition of intangible assets.

Attempts have been made to reflect the changing economic structure. For example, the principle of substance over form requires that the economic substance of a transaction rather than its legal form be accounted for. It was developed to ensure that certain types of liability did not escape recognition [Power, 1990]. The substance of a transaction is represented as it more accurately reflects the economic activities of an organisation. This has been acknowledged in FRS 5, Reporting the Substance of Transactions. It seeks to represent the commercial effect of a transaction with respect to assets and liabilities.

The debate over the recognition of intangible assets is said to stem from a lack of consensus on the objectives of financial reporting [Pizzey, 1991]. A matching, historical cost approach recognises realised gains and is grounded in past events and actual transactions of a reporting entity. It is compatible with the function of stewardship and accountability. A current valuation approach deals with the current opportunities of the entity and recognises all gains. Such an approach aims to provide predictive and market-orientated information. The balance sheet shows the current value of the entity whereas a historical cost balance sheet is

purposes of financial reporting. See below.

said to be a depository for the unexpired costs and revenues derived from the transactions of the entity [Davies et al, 1997].

The objectives of financial reporting are laid down in chapter 1 of the Accounting Standards Board's Statement of Principles for Financial Reporting. They are the provision of information about the financial position, performance and financial adaptability of an enterprise that is useful to a wide range of users for assessing the stewardship of management and for making economic decisions [ASB, 1995b]. It is conceded that financial statements do not provide all information that may be needed to make economic decisions.

The objective encompasses both a decision-usefulness function and a stewardship function. An assessment of management is assumed to aid in making economic decisions. Thus, it is inferred that decision usefulness is the primary objective of financial statements. By meeting the needs of investors, financial reports will also meet the needs of other users.

Intangible assets are mostly rejected from inclusion in financial reporting under a historical cost perspective because their existence is not verifiable and they cannot be measured with the same degree of reliability as tangible assets. However, intangible assets have an impact on the financial position, performance and adaptability of an enterprise. They influence an organisation's ability to generate cash. Therefore, if intangible assets influence economic decisions, then their inclusion in financial reports will improve decision usefulness. In addition, management should be held accountable for all the assets/liabilities to which they are entrusted to satisfy the stewardship function. Such assets may be of a tangible or intangible nature.

The inclusion of intangible assets in financial reports is dependent upon a trade off between relevance and reliability. Information on the intangible assets of the entity is relevant to economic decision making. However, the reliability of that information is subject to difficulties in ensuring the existence of intangible assets and measuring their value. This trade off reflects the dichotomy in financial reporting objectives; to provide reliable information for stewardship purposes or to provide relevant information for decision making. The current objective in the Statement of Principles for Financial Reporting appears to be a hybrid of these paradigms. This has led to much disagreement in setting accounting standards for intangible assets.

1.3 Development of Accounting Standards for Intangible Assets in the UK

a) Company Law

Financial reporting in the UK is subject to company law. However, little guidance is given regarding intangible assets. The main body of law relevant to financial reporting is found in the Companies Act 1985.

Schedule 4 of the Companies Act 1985 requires separate disclosure of intangible assets but is silent on their treatment. It lists 'concessions, patents, licences, trademarks and similar rights and assets' as intangible assets in its balance sheet formats. It also prohibits the costs of research to be recognised as assets. Amounts shall only be included in the balance sheet if the assets were created by the company or acquired for valuable consideration and are not required to be shown under goodwill.

Schedule 4A of the act requires that identifiable assets be recognised in the balance sheet of the accounting entity. Identifiable assets are defined as assets that are capable of

being disposed of or discharged separately, without disposing of a business of the undertaking [Goldenberg, 1991].

b) Statement of Standard Accounting Practice 22; Accounting for Goodwill

Until December 1997, the treatment of intangible assets in the UK was officially governed by SSAP 22, Accounting for Goodwill, issued in 1984 [ASC, 1989]. It states that assets of an intangible nature can be recognised in financial statements provided they are separable. Separable net assets are defined by SSAP 22 as assets that can be identified and sold separately without necessarily disposing of the business as a whole. This definition was superseded by FRS 7, Fair Values in Acquisition Accounting. The term, 'separable net assets' was replaced by 'identifiable assets'. An intangible asset was identifiable where it was capable of being disposed of or settled separately, without disposing of a business of the entity [ASB, 1994b]. Identifiable assets are to be disclosed on the balance sheet.

The recognition of intangible assets in financial statements is based on their identity being separable from other assets, particularly goodwill. The test of separability is whether an asset is capable of independent sale, without disposing of the business as a whole. Legal rights such as publishing titles, concessions, patents, trademarks, licences, customer lists and franchise rights are listed as examples of recognisable intangible assets. Intangible assets that meet recognition criteria are to be capitalised at their fair value and depreciated over their useful economic life.

Accounting standard setters have traditionally followed an apparently logical approach of identification, recognition and measurement in assessing whether an item should

appear in the financial reports of an entity [Napier and Power, 1992]. However, under SSAP 22, this process is inter-related as recognition is based on identification. Recognition of an asset is dependent on the ability of the asset to be disposed of separately from the business. Identification or separability can be said to be dependent on the choice of measurement technique used. For example, if an asset is measured by its market value, this implies it is separable in that it can be sold without disposing of the business as a whole. If an item is separable, it can be recognised as an asset. Thus, recognition is entwined with measurement.

SSAP 22 states that recognisable intangible assets must be carried on the balance sheet at their fair value. In the UK, the fair value of an asset is derived from its acquisition cost. Thus, if recognition is dependent upon identification, and identification is dependent upon measurement, there will be a preference for recognising only items to which an acquisition cost can be attributed [Napier and Power, 1992]. Many intangible assets do not arise from a single market transaction and there is usually uncertainty over the costs of creation. Fair values for such assets are more difficult to estimate. This explains why accounting standard setters more readily recognise purchased intangibles rather than non-purchased intangibles. No explicit distinction is made in SSAP 22 between the treatment of purchased and non-purchased intangible assets. However, the recognition of purchased intangible assets in the balance sheet is less stringent because their fair value can be established with greater reliability. Under such treatment, organisations that grow organically will suffer whilst companies who grow by acquisition will recognise intangible assets because their fair value can be determined upon acquisition.

SSAP 22 was issued primarily as a standard on goodwill. The close relationship between intangible assets and goodwill has led to difficulties over the treatment of intangible

assets. Goodwill can be defined as a bundle of unidentifiable intangible assets. Purchased goodwill is the difference between the consideration expended in an acquisition and the fair value of the separable net assets acquired. Purchased goodwill can be viewed as a payment made in the anticipation of future income. The accounting treatment of purchased goodwill is an anomaly in that it is inconsistent with other aspects of financial reporting whichever method is used. If it is recognised as an asset, it is inconsistent with the treatment of internally generated goodwill but consistent with the treatment of other fixed assets. If it is written off immediately to reserves, it is inconsistent with the treatment of other elements of a purchase transaction. It has been said that what is an intangible asset to some is goodwill to others. This permits arbitrage.

SSAP 22 prefers purchased goodwill to be immediately written off to reserves. It also allows goodwill to be capitalised and written off through the profit and loss account over its useful life. Thus, after SSAP 22 was issued, an organisation could decide whether to capitalise or write off purchased goodwill. A majority of organisations follow the preferred treatment outlined in SSAP 22. A 1993 investigation by the Financial Times found that 96% of companies wrote off goodwill upon acquisition [ASB, 1993b]. However, heavily acquisitive companies began to experience an erosion of their reserves after writing off purchased goodwill. The alternative treatment of capitalising purchased goodwill meant that companies suffered amortisation charges in the profit and loss account. However, it was possible to reduce the amount of purchased goodwill written off to reserves by identifying intangible assets. Purchased goodwill could be converted into purchased intangible assets. Companies became inventive in the recognition of identifiable intangible assets, particularly acquired brands. It was subsequently claimed that such assets would remain unamortised as

their value had been maintained or enhanced. Such a policy avoided any amortisation charge to the profit and loss account.

Therefore under SSAP 22, organisations can reduce the level of purchased goodwill written off to the profit and loss account by 'compartmentalising' purchased goodwill into intangible assets. Thus, organisations have an incentive and the ability to recognise and capitalise intangible assets after an acquisition. The recognition of intangible assets after an acquisition can improve the reported results of an organisation. This is consistent with positive accounting theory on the selection of accounting policies proposed by Watts and Zimmerman [1986]. They assert that corporate management will take any discretionary action they have over the financial reporting process to present themselves and/or their organisation in a desired manner.

Standard setters have responded to the possible arbitration between purchased goodwill and purchased intangible assets with attempts to introduce a new standard. However, it is claimed that SSAP 22 allowed companies to spend heavily on wasting assets without having to write the costs off against profit. Therefore, standard setters found it difficult to withdraw this privilege [Fisher, 1995].

Since being issued in 1984, little consensus had been reached on an acceptable alternative to SSAP 22. During this time, it can be said that SSAP 22 had become largely defunct.

c) Exposure Draft 52, Accounting for Intangible Fixed Assets

The Accounting Standards Committee (ASC) attempted to align the treatment of purchased intangible assets and purchased goodwill. ED 52, Accounting for Intangible Fixed

Assets and ED 47, Accounting for Goodwill were released in 1990. In ED 52, the criteria for the recognition of intangible assets were threefold; 1) the historical costs of creation of the item were to be known or readily ascertainable, 2) its characteristics were to be clearly distinguishable from goodwill and other assets, and 3) its cost was to be measurable independently of goodwill, other assets and earnings of the relevant business segment [ASC, 1990]. For non-purchased intangible assets, ED 52 required an active market, independent of the purchase and sale of business segments. Items that passed the recognition criteria were to be capitalised and amortised. The useful economic life of an intangible asset was not to exceed twenty years or forty years in exceptional cases.

ED 52 (and ED 47) met with widespread disagreement and disapproval from the business community [Kennedy, 1995]. It specifically addressed an increase in the popularity of recognising brands as intangible assets. It stated that brands were not distinguishable from goodwill and should not be subject to separate recognition. Criticism was also made of the mandatory amortisation charge which was applicable to all intangible assets. 62% of respondents to ED 52 opposed fixed life amortisation proposals [ASB, 1993b]. Companies felt that they had spent heavily to maintain and enhance the value of intangible assets and felt it inappropriate to suffer an annual amortisation charge where their value had not decreased. Due to extensive opposition, ED 52 was withdrawn.

d) Discussion Paper; Goodwill and Intangible Assets

A discussion paper, Goodwill and Intangible Assets, was released by the ASB in December 1993. Again, the discussion paper proposed that intangible assets were so similar in nature to goodwill that they should be subsumed within goodwill. An exception was made to purchased legal rights, presumably patents and trademarks, which could be capitalised at

their acquisition cost and amortised over their useful life. Internally created intangible assets were not to be recognised in the balance sheet. Purchased intangible assets were to be treated as purchased goodwill.

Six treatments of purchased goodwill were suggested. Two approaches were recommended. The first recommendation suggested writing off goodwill immediately on acquisition to a separate write off reserve. The second recommended option stated that goodwill should be capitalised and written off over its useful economic life. If its useful life could not be estimated, the book value of goodwill would be subject to annual review [ASB, 1993b].

Respondents to the discussion paper criticised the alignment of intangible assets and goodwill. It was stated that they were critical to business and should be accounted for separately [ASB, 1995a]. Only 35% of respondents to the discussion paper supported the recommended treatments [Accountancy, 1995b]. Hence, no exposure draft was formulated due to the lack of consensus. Instead, further consultation was sought.

e) Working Paper; Goodwill and Intangible Assets

In June 1995, the ASB released Goodwill and Intangible Assets: Working Paper for Discussion at Public Hearing. The paper sought to set out proposals for public discussion that could be further developed for exposure.

It stated that an item was subject to identification by meeting the definition of an intangible asset. An asset was defined as an item having rights or other access to future economic benefits controlled by the entity as a result of past transactions or events. An intangible asset was identified where control over future economic benefits was apparent

through legal protection or physical custody. Emphasis was placed on the ability to obtain and enjoy benefits (or restrict the access of others to benefits) rather than ownership.

To be included in financial statements, an item must have passed recognition criteria. There must be sufficient evidence of a change in the asset and that a future inflow will occur. An item must be measurable at a monetary amount with sufficient reliability. Sufficient reliability was dependent upon the variability of future economic benefits; both the spread of possible benefits and the probability of obtaining a benefit. Transactions that were negotiated at arms length for monetary consideration were considered strong evidence of reliability.

For intangible assets that have arisen from a transaction, it was proposed that recognition would occur where the reliable fair value of the asset could be measured. The least disputable measure of fair value was attained where a reliable market value existed. A reliable market value was obtainable from frequent transactions in a homogeneous population of identical assets. Replacement cost was permitted as a reliable fair value where there was a continuing market for the initial issue of an asset. For internally generated intangible assets (those not arising from a single transaction), recognition in financial statements would only occur where a reliable market value existed or where there was a natural ceiling on the value of the asset.

Those intangible assets that met the recognition criteria were to be capitalised and written off over the useful life of the asset if less than twenty years. Intangible assets with useful lives greater than twenty years were subject to annual impairment tests. Intangible

assets were to be shown separately in the balance sheet with opening and closing balances and movements during the year displayed in the notes.

The Working Paper was discussed at a public hearing in October 1995. The ASB announced that their proposals were supported by approximately 60% of respondents [Accountancy, 1995b]. Hence, a Financial Reporting Exposure Draft was based on this approach.

f) Financial Reporting Exposure Draft 12; Goodwill and Intangible Assets

FRED 12, Goodwill and Intangible Assets, was released in June 1996 and supersedes SSAP 22. It was based on the Working Paper and subsequent responses. The identification criteria for intangible assets remained the same. Recognition was undertaken where a fair value could be measured reliably. Purchased intangible assets were to be recognised at their cost. Internally generated intangible assets were to be recognised only if they have a readily ascertainable market value.

FRED 12 differed from the Working Paper in limiting the economic life of intangible assets. There was a rebuttable assumption that the useful economic life of an intangible asset was not to exceed 20 years from the date of acquisition. Any departure from this assumption must be based on valid grounds and be disclosed. Assets with lives under 20 years were subject to systematic amortisation. Assets with lives over 20 years were subject to annual impairment reviews [ASB, 1996].

Where identification is based upon securing or preventing access to economic benefits by legal protection, the Working Paper proposed that the useful economic life of the asset may not exceed the period of legal protection. This was altered to allow asset lives to

exceed legal protection where renewal is assured. This change was made to mirror commercial practice with respect to contracts, licences and patents.

Responses to the exposure draft were received by October 1996. The ASB finally decided to issue a Financial Reporting Standard based on FRED 12 with no material changes. Hence, FRS 10, Goodwill and Intangible Assets, was released in December.

g) Summary

The difficulty in obtaining support for a standard on intangible assets over the last decade is due to divided opinion amongst the users and preparers of financial reports.

Accounting standards must gain the support of the whole business community due to the lack of full legal backing for standard setters in the UK. The formulation of accounting standards is a political process. For example, the intangible assets standard has been subject to considerable lobbying by those with a financial interest in the outcome. Auditors, brand valuation and trademark specialists are said to support the recognition of goodwill and intangible assets as they will benefit financially [Fisher, 1995]. The policy that gains the support of the business community may not necessarily be theoretically consistent and logical.

Identification of intangible assets is based on control over the future economic benefits through legal protection or physical custody. Identified intangible assets should be recognised where a reliable estimate of the asset's fair value can be made².

²The measurement of intangible assets is discussed in Chapter 2.

The wisdom of allowing intangible assets (and goodwill) to be capitalised without fixed life amortisation is disputed. It is argued that intangible assets are transitory; that one intangible asset is not being maintained but is continually substituted by a new asset. Thus, a purchased intangible asset will depreciate over time but will be succeeded by a new internally generated asset. This view is inconsistent with the latest ASB proposals.

The scope for the recognition of intangible assets on the balance sheet has been widened. From its Working Paper to FRS 12, the ASB has become more explicit about the treatment of intangible assets. Whilst intangible assets and goodwill are treated similarly, standard setters have acknowledged the role of intangible assets in financial reporting.

1.4 International Accounting Standards for Intangible Assets

a) International Accounting Standards Committee

Disagreement over intangible asset accounting is not confined to the UK. The international standard setting body, the IASC have found difficulty in reaching a consensus over the treatment of intangible assets.

IAS 22, Accounting for Business Combinations, released in 1983, provides similar guidance to SSAP 22. IAS 22, subject to the provisions of the EC fourth directive, stated that purchased goodwill was to be capitalised and amortised or written off immediately to reserves. If capitalised, the useful economic life of goodwill was to be no greater than five years. No explicit statement is made regarding the treatment of intangible assets. Thus, intangible assets could be recognised if separable from goodwill. Items that were not capable of separate disposal were treated as purchased goodwill.

Revision was made to IAS 22 by E 32, released in 1989. It limited the treatment of purchased goodwill to capitalisation and amortisation. Further revisions were made in 1993. However, the treatment of intangible assets was not materially affected.

The role of international standards became more influential in 1995 when the IASC agreed a programme to create a set of core international standards with the International Organisation of Securities Commissions. These standards would be used in all the major international capital markets. It also appeared that these standards would be adopted by the European Union. Thus, work began on standards that would be consistent and internationally acceptable.

E 50, Intangible Assets, was released in June 1995. It dealt solely with intangible assets and was designed to align their treatment with tangible assets.

It proposed that items meeting three criteria should be recognised on the balance sheet and amortised over a maximum period of 20 years. 1) an item meets the definition of an intangible asset. That is, an item must be non-monetary, without physical substance and identifiable in that it is subject to legal rights or is separable from the business to which it relates. 2) it must be probable that future economic benefits associated with the item will flow to the entity. Thus, the role that an item will play in enhancing expected benefits must be demonstrated alongside an asset's ability to perform that role and the entity's intention to use the item in that role. 3) the cost of an item must be capable of reliable measurement.

It was claimed that the requirements of E 50 would permit few intangible assets to be recognised [Cairns, 1995]. It restricted the recognition of brands as their value could not be measured with reliability.

Comments were received by November 1995. Respondents claimed that the 20 year ceiling on the useful life of assets did not reflect economic reality. In addition, lack of consensus between the major national standard setters limited the development of E 50 into an International Accounting Standard.

E 60, Intangible Assets, was released in August 1997. It applied to all intangible assets: this included the costs of research and development which had previously been dealt with separately by the major standard setters. Hence, the exposure draft proposed the withdrawal of IAS 9, Research and Development Costs.

Similar to E 50, items would be identified as intangible assets if they met 3 criteria. The item must be identifiable and distinguishable from goodwill. An item would be identifiable if separable. However, separability is not a necessary condition for identification. The second criterion was that the item must be controlled by the entity as a result of past events. Control would be aided if legally enforceable but is not required for sufficient control to exist. Finally, identification could only occur where future economic benefits are expected to flow to the enterprise [IASC, 1997].

Recognition of identified intangible assets in the financial reports of the entity is subject to two criteria. 1) It must be probable that the future economic benefits identified will flow to the entity. This has to be demonstrated in light of the fact that intangible assets rarely have alternative uses or high resale value. The IASC hint that this may be achieved through feasibility studies. 2) the cost of the asset can be measured reliably.

The recognition of internally generated intangible assets is restricted in E 60. Recognition is phrased in terms of 'research and development costs'. Hence, only items that have reached the development stage are expected to be recognised. That is, the item must be

commercially viable and have the ability to generate specifically attributable future economic benefits. The item must also be capable of reliable measurement. E 60 specifically rules out the recognition of internally generated mastheads and brands.

Similar to FRS 12, E 60 contains 'a rebuttable presumption' that the useful economic life of an intangible asset is no more than 20 years. Annual impairment tests must be undertaken for internally generated intangible assets with a useful life over 5 years. Impairment tests must also be undertaken on purchased intangible assets with lives over 20 years and for those assets which are not yet available for use. Impairment tests were to be undertaken in line with E 55, Impairment of Assets.

The IASC approach is similar to the ASB in basing recognition upon measurement. The alignment in E 60 of research and development costs with goodwill and intangible assets is thought to standardise the treatment of similar items. Hence, reporting entities will be restricted to one accounting treatment whether an item is classified as goodwill, intangible assets or research and development.

b) Financial Accounting Standards Board

In the United States, the treatment of intangible assets is still enforced by Accounting Practices Board Opinion 17, Intangible Assets, released in 1970. It recommends that intangible assets be recognised on the balance sheet if they are separable and have a determinate useful life. Separability is based on whether an item is saleable. Items that are recognised are capitalised on the balance sheet and amortised through the income statement. The useful economic life of an intangible asset is limited to forty years.

The scope for recognising internally generated intangible assets is limited as recognition is again based upon measurement. The Jenkins Committee studied the needs of investors and creditors. It found that users generally opposed recognising internally generated intangible assets because it didn't help them value companies or assess credit risk. It concluded that users would be aided by improved disclosures about the identity, source and life of intangible assets [Cairns, 1995]. However, a 1996 symposium organised by the Securities and Exchange Commission expressed the view that the enhanced disclosure of intangible assets was desirable but no clear solution was available in achieving this objective [Lev, 1997].

c) Australian Accounting Research Foundation

In Australian financial reporting, intangible assets were first specifically addressed in AAS 18, Accounting for Goodwill. Identifiable intangible assets were permitted to be recognised on the balance sheet: no mandatory amortisation was specified. However, it was noted that companies sought to recognise intangible assets, particularly brands, without amortisation. This enabled companies to avoid amortisation charges with respect to goodwill [Wines and Ferguson, 1993]. The AARF responded by issuing Accounting Guidance Release 5. This drew attention to AAS 4 which required amortisation for all non-current assets.

The AARF attempted to formulate a standard on intangible assets with Exposure Draft 49 in August 1989. It required the capitalisation and mandatory amortisation of intangible assets. Their useful economic life was limited to twenty years unless justification could be provided. The exposure draft also provided the opportunity to value and recognise internally generated intangible assets. Opinions on ED 49 were divided and no agreement was

reached. It was withdrawn by the AARF 'in view of the lack of consensus on the subject at national and international level' [Wines and Ferguson, 1993].

Summary

The growing importance of intangible assets in the modern economic environment promotes their recognition in financial reporting. This has influenced the evolution of accounting standard setting and has led to increasing scope for the identification and recognition of intangible assets in financial statements.

Identification is based upon control over future benefits. Recognition is based upon reliable measurement which is subject to separability. This enables purchased intangible assets to be more easily recognised than internally generated assets. This is due to the nature of intangible assets being incompatible with a historical cost framework of measurement in financial reporting. Hence, the future of intangible asset accounting will depend upon the ability to provide reliable measurement procedures.

CHAPTER TWO

THE MEASUREMENT OF INTANGIBLE ASSETS

Introduction

This chapter describes the financial reporting regulations for measuring intangible assets. It then evaluates valuation bases offered for intangible asset accounting. This evaluation includes methods which may be currently unacceptable for financial reporting purposes. Finally, a description is given of the amortisation requirements for intangible assets.

2.1 Financial Reporting Requirements

The recognition of intangible assets in UK financial reporting is dependent on measurement. This assertion is represented in SSAP 22 by the term, 'separable net assets' and in FRS 7 by the term 'identifiable assets'. Hence, recognition is dependent on the ability of the asset to be disposed of separately from the business. Separability is dependent on the choice of measurement technique used.

FRED 12 is less subtle in referring to the dependency of recognition on measurement. Its criteria for recognition includes the clause that an item must be measurable at a monetary amount with sufficient reliability. Hence, under current and proposed intangible asset requirements, recognition is entwined with measurement. Therefore, the reliable measurement of intangible assets would facilitate their recognition in financial reporting.

a) Company Law

Schedule 4 of the Companies Act 1985 requires that fixed assets be measured in reports at their purchase price or production cost. The carrying amount must be reduced by a

provision for depreciation or diminution in value in order to write down the asset to its residual value over its useful economic life.

However, under 'alternative accounting rules', the act explicitly allows intangible fixed assets, other than goodwill, to be included at their current cost. The basis of valuation must be disclosed. The accounts must also disclose either comparable amounts determined using historical cost accounting rules, or the difference between the historical figure and the amount carried in the accounts on an alternative basis [Goldenberg, 1990].

b) Accounting Standards

The requirements for the measurement of assets are found in chapter 5 of the Statement of Principles for Financial Reporting [ASB, 1995b]. In conjunction with company law, the ASB normally require initial measurement at historical (or acquisition) cost. However, situations are identified where acquisition costs cannot be ascertained: assets bought by barter or assets bought in groups. In addition, any subsequent remeasurement of assets may use alternative valuation bases.

Current values can be used as an alternative to acquisition costs. They will only coincide with acquisition costs at the initial stage of recognition. Several distinct current values are identified; entry value, exit value and the value in use. The entry value is replacement cost; the cost of acquiring the asset under current market conditions. Exit values are based upon the current selling price of the asset. The value in use is the present value of the net future cash flows that can be obtained by retaining the asset in its most profitable use.

The ASB use each of the above current value bases to derive an eclectic valuation concept known as the 'value to the business' or 'deprival value' [ASB, 1995b]. It aims to measure the minimum amount that the entity would lose if deprived of the asset. Hence, it is claimed to be relevant to the economic opportunities facing the reporting entity.

Under the model, an asset is not to be measured above its recoverable amount. If an asset is worth replacing, it is measured at replacement cost. If it is not worth replacing but is worth keeping, it is measured at 'value in use'. If an asset is not worth replacing or worth keeping, it is measured at net realisable value.

The ASB warn that the 'value in use' is a highly subjective measurement technique which may not pass the reliability test for inclusion in financial reporting. In such cases, the replacement cost or net realisable value should be used [ASB, 1995b].

Further measurement guidance is provided by FRS 7, Fair Values in Acquisition Accounting. This standard aims to estimate the value of individual assets which are purchased as a whole. Hence, individual purchase prices are not assigned to each identifiable asset. It requires assets to be measured at their fair value. Fair value is defined as the amount at which the asset could be exchanged in an arms length transaction. This must not exceed the recoverable amount of the asset. Here FRS 7 aligns itself with the 'value to the business' model.

The standard also explicitly makes reference to intangible assets. It states that their fair value should be based upon replacement cost which is normally the estimated market value of the asset. Where quoted prices are not available, market prices can be estimated either by independent valuation or valuation techniques such as discounting future estimated cash flows [ASB, 1994b].

Under E 60, the initial measurement base for purchased intangible assets is acquisition cost. Assets bought as part of a business combination are to be recognised at their fair value. Fair values can be derived from quoted prices in an active market (current bid price). If no market exists, the cost is (based on the best information available) the amount that the enterprise would have paid at the date of acquisition for the asset in an arms length transaction between willing and knowledgeable partners. This clause allows fair value to be derived from discounting estimated future net cash flows. This is available only if cash flows can be identified that are specifically attributable to the asset and independent of cash flows from other assets used in the same revenue generating activity.

In valuing internally generated intangible assets, the costs of creation can be estimated. These costs must be distinguishable from the cost of enhancing or maintaining goodwill and separate from costs of running day-to-day operations. The costs of creation can include the employment costs of those personnel engaged in generating the asset and allocated overhead costs [IASC, 1997].

It can therefore be seen that under both IASC and ASB guidelines, assets can be measured on different bases; acquisition cost, out of date revaluation's and current valuation's. Thus, the residual figure, capital, is argued to be a hybrid figure whose significance is unclear [ASB, 1993a].

The ASB has acknowledged the shortcomings of the current modified historical cost basis of measurement and supports a move towards alternative accounting measures. It states that movement to the 'value to the business' model will be gradual, thereby retaining consistency with the ASB's aim of evolution rather than revolution in the development of

financial reporting. The model is similar to the current cost system which was introduced unsuccessfully in SSAP 16 by the ASC.

Critics of this model argue that it measures the deprival value rather than the future economic benefits associated with an asset [Davies et al, 1997]. Valuations are dependent upon management strategy with regard to holding and replacing assets: this is subject to change [Baxter, 1996]. There has also been criticism of the valuation bases, particularly value in use and replacement cost.

In sum, current financial reporting requirements allow replacement cost, value in use and net realisable value measurements in addition to acquisition costs. The dominant valuation bases for intangible asset accounting are acquisition costs, replacement costs and market values. Each of these measurement bases requires the existence of a market. This is argued to be the main obstacle to the widespread recognition of intangible assets in financial reporting. Recognition is dependent upon measurement. Measurement is dependent upon the existence of a market.

There is some departure from this principle in allowing valuations based upon market estimates to be used for the measurement of intangible assets. Several bases can be used to estimate fair value or value to the business. The freedom in measuring intangible assets leads to the development of several different valuation techniques. The future of intangible asset accounting can be said to rely on the development of such measures.

2.2 Valuation Models

This section describes and evaluates those valuation models which are capable of measuring intangible assets. Both the established methods which are acceptable to financial reporting and developing methods are assessed.

There are several methods which attempt to estimate economic value directly. Alternatively, many measures use entry and exit values as a surrogate for economic value. Here, economic value is defined as the present value of all cash flows flowing to the entity resulting from control of the asset. Cost based models measure the sacrifice incurred to obtain an anticipated future benefit. They use the sacrifice incurred to gain benefits as a surrogate for the benefit itself. Hence, such models rest on the assumption that the sacrifice paid to access benefits equates to the benefits flowing from the resource.

a) Evaluation Criteria

In evaluating methods of measurement, it is useful to establish a set of criteria. Valuation methods will be judged by their levels of objectivity and reliability, and their relevance for decision making. Such criteria are selected so as to be concordant with the objectives of financial reporting. This is defined by the ASB as the provision of financial information to aid the informed investor in decision making [Tweedie, 1996].

The level of objectivity refers to the extent to which the measurement exists outside the mind of the measurer. The results of an objective method will be reliable and can be replicated by external sources. An objective measure is reliable in that it is free from material error and bias.

Relevance is said to refer to the extent that the method measures the economic value of the measurement object. Economic value can be said to be the most useful measure for economic decision making. It is defined as the present value of the future benefits that will flow from the resource. Several methods attempt to directly estimate economic value.

The usefulness of the information for decision making will be dependent upon the economic decision being undertaken. It may be noted that the valuation models described are not mutually exclusive and that different models can serve different purposes [Tsay, 1977]. Thus, models may have an internal emphasis, concentrating upon future expectations data, or an external emphasis, based upon performance measurement.

In evaluating decision making usefulness, the irrelevance of a measure may be considered. If irrelevant information is used when expanding the measurement system to include intangible assets, then the quality of existing information may decrease as the additional information can overload the decision maker [Sydenham, 1979].

b) Acquisition Cost

Acquisition or historical cost measures the sacrifice incurred to purchase, produce or create intangible assets. Those expenditures that are expected to provide benefits beyond the current accounting period are capitalised and amortised over the period in which the benefits are expected to occur. If the asset arising from the cost is liquidated prematurely, a loss is recorded. If the useful life of the asset is longer than expected, the amortisation schedule is altered.

Acquisition costs have a high level of objectivity as the data is verifiable and dependable, being traced to actual transactions. They are said to be irrelevant as these

measures may only represent the economic value of the resource at the date of acquisition. Thus, they are unlikely to fulfil the role of a predictor and are of limited use for decision making. However, they may be directly relevant to some input decisions.

Assets valued at their acquisition cost will not be comparable within and between entities unless purchased at the same date. This is due to instability in the monetary unit. As a result, the older the asset, the less relevant the valuation.

Acquisition cost measures are simple, feasible and cheap to prepare. The value of the information can be said to exceed the cost of providing that information. They are used in the current, established basis of measurement in financial reporting and are familiar to users.

However, it is argued that intangible fixed assets are incompatible with the modified historical cost system. Acquisition costs are based upon actual transactions which can be verified, and actual cash flows that have been generated. Intangible assets are, by their nature, more difficult to verify or trace to a single transaction. Intangible assets are not normally saleable and there is no independent check on valuation. In addition, they are often bought as part of a group necessitating an allocation of the total consideration between individual assets. Thus, it is unlikely that acquisition costs will be of use in the valuation of intangible fixed assets.

(c) Current Cost

Current cost is the sacrifice that would have to be made to replace intangible assets presently employed. Current cost can be split into replacement cost and reproduction cost.

Replacement cost is the cost of acquiring an asset offering identical services as the intangible asset held. Reproduction cost is the cost of acquiring an asset identical to the one held.

The level of objectivity of this measure is dependent upon the availability of obtaining current cost data. This is dependent upon the existence of an active market for the asset. Reproduction cost valuations require a continuing market for the asset. Replacement cost valuations require a market for a similar asset.

If a market exists, then current cost can be ascertained reliably. Current costs measure the market's current assessment of an assets economic value. Thus, they can be very useful for economic decision making.

Replacement costs are part of the ASB's 'value to the business' measurement system. Thus, this basis is considered suitable for financial reporting purposes.

The existence of a market for identical intangible assets is uncommon. Many intangible assets are heterogeneous in nature. Thus, market prices are rare. There may be no current cost for assets which are custom made or which become technologically obsolescent. As such data are not typically available, then subjective assessments need to be made. For example, an estimate of the effect of technical progress is frequently required in valuing an asset at its replacement cost [Whittington, 1996]. An exception may be the buying and selling of player registrations between professional sports teams. Player registrations are heterogeneous but have ascertainable market values.

The major form of current cost valuations is replacement cost. This is due to its pragmatism. However, this method fails to give a value to assets that will not be replaced. It may also exert bias towards inefficient firms as their costs of replacement will be greater.

(d) Estimates of Economic Value

Economic value is defined as the present value of the sum of future cash flows flowing from the asset in question. It is a theoretical construct and can only be estimated in practice. Models have been developed that seek to directly estimate economic value. Value can be separated into exchange value and use value. Exchange value measures the purchasing power that possession of the resource will allow. Use value measures the usefulness of the resource. The benefits derived from intangible assets are usually measured in terms of exchange value rather than on use value, due to the difficulty of measuring use value [Dawson, 1989].

Economic value estimates are acceptable in financial reporting under the guise of 'value in use' as part of the ASB's 'value to the business' rules. However, the reliability of any estimate must be proven. In addition, economic value estimates may be permitted by FRS 7 to measure fair values where quoted market prices are unavailable. They are used as a surrogate for market values in order to estimate replacement cost.

Valuation methods attempt to measure economic value through the application of capital budgeting techniques. Estimates are made of future cash flows and the rate at which such flows are discounted. The discount rate will normally be the entity's weighted average cost of capital adjusted for specific risk factors.

Several forms of estimate have been offered for valuing intangible assets. One form of estimate is known as royalty relief. This estimates the premium that would be payable for the use of an asset under a hypothetical licensing agreement [Napier and Power, 1992]. The notional royalty income earned from licensing out the right to exploit the asset is quantified and discounted to estimate the assets economic value [Mullen, 1993]. This method can also be used in financial reporting as a surrogate for market value, and used for estimating replacement cost.

Another form of estimate is premium profits. This compares the reporting entity with and without the intangible asset. It is assumed that the entity will be valued more highly with the asset. The difference can be estimated using different criteria. For example, the actual operating margin can be compared with the operating margin arising if the business did not have the asset. The value can also be estimated by comparing the Return on Capital/Asset or Price Earnings ratios. The increment in the ratio is attributed to the asset and added to an estimate of maintainable earnings to derive an asset valuation [Napier and Power, 1992].

Another method of estimating the premium is by using the selling price of a product. This method is advocated for brand valuations. Brands can be valued by comparing the price of the branded product with the price of an unbranded generic equivalent [Murphy, 1991]. However, many elements of value are said to relate to the future demand and stability of the brand rather than any price premium. In addition, the price premium may be influenced by other factors such as distribution networks [Mullen, 1993].

Another economic value estimate can be provided by the earnings multiple. The asset is valued at a multiple of its estimated earnings. The return on the investment will be more than the return from a risk free investment. Hence, the risk free return provides a ceiling for the earnings multiple. It will vary between businesses and industries but can be signalled by industry Price Earnings ratios.

This method is used in the valuation of brands. Factors such as market share, stability, international exposure, support and protection determine the earnings multiple of the brand [Murphy, 1990]. The perfect brand is said to have a earnings multiple of 20. Brand earnings are estimated from historical profits. They are adjusted by a medium term tax rate for the company and compounded to present day values [Power, 1990]. Despite its use in practice, this method lacks reliability and objectivity. The choices available over many influential parts of the measurement process make it susceptible to manipulation.

In summary, it can be argued that economic value estimates are often conceptually attractive but difficult to apply. In practice, these methods can be severely limited by their volatility and subjective nature. Expectations are continually revised and cannot be confirmed [Egginton, 1993]. All estimates involve a high degree of speculation. The difficulty of estimating future values and determining a basis for allocation reduce the level of reliability and objectivity.

(e) Exit Price

The exit price represents the amount that could be gained from the selling or disposing of an intangible asset. It is also known as the net realisable value. It is acceptable in financial reporting, being used as part of the 'value to the business' measurement rules.

Exit prices, where available, are highly relevant to current economic decision making, assuming an asset can be sold immediately. The objectivity and reliability of exit prices rests on the proximity to perfect competition of the market from which prices are drawn. Here, an active market with arms length transactions between knowledgeable and willing partners provides sufficient reliability for financial reporting purposes.

(f) Market Value

The use of market values for measuring assets is limited by company legislation. Under the Companies Act 1985, intangible assets are permitted to be measured in financial reports at current cost but not at market value [ASB, 1993b]. However, current market value is used to estimate replacement cost. In this case, the market value must be derived from an 'active market'. An active market is defined as one where willing buyers and sellers can be found at any time to trade homogeneous items. The prices, derived from arms length transactions, must be publicly available.

Market values are highly relevant due to their proximity to economic value. Their reliability and objectivity are dependent upon the market from which they are drawn. Due to company law, market values are only used as estimates of other measures. In their own right, market values could be used in financial reporting. It has been suggested that market value estimates of intangible assets could be undertaken by a professional body similar to property valuations. This strategy has been undertaken by brand valuation specialists who set up the Institute of Brand Valuation [Accountancy, 1997]. It is assumed that the aim of this strategy is to provide more credence and objectivity to their valuations.

(g) Opportunity Cost

Opportunity cost is the value of an asset in its next most profitable alternative use.

Valuation is possible only in limited circumstances. Such circumstances are only likely to arise in large organisations with separate investment centres and scarce resources. Each investment centre manager will bid for the asset; the highest bidding price represents the opportunity cost of the asset.

Opportunity costs are not recognised in financial reporting. This method can be said to have a low level of reliability. However, they may be used to estimate market value which in turn is used to estimate replacement cost.

The logic of the method is questionable on the grounds of circularity. A surrogate measure of value is needed to make an initial bid. This bid is used to derive a surrogate measure of value. It is also subject to shifts in supply and demand and may bear no relation to value except at the date of acquisition.

(h) Qualitative Measurement

In response to the difficulties of quantifying intangible assets, non-monetary measures have been suggested. Inventory lists and descriptions of intangible assets can be used as a surrogate for monetary measures. The relevance for decision making is likely to be poor but the objectivity of such measures can be high.

(i) Summary and Conclusions

In appraising intangible asset valuation methods, it is suggested that the most acceptable measures are those which are linked to a market. Acquisition costs, current costs, market values and exit prices are all linked to a market through the past or current purchase

price of an asset. Reference to the market provides an objective benchmark which gives the measure reliability.

The linkage of valuation methods to a market enables the entity to avoid the 'aggregation problem'. This occurs where the value of individual assets added together does not equal the value of the same assets valued in aggregate [Baxter, 1996]. The valuation of an asset cannot be considered an independent event. The difference is attributable to synergy.

Synergy may be described as that part of value arising from an assets interdependence with other organisational assets. For example, the value of one glove is dependent upon whether it is valued in aggregation with a matching glove. One glove has little value unless it is part of a matching set. The existence of synergy results in a different value being ascribed to the same asset under the same valuation technique depending upon the level of aggregation. This leads to the problem of what level of aggregation should be used to value assets [Whittington, 1996].

The jointness of intangible assets is also characterised by the use of the term 'separable' or 'identifiable' in the recognition of intangible assets. The solution to these problems is to reference valuation techniques to a market. Hence, the market defines the level of aggregation at which an asset can be measured. The market also defines what is separable or identifiable. Therefore, the recognition and measurement of intangible assets can be argued to be based around the existence of a market.

2.3 The Amortisation of Intangible Assets

For cost based measures such as acquisition and current costs, asset values may require amortisation. Such a policy should aim to match the consumption of the asset's

services with the benefits derived. An estimate is required of the expected useful life of the asset.

The amortisation of intangible assets is contested. It is argued that charges are already made to the profit and loss account to maintain such assets. Hence, any amortisation would result in double counting. For example, marketing and advertising costs are said to represent depreciation charges for a brand asset. Thus, it is argued that such assets should be written down only if there is a diminution in value. Assessments of diminution in value, relevant to goodwill and intangible assets, have been codified by the ASB. FRED 15, Impairment of Fixed Assets and Goodwill, was released in June 1997. It is expected to be issued as a Financial Reporting Standard in the second quarter of 1998 [Accountancy, 1998].

Impairment tests seek to ensure that assets valued under 'value to the business' rules or in a fair value exercise are not held at above their recoverable amount. Impairment tests judge whether carrying values are supported by their net present value. If an asset is to be depreciated over less than a twenty year period, then an assessment is made after the first year. Consideration is taken of: a) the existence of negative cash flows associated with the asset; b) adverse changes in legal, market or regulatory environments; and c) whether the method adopted for assigning value would now give rise to a lower value.

If there is indication of impairment, or the asset is to be depreciated over twenty years or more, carrying values are to be compared with net present values. Assets are grouped into their major income streams. Cash flows are estimated and discounted at the entity's weighted average cost of capital adjusting for specific risk factors. Assets held above their net present value are written down to their recoverable amount. Alternatively, the useful economic life of the asset may be adjusted.

FRED 15 is based upon the US standard, FAS 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of. Similar treatment is also proposed in an IASC exposure draft, E 55, Impairment of Assets, issued in May 1997.

A degree of speculation is inherent in impairment testing due to the estimation of future cash flows. The acceptance of an indefinite useful life is criticised in that it provides scope for manipulation. It is argued that impairment tests allow treatments which are inconsistent with Companies Act 1985. It states that identifiable assets must be written down to a residual value over a finite useful period. Impairment tests recognise that an assets life may be indefinite if not infinite [Accountancy, 1995a]. Thus, the accounting treatment is justified by resorting to the overriding principle of a 'true and fair view'. In this case, it is assumed that relevance precedes reliability. This is in recognition of commercial practice where asset lives, particularly intangible assets, are increasingly uncertain.

Summary

Measurement is critical in intangible asset accounting because it provides the basis for recognition. Financial reporting standards in this area are developmental. Hence, opportunity exists for several bases of valuation to be used.

It may be suggested that cost measures are generally more objective, reliable and more acceptable for external reporting. However, whilst value measures may be more subjective, the information generated may be more relevant and of greater use for decision making. Economic value measures are feasible but are intrinsically unreliable.

The most widely used and accepted methods of measurement are linked to a market for intangible assets. The existence of a market aids measurement and hence, enables recognition.

CHAPTER THREE

HUMAN RESOURCE ACCOUNTING

Introduction

This chapter focuses on a particular type of intangible asset, the human resource. Accounting research first addressed intangible asset accounting in its attempts to measure and recognise the contribution of labour to the activities of an organisation. The process of recognising and measuring intangible assets associated with labour became known as Human Resource Accounting. Labour represents the largest source of unaccounted intangible benefit.

Human Resource Accounting (HRA) is defined as "the process of identifying and measuring data about human resources and communicating this information to interested parties" [AAA Committee On HRA, 1973: p169]. The purpose of HRA is said to be the improvement of decision-making, both internal and external to the organisation. HRA (or human asset accounting) may be distinguished from human capital. HRA measures value to the organisation whereas human capital measures value to the employee.

This chapter starts by examining whether human resources are assets and whether they are relevant in financial reporting. It then outlines various measurement approaches specifically designed for valuing human resources. The fourth section describes the development and uses of HRA. Finally, consideration is given to the consequences of HRA.

3.1 The Human Resource as an Asset

The existence of a human resource asset is questionable. This section highlights the points of debate, particularly with regard to financial reporting requirements. Human resources are assessed using the criteria for the identification and recognition of intangible

assets outlined in Chapter 1. The existence of a human resource asset is also assessed from an economic perspective.

HRA is concerned with the performance and value of employee services to the accounting entity. Hence, it is the services that employees are expected to provide that are said to comprise a human resource asset. Activities undertaken to enhance the economic generating abilities of the labour force such as training and recruitment are expected to provide economic benefits in future accounting periods. The human resource asset is comprised of employee services, in terms of skills and knowledge. These services are intangible in that they have no physical substance and are non-monetary in nature.

a) Identification

An intangible fixed asset can be identified for financial reporting purposes where rights or other access to future economic benefits are controlled by the entity as a result of past transactions or events. Control over economic benefits must be maintained through legal protection or physical custody [ASB, 1997].

Future economic benefits associated with human resource assets derive from the ability of labour to generate cash flows. The services of employees create economic benefits for the organisation. Evidence of the future service potential of human resources is said to occur as no investments such as training would be undertaken if benefits didn't accrue beyond the current accounting period [Lev and Schwartz, 1971].

It is debatable whether a right to exploit future economic benefits exists. Humans cannot be owned unless they exist in a slave society. However, the services people are expected to provide may be subject to some form of ownership or control. It is argued that an

organisation does constructively own a labour force that is constantly associated with the firm [Lev and Schwartz, 1971]. This labour force can be bought and sold in acquisition or merger.

Alternatively, it can be said that there is no exclusive right to the services of employees as they are free to leave. Employee services are highly perishable through loss to other organisations or technological obsolescence. Any benefits from human resource investments such as training aren't necessarily retained within the firm.

An organisation does not own a human resource asset. However, some control is said to exist in the form of an employment contract. The enforceability of employment contracts from the organisation's perspective is argued to be so tenuous that they allow no exclusive right to the services of an individual [Jauch and Skigen, 1974]. However, the rights to services given by employment contracts are more enforceable in industries where the supply of labour is small. Employment on fixed term contracts has become more popular over the last decade. Organisations are increasingly prone to adding compensation clauses to contracts should their employees take up similar work with other organisations whilst under contract.

Proponents of HRA argue that some form of control is sufficient for the recognition of human resources as an asset. Money is spent on developing human resources to enhance the future economic prosperity of the organisation. Accounting is said to be concerned with events of economic significance. In debating the existence of a human resource asset, a HRA paradigm is evident. This is summed up by Marques [1976: p178]. "Are people a resource for the enterprise or is the enterprise a resource for the people?".

It can be argued that human resources do provide economic benefits. However, the use of those benefits is dependent upon the employee being able to perform future services, and the employee's association with the firm [Jaggi, 1976]. Thus, the identification of human

resources as assets is dependent on the degree of control exercised over human resource services.

b) Recognition

For recognition as an intangible asset, there must be sufficient evidence of a change in the assets of the organisation, and that a future inflow will occur. The item must be also capable of reliable measurement in monetary terms.

The absence of a single transaction leading to the creation of a human resource asset impairs evidence of its existence. This is in common with many intangible assets. However, some outlays on training and development may lead directly to an expansion of services an individual is able to offer. For example, the technical qualifications gained by employees may allow the organisation to generate additional revenues.

It is debatable whether human resource assets can be measured accurately due to the interdependent nature of their value. Their contribution cannot be disentangled from other factors of production [Parker, Ferris and Otley, 1989]. The existence of a market is central for reliable measurement. Human resource assets that cannot be linked to a market will be incapable of reliable measurement under ASB guidelines. It will be difficult to assign fair values to human resource assets as part of an acquisition due to their inseparability caused by the lack of a continuing market. Thus, human resource assets may be indistinguishable from goodwill. In financial reporting, the recognition of intangible assets is dependent upon measurement. The measurement of intangible assets is dependent upon the existence of a market.

However, in cases where the rights to the services of a human resource have been purchased, a reliable measurement may be possible. Human resource assets which are

purchased as in the case of professional sports industries may provide evidence of a change in the assets of an organisation.

Where no market exists, an imperfect measure of human resource assets may provide some utility. For example, the allocation of depreciation may be imperfect but is of some information value to users [Edmonds and Rogow, 1986]. However, this may not be acceptable for financial reporting. Volatility over the timing and existence of future economic benefits may prevent recognition. The possibility of any benefit and the timing of such benefits are subject to a high degree of variability.

c) Economic Perspective

The existence of a human resource asset is questioned under economic analysis. HRA states that benefits are created from training. However, economics suggests that wages tend to equal marginal revenue product (MRP) even in imperfect markets. Thus, cost is equal to benefit and no value is created.

Under general industry training, human resource value to the organisation is increased but so is human capital value. General industry training adds skills that are not specific to the organisation. An individual will contribute more to the organisation but will possess greater skills and there will be greater demand in the labour market for his/her services. General industry training causes MRP to increase. Therefore, an employer will have to increase wages in response to the increased MRP of an individual to prevent movement to another organisation.

With organisation specific training, human resource value is increased and there is no change in human capital value. An individual will contribute more to the organisation but will be unable to confer similar services to other organisations due to the nature of the

training. The marketability of the individual is not increased and so wages need not be increased to prevent movement to another firm. Thus, value may exist where wages are less than MRP.

The presence of a human resource asset is questioned because training is rarely organisation specific. Where an individual whose MRP to the organisation is greater than wages, a human resource asset may exist. However, attempts to maintain this asset may lead to its eventual elimination [Dittman, Juris and Revsine, 1976]. For example, a manager may delay the layoff of an employee who is no longer required but who has undertaken organisation specific training.

However, this argument assumes the perfect mobility of labour. Under conditions of imperfect mobility, marketability cannot be exploited as easily and wages need not be increased to ensure an individual does not move to another organisation. Thus, wages may be less than MRP, indicating the possible existence of human resource value.

The existence of a human resource asset centres around the degree of control an organisation can exert over the skills gained by the employee. If the organisation can exert control, it will enjoy the benefits of general industry training alone. It can prevent any increase in marketability leading to a diminution in the value of the human resource by restricting movement to other organisations.

If no control can be exerted, the organisation is unlikely to enjoy the benefits of general industry training. The increased marketability that general industry training provides will cause the employee to leave the organisation or have remuneration increased.

Human resource accounting is argued to have parallels with accounting treatment of finance leases [Brummans and Langendijk, 1996]. The organisation is effectively renting the

services of human capital, rather than physical capital. It is argued that their treatment should be aligned. Thus, leased human assets could be recognised on the asset side of the balance sheet with the organisations liability to pay salaries on the liabilities side [Lev and Schwartz, 1971].

d) Summary

Under present financial reporting guidelines, the existence and timing of future economic benefits from human resources may be too unreliable to allow recognition as an asset to occur. The reliable measurement of the majority of human resource assets is impaired by the lack of an associated market. However, in some circumstances, human resource assets may exist where control and accessibility to future economic benefits are more certain. Specific human resource assets are subject to transactions. In such cases, HRA may be acceptable in financial reporting.

3.2 The Relevance of Human Resource Accounting

The relevance of HRA is said to derive from the users of financial reports (both internal and external) receiving information on an additional dimension of the organisation. Management are held accountable for all the resources under their control; this includes human resources.

HRA is said to facilitate the utilisation of human resources more effectively than conventional accounting information because it recognises that human resource expenditures are often made with the aim of providing benefits beyond the current accounting period [Flamholtz, 1985]. Conventional accounting only recognises human resources in the current accounting period. HRA attempts to measure the benefits of expenditures on human

resources. Conventional accounting does not attempt to quantify these benefits. It can only recognise the value of human resources as a part of goodwill. It treats them as an expense of the period and charges them against the current period's revenue which can lead to a distortion of income measurement. Expenses are overstated and current profit is understated. By omitting human resource assets, it can be said that the investment base will be undervalued. This distorts Return on Investment and Rate of Return measures. Under conventional accounting systems, changes in the capabilities of the human organisation may not be reflected until long after the event [Alexander, 1971].

The measurement of HRA is said to aid external and internal decision making. The addition of this information adds a new variable to decision making. Without it, human resources are only considered from a qualitative rather than a quantitative viewpoint.

Flamholtz [1976] sought to test whether HRA data made any difference to the allocation decision. Individuals were to be assigned to jobs within an organisation on the basis of three criterion; job productivity, human resource development and individual satisfaction. The results indicated that decisions were made differently when using non-monetary HRA data compared to conventional accounting data.

HRA is said to provide a framework for optimising the value of human resources. It can be used to evaluate the allocation of resources among profit opportunities to maximise the return on all resources [Das-Gupta, 1974]. HRA can be said to allow the human organisation to be assessed on a cost benefit basis allowing the whole organisation to be managed with greater economic rationality.

Decisions concerning the acquisition of human resources can be made by choosing the person who possesses the greatest future value to the firm. HRA is said to aid personnel layoff decisions. Laying off workers can increase short run profit. Conventional accounting doesn't quantify the costs of recruiting and training new workers if a business subsequently expands. HRA is said to quantify the costs of personnel turnover. The costs of separation can be compared to the costs of continuation. A study by Ogan [1988] found that HRA data made a difference to personnel layoff decisions and led to an increase in confidence regarding those decisions. In their survey, Spiceland and Zaunbrecher [1977] found that HRA influenced personnel decisions, and that respondents found potential utility in the data. However, Elias [1976] questioned the relevance of HRA data in assessing the costs of personnel layoff. He argued that any amortisation charges or book losses are sunk costs once they have occurred.

However, it can be argued that HRA may still be of use in assessing the benefits of continuing employment. Development policy decisions about whether to recruit at entry level and train or to recruit from experienced personnel outside the organisation may be aided by HRA data.

External decision making may also be improved by HRA. By taking account of human resources, investors should be able to assess a firm's performance and its future prospects with greater confidence. Identifying the respective contributions from the organisation's inputs and assessing the ratio of human assets to total assets can be said to provide useful predictors of a firm's performance. The stewardship function may be aided by providing more accurate measures of management performance. For example, short run profits can be made by diminishing the workforce, and this decline in the asset base (operating capacity) of the organisation will not be reflected in the financial statements. By

the time such a liquidation of assets has been identified in the conventional accounting system, the 'successful' management are likely to have moved on [Alexander, 1971]. This argument is applicable both to investor decision making and divisional performance evaluation.

It is claimed by several authors that the lack of information about human resources leads to uncertainty about the value of the firm, particularly in labour intensive industries. Schwan [1976] tested the usefulness of HRA data for the investment decision of bankers who frequently used published accounts. It was found that HRA data resulted in a significant change in decisions. However, a similar study by Elias [1972] using accountants, financial analysts and students, found no statistically significant difference in decisions. A study by Hendricks [1976] concluded that the addition of HRA information to conventional accounting information affected stock investment decisions. Hansson [1996] found that specific information on the amount invested in human resources would improve investor decision-making. Campbell [1996] incorporates human resource value into an asset pricing model in order to give more accurate predictions of stock prices. However, any changes in decision making found in the above tests may be attributable to the 'novelty effect' of HRA data.

In sum, it is suggested that HRA is relevant in terms of economic decision making. It is said to be relevant to allocation decisions, internal personnel decisions and external investment decisions. Empirical evidence for the relevance of HRA is available, but it is inconclusive due to methodological difficulties associated with assessing the use of intangible assets. It may be argued that HRA is relevant in the stewardship role, a traditional aim of financial reporting. That management is held accountable for an extra dimension of resources under its control, is said to be the foremost benefit of HRA.

It can be said that debate over whether human resources are assets has led to the creation of a 'HRA paradigm'. The above arguments are ideologically very strong, but are based on the assumption that human resources behave and exist as assets. Hence, arguments advocating their relevance often assume that human resources can be measured reliably and the social consequences of HRA are ignored. These issues are explored in the next two sections.

3.3 The Measurement of Human Resources

The development of intangible asset measurement began with methods of measuring the contribution of human resources to an organisation. Many early human resource accounting measures form the basis of several modern intangible asset measurement techniques. This section describes valuation techniques developed specifically for measuring human resource value. These consist of acquisition costs, current costs, estimates of economic value, opportunity costs, qualitative measurements and wage based valuation models. Techniques, where appropriate, are appraised using the same criteria as those applied in Chapter 2 to the valuation of intangible assets.

a) Acquisition Cost

The acquisition cost of a human resource asset can be split into outlay and development costs. Outlay costs include those relating to recruitment, selection, hiring and placement. Development costs include formal training and orientation, on-the-job training and the lost productivity of others during training. Such a system would have to be operated for several years before it can be expected to represent an organisation's total investment in

human resources. In addition, the costs spent on development and training may bear no relevance to the employee's ability to contribute to the organisation.

b) Current Cost

The current cost of a human resource asset is the cost of recruiting and developing replacements to the level of proficiency and familiarity with the organisation experienced by existing employees [AAA Committee On HRA, 1973]. Replacement costs can be personal or positional. Personal replacement cost is the cost associated with acquiring someone capable of providing equivalent services in all the positions the former employee might have occupied. Personal replacement costs may provide operational estimates of economic values. Positional replacement cost is the cost of acquiring someone who is capable of providing an equivalent set of services in a given position [Flamholtz, 1985].

A further distinction can be made between marginal and full replacement costs. Marginal costs are those associated only with the replacement (selecting and recruiting one individual) whereas full costs include the effect on others in the organisation (development costs to ensure that all layers of the organisation possess the same skills and abilities).

c) Estimates of Economic Value

Economic value is defined as the present value of the sum of future cash flows arising from the human resource. The economic value of human resource assets has been estimated both individually and in aggregate.

One early measure is discounted excess earnings, as reported by Hermanson [AAA Committee On HRA, 1973]. Here, any supranormal earnings are attributable to unidentifiable

assets, which include human resources. Thus human resource value can be estimated by the level of differential earnings. This measure can be said to have a high level of objectivity as data required can be obtained directly from accounting records. It is also cheap and provides a close association with financial statements. However, reliability is low as all assets of an intangible nature are subsumed. Also, the method relies upon previous earnings as a surrogate for future earnings. There is no evidence to support this relationship. Furthermore, there is no recognition of the human resource base required to undertake normal operations and earnings. Thus, this measure can be said to have little predictive value.

A similar measure of human resource value suggested by Brummet, Flamholtz and Pyle [AAA Committee On HRA, 1973] discounts the future earnings of the organisation to obtain its total net present value. A portion of the net present value will be allocated to human resources depending on their relative contribution. The difficulty of estimating future earnings and determining a basis for allocation reduces reliability and objectivity.

A model developed by Likert identified variables that could estimate changes in the effectiveness of the human organisation [Likert and Pyle, 1971]. Periodic measurement of causal and intervening variables such as loyalty, structure and leadership style may reveal changes in the productive capacity of the organisation. After a time lag, these present changes can be translated into expected future changes in terms of end result variables such as productivity or profits. Thus, such changes can be expressed in money terms. It was suggested that these variables be measured using a questionnaire. This means of measurement can be said to have a low level of objectivity and reliability, and may also be expensive. However, it may be a sound predictor in decision making.

A model of individual valuation has been proposed by Flamholtz [1972:1985]. It assumes that human resources are valuable in relation to the roles the individual is expected to occupy. The model measures an individual's expected realisable value. This is the amount actually expected to be derived by the organisation. It is equal to an individual's conditional value multiplied by the probability that the individual will stay with the organisation. Conditional value is the amount that could potentially be realised if an individual stays with the organisation for the duration of his/her productive service life. The conditional value is based upon the services the individual will provide in various roles through the organisation.

The level of these services will be dependent upon individual attributes such as cognitive abilities, personality traits, skills and activation level. It will also be dependent on how these individual attributes combine with organisational attributes such as structure and management style. This measure lacks objectivity and reliability. However, it was intended as a basis for developing a theory of human resource value rather than be used as a method of measurement [Flamholtz, 1972].

Other measures of human resource value that have been suggested incorporate the mobility of employees. An individual's movement through different roles in an organisation is described as a stochastic process. A stochastic process is defined as a natural system that operates in accordance with probabilistic laws [Flamholtz, 1985]. Stochastic models estimate the mobility of an employee through an organisation by the use of Markov chains. A Markov chain is a stochastic system where the occurrence of a future state depends only upon the immediately preceding state [Sydenham, 1979]. Using this technique, the probability of

occupying each organisational role can be established. The roles may be groups of jobs the person is expected to occupy while they work for the organisation.

Flamholtz [1985;1987], applied this Markovian process to his individual valuation model. The net profit contribution provided by each organisational role or service state can be measured. Therefore, by calculating the probability that the individual will occupy each state at specified future times, the level of future cash flows contributed by the individual can be derived. Discounting the level of expected future cash flows will provide a present value measure of the human resource.

However, it is argued that assigning probabilities on an individual basis will be costly and large variances will undermine the reliability of the method. Thus, Jaggi and Lau [1974] propose a stochastic model based upon homogeneous groups. This method can be said to be objective in so far as the information needed can be derived from historical personnel records. However, quantifying the net profit contribution of each service state may be problematic in some industries due to the difficulty in allocating overheads. The reliability of this method is further decreased by the assumption of stability in the organisation.

It is argued that individual valuation models are flawed because value is treated as an independent event [Edmonds and Rogow, 1986]. That is, the models ignore synergy. However, this problem is common to all asset measurement techniques³.

Synergy, in this context, may be described as that part of value arising from an individual's interdependence with the organisation and other employees. Synergy is said to occur because an organisation will employ up to a point where marginal revenue product

³ Refer to Chapter 2; 2.2(i)

equals the marginal cost of employment (wages). Before that point, marginal revenue product is greater than wages; this creates synergy [Morse, 1975].

d) Opportunity Cost

Opportunity cost is another method of measuring human resource assets. It has been suggested that human resources can be measured by the amount bid between investment centre managers for a scarce employee [Hekiman and Jones, 1968]. The bid price should then be included in the investment base.

This type of measurement will only be feasible in large organisations with a sufficient number of investment centres and managers to ensure fair bidding. Furthermore, if employees can be readily recruited from outside the organisation, then there is no opportunity cost as the resource is not scarce [Brummans and Langendijk, 1996]. It is also questionable whether frequent transfers and bidding have a healthy impact on employee morale.

e) Qualitative Measurement

A human resource inventory has been suggested as a non-monetary alternative to the quantitative measurement of human resource assets. It lists the skills and capabilities of people within the organisation. It may include academic and professional qualifications as well as personal credentials. This method can aid external and internal users by representing the potential skills to be rendered, particularly in smaller organisations. However, it is not a method of valuation.

f) Wage Based Valuation Models

Several human resource accounting measures are based upon the level of remuneration received by an individual. The human resource will add wealth to the organisation in the future. The payment offered for the services of the human resource is assumed to be equal to the level of wealth generated by those services. Thus, the present worth of the remaining earnings from employment should represent the organisation's assessment of the value of the resource.

The method of discounting future salaries embodies these principles. Expected wage payments over a specified future time period are discounted at the most recent rate of return and modified by an efficiency factor [AAA Committee On HRA, 1973]. The time period is the number of years a person is expected to provide services to the organisation. The efficiency factor should reflect the effectiveness of performance of the resource.

Lev and Schwartz [1971] proposed a similar model measuring human resource value as the present value of the remaining future earnings from employment. Census data and actuarial calculations are offered as methods for obtaining average earnings, and average ages for retirement.

Friedman and Lev suggest an approach to valuation based upon wage differentials [Sydenham, 1979]. The wage differentials between the market and the firm are said to reflect the organisation's personnel policy. Otherwise, these differences would be eliminated by employee mobility. This wage differential is said to represent the return on the organisation's investment in human resources. If this return is known, then the value of the investment in human resources can be obtained by discounting expected wage savings over the expected

service life of the employees. This value can be said to reflect management policies for developing the workforce relative to the market average. Both these methods suffer from similar problems as discounting future salaries in that they are based upon estimates of remuneration.

The human asset multiplier proposed by Giles and Robinson in 1972 also uses employee remuneration in its measurement [Gambling, 1975]. The value of an employee to the organisation is calculated by multiplying individual remuneration by a factor relating to their contribution to the organisation. This weighting factor is a quadratic progression commonly used for wage structures. The method can be said to suffer from low levels of reliability and objectivity. Past remuneration is assumed to be a close surrogate for future income generated by employees [Sydenham, 1979]. The weighting factor is also said to have no conceptual basis.

Wage based measures are theoretically dependent upon the relationship between the marginal revenue product of labour and wages. It is argued that the reliability of these methods is low as there is no correlation between salary paid and the value of the employee to the organisation [Jauch and Skigen, 1974]. This is attributable to factors such as trade union pressure upon wage levels [Flamholtz, 1985]. However, it is argued that the mean compensation of a group over the long run may still approximate the economic value of expected successful job performance [Steffy and Maurer, 1988]. The objectivity of these methods is limited as future rates of pay are used as the basis for measurement. The difficulty of estimating future salary levels may result in past or current compensation being used.

Current remuneration is usually based on past service rather than future income production.

Subjective assessments are also required of a discount rate and the efficiency factor.

h) Conclusions

The above valuation methodologies highlight a major difficulty of using HRA in financial reporting. Those techniques such as acquisition costs and current costs that pass reliability criteria rely on the existence of a market for the human resource. Those techniques not subject to this constraint, are unlikely to be acceptable for financial reporting. HRA valuation methodologies provide a basis for assessing the measurement of football player registrations, which is examined in detail in Chapter 9.

3.4 The Development of Human Resource Accounting

This section seeks to describe the development and uses of HRA. It provides a background for the next chapter of this thesis; the application of HRA in the football industry.

HRA is said to have been initially recognised by Likert in the early 1960's [Glautier, 1976]. His work was concerned with measuring the effectiveness of the human organisation as a means of achieving optimal organisational performance. Measurement was to be extended to cover all assets related to human resources such as customer loyalty and reputation.

HRA has been influenced by various disciplines. Economists developed human capital theory which was concerned with the measurement and preservation of human resources in the economy as a whole [Dawson, 1989]. By 1962, economists were seeking methods of analysis to value the investment in human resources which could be reflected in

national economic accounts. Around the same time, accounting theorists were concerned that financial statements were giving a misleading view as employees were not represented on the balance sheet [Flamholtz, 1985]. They sought to disaggregate goodwill, and extend the matching principle to employee expenditures. Organisational psychologists and personnel theorists expanded upon Likert's initial work. They aimed to measure the value of human resources as an aid to management in order to increase leadership effectiveness.

This initial growth of interest in the subject led to the development and application of models measuring human resource cost and value. These models were mostly based upon deductive accounting theories. Towards the end of the 1970's, interest in HRA began to decline. It was claimed that more complex research was needed to resolve the problems of measurement. An additional factor was said to be the economic climate which made it too expensive for organisations to experiment in HRA systems and advance past the modelling stage [Parker, Ferris and Otley, 1989].

However, HRA continues to attract some interest due to environmental trends. As discussed in Chapter 1, the emergence of human capital rather than physical capital has led to the growth of human resource management. The aim of which is to maximise the value of human resources. Interest in Japanese management styles that have a more paternalistic regard for employees also indicate the emphasis that some organisations place upon the effective utilisation of human resources.

Several organisations have implemented HRA systems. The remainder of this section discusses the purposes for which these systems have been used and the success of HRA in practice.

The first reported application of a HRA system was by the RG Barry Corporation, a manufacturer of soft goods and leisure footwear in Ohio, USA [AAA Committee On HRA, 1973]. Investigations began in 1966 to measure the outlay cost of investments in human resources in order to aid the management of employees. Investments that were expected to generate benefits extending over the current accounting period were to be capitalised and amortised over their useful life. The study initially only covered management but was extended in later years. In 1971, the company reported investments in human resources of nearly \$1.6M. This had the effect of reducing the Return on Investment from 7.2% with conventional accounting to 6.9% with HRA [Flamholtz, 1985:pp 98-99]. Individual managers were given personalised asset accounts, with a credit for capital invested in human resources, to improve the utilisation of employees. This information was reported in a separate, unaudited HRA balance sheet which was distributed with the published accounts. However, it is argued that these statements were included to illustrate the information value of HRA; this was aimed to improve the effectiveness of internal management [Elias, 1972].

Touche Ross (Montreal) began to apply a HRA system in 1970 [Alexander, 1971]. It aimed to calculate the costs of labour turnover and the level of employee contributions. The outlay cost of the investment in an employee and the opportunity cost (billings foregone) of the employee were calculated and amortised at the lesser of the individual's expected life with the firm and the useful life of the investment (such as the limited benefit of a training course). These figures were grouped together in an employee contribution report. The information was to be used as a management tool to help direct training needs and allocate staff.

American Telephone & Telegraph also measured investments in human resources by outlay cost. By treating investments in human resources as capital investments, management were directly responsible for segments of investment that fell within their area. The purpose

of this system was to evaluate personnel policies in terms of their impact upon employee values and future earnings [Craft and Birnberg, 1976].

In 1987, an application of HRA for tax purposes was undertaken by a large US financial institution [Flamholtz, 1987]. It had acquired the assets and liabilities of a securities brokerage firm. A portion of the price premium was attributable to human capital. The organisation wished to make cash flow savings by depreciating this asset for tax purposes. Flamholtz's stochastic rewards valuation model was used to establish the asset was separate from goodwill and that it had a useful life which could be ascertained with reasonable accuracy. Four service states were assigned to the organisation's registered representatives (low, medium and high producers, and a state of termination). The expected net contribution from each service state was determined, with probabilities of the employees moving through each state being derived from historical data. The discount rate was calculated from the Capital Asset Pricing Model using firm specific and industry data.

Human resources were also measured by Barter Automatic Products (Toronto) by a present value approach. Expected wage payments from the next five years were discounted at the industry rate of return and adjusted by an efficiency ratio based on the organisation's rate of return [Flamholtz, 1985].

The applications examined demonstrate the various purposes for which HRA information has been used and the different systems that have been employed. Most organisations have used this information to aid internal decision making. In particular, they have been used to communicate the effects of personnel policies to operating management in financial terms. The lack of HRA applications in financial reporting reflect the measurement reliability problems connected with intangible assets in the absence of an associated market.

3.5 Consequences Of Human Resource Accounting

The data provided by a HRA system can be said to alter behaviour and thinking in an organisation. HRA provides scope for the manipulation of earnings. Management may use their influence to have human resource expenditures placed in an asset category thus giving the appearance of improved performance in the short run [Elias, 1976]. Influence may also be exerted upon amortisation rates depending upon a manager's expectations of staying in their current position.

Management may be more motivated to initiate human resource expenditures under a HRA system as the impact of spending is not reflected in profit immediately. This could result in overspending on human resources.

A further possible consequence of HRA is that human resources are treated as assets to be optimised rather than expenses to be minimised [Flamholtz, 1985]. It can be said that laying off employees to improve the short run financial condition of an organisation may be inhibited. Also, it is suggested that HRA is seen as a means for spreading out training and development costs rather than viewing human resource services as assets [AAA Committee On HRA, 1974]. HRA is said to provide an incentive to institute training programmes as they are recorded as immediate gains as well as deferred gains [Gastil, 1973]. This has led to criticism of HRA as being merely an aid to procure more resources for employee development [Baker, 1974]. It has been suggested that management may be resistant to HRA because it means they are held accountable for a new area of performance [Rhode, Lawler and Sundem, 1976].

Capitalising human resource expenditures may also cause disputes about the transfer of personnel [Elias, 1976]. This is because an amortisation charge will be transferred with the

employee. Employees with higher capitalisation values may be in lower demand for transfer as they 'carry' a higher amortisation charge.

Tomassini [1976] proposes variables upon which the effects of HRA may be dependent. They are categorised into individual, organisational and information attributes. Individual attributes include leadership style, experience and cognitive style. Organisational attributes include the type of management control system and the task environment. Information attributes include the type, quantity and format of the information. For example, it is hypothesised that replacement cost measures will be more use in a structured environment because they can be measured with greater accuracy.

Concerns have also been expressed about the impact of HRA information on employees. It may reduce their status in an organisation to that of mechanical inputs, considered only in terms of their profitability. It could also subject employees to tighter control leading to undue attention being placed upon individuals. McCowen [1968] argues that HRA may limit freedom of choice by giving people jobs that exactly match their abilities rather than their inclinations. It has been suggested by Gastil [1973] that HRA is likely to dehumanise employees unless influenced by a paternalistic regard. It is argued that HRA gives no regard to the differences between the human being and the machine as economic resources. However, Schultz [1971] argues that HRA gives recognition to the value of employees by neither underestimating their talents or overextending them. HRA may provide an opportunity to integrate organisational goals with personal development [Flamholtz, 1973]. It can be argued that HRA is explicit about what is implicit in the behaviour of many organisations.

HRA may have an impact on industrial relations within an organisation via the relationship between wage levels and human resource value [Rhode, Lawler and Sundem, 1976]. For example, should an employee be allowed to earn the imputed value of their services? Consideration may also be given to the attitudes of employees with a decreasing human resource value.

Attaching values to individuals in money terms may be subject to cultural constraints and taboos of an exploitative nature [Brummet, Flamholtz and Pyle, 1968]. This is said to lead to the separation of the measurement of people from the measurement of their services.

The cultural constraints in recognising human resources as assets aid the formation of a HRA paradigm. This set of beliefs is based upon the recognition of human resources as assets in both economic and moral terms. Hence, all arguments concerning HRA are based upon recognition of this paradigm and its central assumptions.

The consequences of accounting for an additional set of resources must be assessed against the benefits. Several consequences of HRA have been hypothesised but there has been little supporting evidence. Such consequences may need consideration if a HRA system is to be implemented. Acceptance of the beliefs upon which HRA is based is required before it can be successfully integrated into conventional accounting.

Summary

It can be argued that HRA is flawed in its present state as it attempts to apply conventional accounting techniques to a non-conventional situation where man and machine

are not necessarily convertible. It is argued that conventional accounting in its present state is not equipped to deal with the recognition of an increasing number of intangible assets. Therefore, it is said that HRA must be an alternative rather than a supplement to conventional accounting systems [Dawson, 1989]. However, Glautier [1976] argues that HRA forms part of the bridging of a gap to more economically relevant accounting. He states that financial reporting is entrenched in concepts of cost and value that derive from a legalistic base even though these concepts are not immediately relevant to economic decisions. Thus, it is likely that standard setters will come under increasing pressure to adopt assets associated with human resources.

Many aspects of HRA are unresolved. The existence of a human resource asset is dependent upon the degree of control the organisation can exert over the services of the individual. If a human resource can be classed as an asset, its inclusion in accounting is said to aid decision making and stewardship. However, such claims rest on the ability to produce a relevant and reliable measure of human resources. This is problematic in the absence of an associated market for the asset. Nevertheless, the development of HRA has sought to tackle these problems. However, such attempts have led to concerns over the consequences of HRA. Fears that HRA may lead to a dehumanisation of employees, and the increased scope for the manipulation of earnings, need to be addressed.

HRA is based upon the moral and economic ability to view human resources as assets. In economic terms, this hinges upon the amount of control the accounting entity has over the services of the 'human resource'. Early work on HRA forms the theoretical basis for recognising football player registrations as discussed in subsequent chapters.

CHAPTER FOUR

THE FOOTBALL INDUSTRY

Introduction

The application of Human resource accounting is restricted by the lack of control that organisations have over the future economic benefits associated with their employees. The measurement of intangible assets is inhibited due to there not being a market on which to base reliable measurement. The football industry provides an unique environment in which to study accounting for intangible assets where both control over, and a market for, human resource assets exist. In the UK, this industry is both large and socially influential.

This chapter describes the structure, finance and accounting policies in the football industry in order to demonstrate the relevance and applicability of HRA. For the purposes of this chapter, the football industry is limited to all professional football clubs in the UK. Where appropriate, it is specifically defined as comprising of the English Football Association Premier League, the English Football League and the Scottish Premier League.

The first section of this chapter examines the nature of the football match as a product and its impact on the structure of the industry. It then describes the role of finance and highlights the differences between football clubs and conventional organisations. Finally, 3 significant and material transactions undertaken by football club organisations are considered as a basis for providing the information needed to study accounting policy choices.

4.1 The Nature and Structure of the Football Industry

Professional football was recognised and accepted by the Football Association in England in 1885. The structure of the industry was established by the founding of the Football League in 1888. Football clubs were divided into two divisions with a system of promotion and relegation deciding the composition of each division. This basic structure remains intact except for the addition of a third and fourth division. Up until 1992, the Football League administered the running of the league, and the Football Association administered the national team and the organisation of amateur football. In 1992, the Football Association took over the running of the top division, the Football Association Premier League, in addition to its existing duties, whilst the Football League remained as organiser of the remaining three professional divisions.

Together, the Football Association (FA) and the Football League (FL) make up a centralised structure that provides regulatory and promotional services which further the collective interests of professional clubs [Arnold, 1991]. Services include the establishment of policies governing the size and composition of the industry, input decisions such as transfer and finance regulations, and output decisions such as fixture and pricing arrangements. A similar structure exists in Scotland.

The nature of the football match as a product gives the football industry unique characteristics. A mutual dependency between competing football clubs is recognised to ensure that the football match is maintained at an acceptable level of interest [Sutherland and Howarth, 1986]. Level of interest is best maintained by maximising the quality of football played with maximum uncertainty over the outcome of the match. The product is determined jointly by competing organisations.

The joint nature of the product results in the existence of collusion. Without co-operation between organisations, the product would not exist. The football industry can be said to act as a cartel. Cartelization occurs where rules constrain the behaviour of individual organisations to act in the interests of the industry as a whole [Arnold, 1991]. Co-operation between members of the cartel manifests itself in the form of income sharing agreements and labour market restrictions.

a) Income Sharing Agreements

Income sharing agreements include the distribution of Pools income, broadcasting rights, and gate receipts. Fees are paid to the FA and the FL by the Pools Promoters Association as copyright fees for the use of fixture lists. This money is shared equally between all clubs in the FA Premier League and the Football League. Revenue received from broadcasting football on television and radio is distributed throughout the league, and not restricted to those whose matches are covered. A percentage of gate receipts (net of related expenses) of all league and cup matches are paid into a pool. The proceeds of which are paid equally to all members of the league.

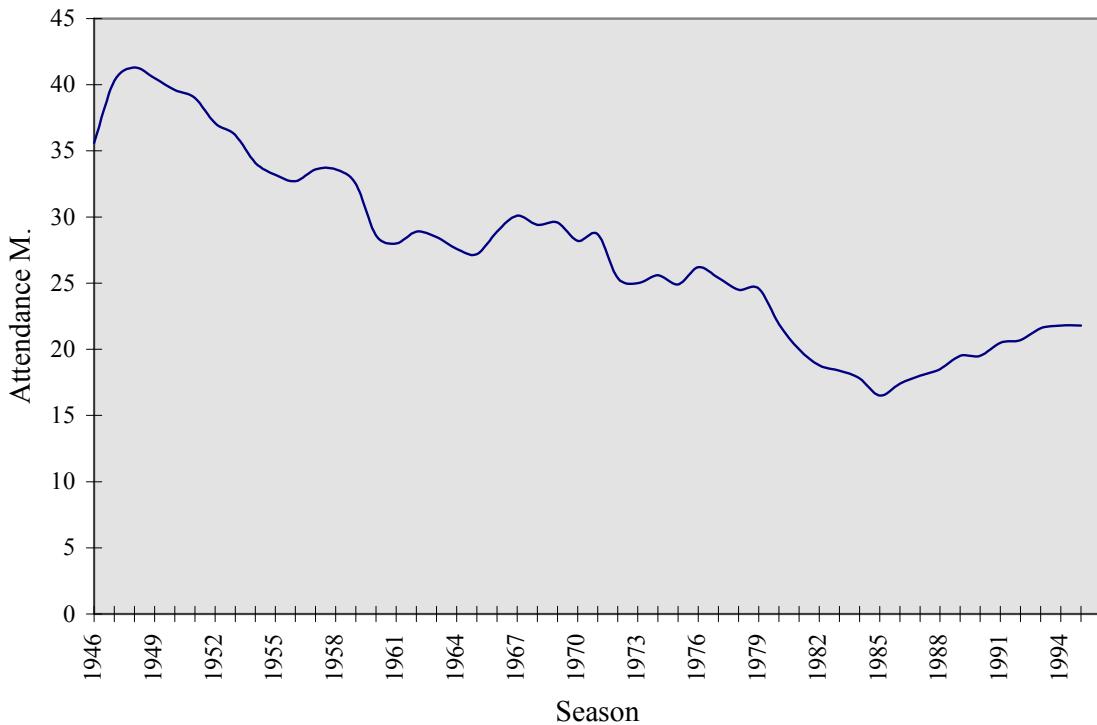
Larger organisations with higher attendance's and greater gate receipts subsidise smaller organisations. Such agreements recognise that the survival of all organisations is necessary for the benefit of the industry as a whole. The dominance of a few clubs is detrimental over the long term. This is because competitors are a necessary requirement for any organisation. Without several competing football organisations, the uncertainty over the outcome is reduced, the product (the match) is impaired and the industry declines. This is known as the Louis-Schmelling paradox. It is characterised by the need of a champion for a

challenger to realise earnings potential. Contrary to economic theory, competition in the football industry is more profitable than monopoly [Morrow, 1996].

Economic and social conditions have instigated changes in the football industry. It has been argued that professional football expanded due to the process of industrialisation during the end of the nineteenth century and the early part of the twentieth century. The Industrial Revolution had changed the working week and demarcated work and leisure [Arnold, 1991]. Football suited the classic working structures of the factory and the emerging half day holiday on a Saturday: a typical scenario involved workers finishing at midday on a Saturday and assembling at nearby public houses before attending the local football match. The pubs closed at the kick off time of the football match. Football was also morally and religiously acceptable, being a credible substitute to drinking and gambling.

Following the war, there was significant growth in the leisure industry due to increased consumption. Leisure consumption had risen due to an increase in household income and decreases in the length of the working week. However, the leisure market had diversified, and increases in home entertainment and active sports participation led to falling attendance's at professional football matches. Thus, the football industry was forced to compete with a growing number of substitutes. Many football clubs faced decline as they were situated in old, industrial towns where populations had fallen. Thus, clubs became less involved with local culture. The public, aided by growing media coverage, became increasingly interested in the top players and the most successful clubs. In addition, attendance's at matches in the upper divisions began to increase, due partly to a decline in hooliganism. Chart 4.1 shows aggregate post-war attendance figures per season for clubs in the English football industry.

Chart 4.1: Attendances at FA Premier League and Football League matches
1946/7 - 1995/6



Source: Football Trust [1998]

It should be noted that attendance figures are only an indicator of the total demand for football. The total demand would include all those who follow football through the media. It is thought that the increase in total demand and the popularity of football products and services have also increased over the last 10 years, possibly at a greater magnitude than attendances due to increased media coverage.

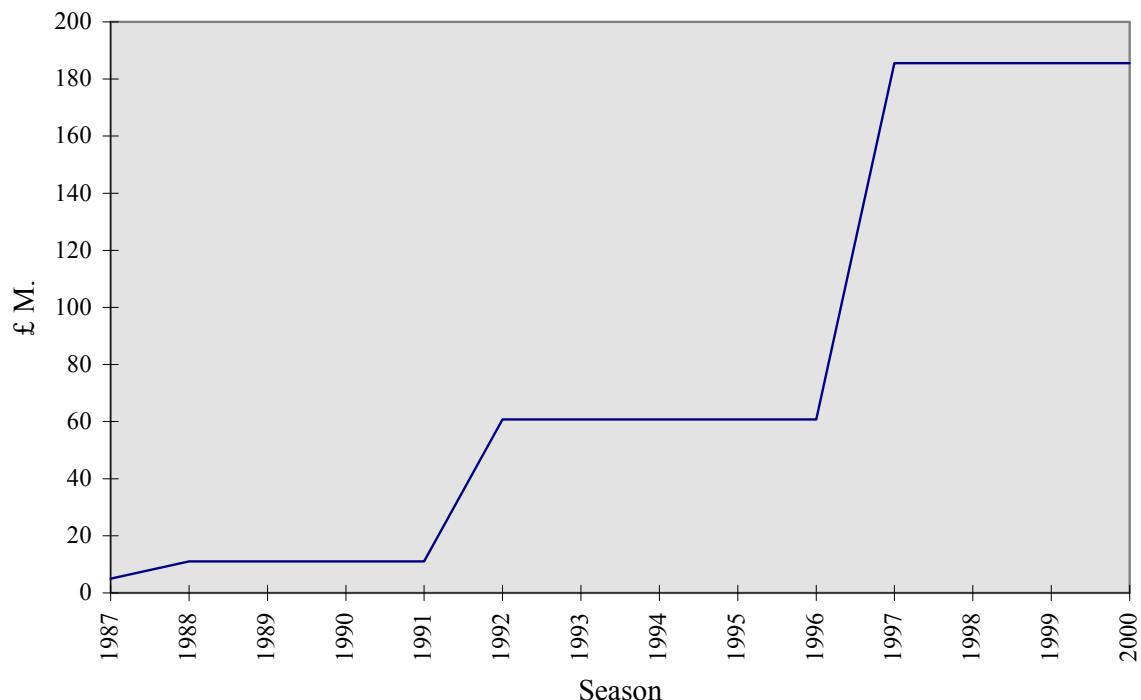
By the late 1980's, the nature of the demand for football had changed. The most successful clubs, recognising the increase in demand for their product, began to lobby for

changes in the structure of the industry. In addition, an influx of television revenue strengthened the industry.

The 1986 Broadcasting Bill resulted in the introduction of competition by satellite and cable companies for rights to televise football. Previously, the terrestrial television companies had acted as a cartel, thereby deflating the price paid for broadcasting rights. However, in 1986 the implicit agreement appeared to have been broken when no agreement was reached and no live football was shown on television. In 1987-8, approximately £5M. was paid by ITV for television rights to English premier division matches. The following year, competition from satellite television increased the price to £11M. per annum as part of a £44M. deal covering the period 1988-9 to 1991-2. Between 1992-3 and 1996-7, television rights for the top English division were sold to BSkyB and the BBC for £304M. This deal was renewed for four years commencing 1997-8 for £743M. [Sunderland plc, 1996]. The English Football League sold television rights to its matches for £25M. per annum to BSkyB as part of a 5 year deal. Increased competition had dramatically increased the price of rights to televise live football.

A summary of payments per annum to televise matches from the top English division is shown in Chart 4.2. This shows approximate payments per season; it is based upon the assumption that payments for deals covering more than one season are divided equally.

Chart 4.2: Payments per annum for TV rights to English premier division
1987/8 - 2000/01



The increase in television payments since the introduction of the 1986 Broadcasting Bill is apparent. The introduction of additional revenues has led to inflationary pressures in football. Admission prices, wages and transfer fees have increased significantly above inflation. However, potential returns from footballing success have escalated. Successful clubs attract greater revenues from European competition, sponsorship and media coverage. Competition to enter European competitions is particularly strong. Clubs can negotiate individually with companies for the broadcasting rights to their European matches, being free of collective deals.

With increasing returns available, larger clubs have sought to remove the uncertainty over the commercial outcome of a football match. This is in conflict with interests of the cartel. However, income sharing agreements clashed with the economic self interest of the larger clubs.

Thus, structural developments occurred to further the interests of the more successful clubs. The existing cartel (the Football League) was split in 1992. Division One of the Football League was replaced by the FA Premier League. Thus, the 20 most successful clubs could form a smaller cartel and reduce their cross-subsidisation of the less successful clubs. Existing income sharing agreements could be reduced. The levy paid on gate receipts was cut. The FA Premier League could negotiate for sponsorship and broadcasting rights independently of the Football League and therefore increase the share of revenue flowing to each of its members. It is argued that increases in the sums offered for broadcasting rights greatly influenced the formation of the FA Premier League.

So long as the industry acted in the interests of all clubs, regulatory bodies tended to ignore any collusion. However, with the FA Premier League ensuring its members receive large economic benefits, the legality of its structure became subject to examination.

In February 1996, the Office of Fair Trading referred the FA Premier League rules and existing television deals with BSkyB and the BBC to the Restrictive Practices Court. The deals gave BSkyB and BBC the rights to televise FA Premier League matches for 5 years ending in 1996-7 with an option of a further 4 years if either company matched any rival bids. Furthermore, FA Premier League rules prevented member clubs from selling television rights to broadcasters without first seeking permission from the FA Premier League. The OFT claimed such agreements represented significant restrictions on competition. A similar case in the Netherlands ruled that the Dutch League TV agreement was monopolistic. The English hearing is due for January 1999, when all parties will have to demonstrate such deals are not against the public interest [Daily Telegraph, 7/2/1996; Guardian, 13/11/1997]. If they are not successful, the existing deals will be considered void, with individual clubs negotiating their own TV rights.

Hence, joint action between clubs has decreased with the creation of independent 'premier' leagues. This threatens the traditional collusive structure traditionally inherent in the football industry. It can be argued that the move to a conventional industry structure with unrestrained competition between clubs will attract conventional industry regulation. The level of economic activity in the football industry has become too large for it to be immune from challenges to the legality of income sharing agreements or labour market restrictions.

b) Labour Market Restrictions

The football industry collectively restricts the labour market for players in order to benefit all football clubs. Restrictions are enforced to prevent the supply of the most talented players moving towards the more economically powerful clubs. A more equal distribution of human resources is required than would be obtained through unregulated market forces. This is required to protect the uncertainty over the outcome of football matches [Arnold, 1991]. A maximum wage was enforced until 1961 and the transfer of players between clubs is still restricted.

To play professional football, a player must be registered with the FA and the league in which his/her club competes. A player may only play for a club with whom they are registered. Any transfer of registrations must be agreed by the FA. Football players usually sign employment contracts with the club holding their registration. Transferring the registration of a player under contract must be agreed by the holding club who can demand a fee from the buying club representing the loss of services from transferring the registration. If a fee cannot be negotiated, an independent tribunal sets the compensation. At the end of a players contract, the club have the option of offering the player a new contract on the same

(or better) terms as the existing contract. If the player rejects this option, the holding club is entitled to a transfer fee from any club that wishes to hold the registration of the player. If the club do not offer a new contract, the player is a free agent (out of contract). Any club can hold the registration of a free agent without the payment of a transfer fee to the previous club.

The rules relating to the transfer of registrations between clubs in different European Union states are subject to change following a judgement made by the European Court of Justice on 15 December 1995. A Belgian footballer, Jean Marc Bosman, claimed that the payment of a fee to transfer his registration at the end of his contract was against Article 48 of the EC Treaty. Article 48 governs the free movement of workers within the European Union. It sought to abolish discrimination based on nationality between workers, and entailed the right to accept offers of employment.

The Court found that fees paid for transferring the registration of a player not under contract were in breach of Article 48. It also found that no restrictions could be placed on the number of non-nationals playing on teams in European Union states [Times, 17/1/1996].

Thus, at the end of his contract, a player is a free agent and can move abroad to any overseas club within the European Union without the buying club incurring a transfer fee. Although the Bosman Ruling applied only to the transfer of players between European Union countries, its rules are being implemented in all transfers. FIFA, the world governing body, have decreed that the Bosman Ruling will apply to all cross-border transfers by 1999 [Deloitte & Touche, 1997]. In England, all out of contract players aged 24 and over will be entitled to free transfers [Times, 28/7/1997]⁴. This is in recognition of the threat of a domestic legal challenge. Transfers of registrations for out of contract players aged 23 and under are

⁴ From season 1998-99 in the FA Premier League and shortly afterwards for the remainder of the UK

still subject to a fee. This is said to encourage clubs to undertake the recruitment and training of young players; they will be compensated if the player does not benefit the holding club.

The transfer system acts as a redistributive mechanism in the football industry; it enables clubs to be rewarded for their 'research and development' activities. Without the transfer system, there would be no incentive to carry out general industry training as provided by youth systems. It enables clubs to gain a return from investing in young players, by retaining them at the club over the length of their contract. The transfer fee, although not linked to identifiable training costs, compensates the holding club for its recruiting, scouting and training policies. The system also ensures team stability which is claimed to be beneficial to football's consumers; supporters can more easily identify with a particular team and its players.

The Bosman Ruling has reduced labour market restrictions in the football industry. It more easily facilitates a move of the most talented players to the most economically powerful clubs, both domestically and internationally.

The focus in this section has been placed on the structure inherent in England. Professional football in Scotland is similar in structure and lesser in scale than the football industry in England. Only the top division in Scotland, the Premier Division, includes clubs of comparable size to the majority of professional clubs in England. However, the development and structure of professional football in Scotland have closely mirrored the development of the football industry in England.

The Scottish Football Association (SFA) controls the rules and conditions for the regulation of football in Scotland. The Scottish Football League (SFL) controls the league

competitions, player transfers and commercial contracts. Similar income sharing agreements and labour market restrictions exist to those in England.

The nature of the football match as a product which is determined jointly by competing organisations gives the football industry unique characteristics. Joint product determination impacts on structure, leading to income sharing agreements and labour market restrictions. However, the coverage of these arrangements has been reduced as the football industry becomes more disparate in terms of economic power.

The Bosman Ruling and the OFT challenge to TV deals represent examples where authorities are refusing to sever sporting aspects from the economic aspects of football. The economic reality of football is of a large, capitalist industry. Regulation and accountability are increasingly based on this economic reality. Less special treatment in the form of labour market and structural regulations are accepted due to the societal aspects of the football industry. Despite its popularity, the football industry is increasingly being viewed by regulators in a manner akin to more traditional, capitalist industries.

4.2 Finance in the Football Industry

This section outlines the unique characteristics of football club organisations in terms of their objectives, constraints and accountability. In doing so, it seeks to highlight the differences and similarities between football clubs and conventional organisations. It then describes the growth and commercialisation of the football industry. Emphasis is placed upon the funding, sources of income and types of expenditure prevalent in football clubs.

It can be argued that the structure and financial limitations of the football industry cause the organisational objectives of a football club to differ from those of a conventional organisation. The objective of a football club has been stated as the maximisation of footballing success subject to a financial security constraint rather than traditional profit maximisation [Sutherland and Haworth, 1986]. The security constraint can be defined as generating enough money to avoid compromising immediate plans for playing success.

However, this objective may be changing in response to the growing commercialisation of professional football. A study by Arnold and Benveniste found that the main objective in 44.1% of football clubs was playing success whereas 37.4% of clubs cited financial success as their main objective [Arnold, 1991]. However, a questionnaire undertaken as part of this research found that 73% of clubs stated that their objective was 'commercial success subject to satisfactory football performance'⁵. It should be noted that footballing or playing success is a term relative to each club. For example, some clubs aim to win a competition each season whereas other clubs aim to avoid relegation to a lower league. However, it provides some indication of the change in focus of many football clubs that may have resulted from recent structural changes and financial inflows.

Organisations within the football industry are subject to restrictions on their capital which are laid down by the governing bodies. This is in recognition of the differences between football clubs and conventional organisations.

Rules restrict the involvement of shareholders in more than one football club. In the FA Premier League, no person or associate with a share capital holding of greater than 10% can hold shares or be involved in the management or administration of another football club.

⁵ See Chapter 7; 7.3 Table 7.15

Similarly, the English Football League prohibit any person or associate being interested in more than one football club at any one time. However, shareholdings of up to 1% are permitted where shares are traded on the London Stock Exchange Official List or Alternative Investment Market, and held solely for investment purposes [Sunderland plc, 1996].

Restrictions exist on dividends payable by clubs on ordinary shares and preference shares. All club companies must include, within their articles of association, provisions restricting dividends payable. This is currently limited to 15% per annum, cumulative for up to 3 years, of the level of paid up share capital [Charlton Athletic plc, 1997].

Upon a return of assets after winding up, shareholders of FA Premier League clubs are only entitled to the paid up amount of their shareholding. Any surplus must be distributed to the FA Benevolent Fund or similar charity approved by the shareholders. In addition, the terms of appointment of any paid executive director of a club must be approved by the FA and the relevant league.

Similar regulations govern Scottish football. These rules attempt to limit the movement of capital out of a football club and avoid the joint ownership of competing organisations.

However, these rules are often circumvented by the formation of a holding company. The football club becomes a wholly owned subsidiary of the holding company. Hence, it is only the subsidiary company that is subject to the restrictions on capital movement and share ownership. The holding company is exempt and trades as a conventional organisation.

It is also argued that football clubs differ from conventional organisations in their relationship with their 'consumers'. The football industry plays a much scrutinised and

culturally influential role in British society. There can be said to be a demand for clubs to be accountable to the communities in which they operate. Football clubs have a large impact on the surrounding locality. For example, large investments in local clubs such as Middlesbrough, Newcastle and Sunderland are viewed as integral to a wider process of economic regeneration in North East England. For example, ICI purchased a stake of Middlesbrough football club as part of a community involvement scheme in response to its significant presence in the region [Guardian, 17/2/98]. The redevelopment of Wolverhampton Wanderers football stadium is included as part of the economic regeneration scheme, Wolverhampton City Challenge. The football club is often a town institution and a focus of the community. It becomes a symbol of supporters social identity. Hence, its societal impact cannot be underestimated.

Many football fans regard themselves as stakeholders in the football club. There is a sense of allegiance that the club belongs to the supporters. The extent of a club's accountability to its fans can be highlighted by the case of Newcastle United. During 1998, two directors were pressured to resign due to their poor relationship with their fans [Guardian, 28/5/98]. Some directors often view their supporters as 'emotional shareholders'⁶. Many believe football clubs should be run in a similar manner to ballet or opera companies, recognising their pseudo-commercial nature. In this way, the football club is viewed as a cultural institution.

As a consequence of the relationship between club and fans, football is an inferior good with a low price elasticity of demand. That is, the demand for tickets is less dependent upon the price of tickets and the income levels of consumers. Hence, many football clubs are accused of exploiting the relationship with their fans by increasing prices on tickets and

⁶Comments by Matthew Harding, director of Chelsea [Guardian 27/11/95]

merchandising. Debate on these issues can be traced to whether football clubs are acknowledged as non-conventional organisations. As conventional organisations, clubs are maximising their brand potential; as non-conventional organisations, they are exploiting their stakeholders.

It can be argued that football clubs have attempted to break the dependence of their financial fortunes on playing success. Clubs derive an increasing proportion of their income from commercial activities. Hence, they are less dependent upon direct fan contribution. This can be said to break down the stakeholder relationship between club and supporters. Thus, clubs are increasingly operating in a manner akin to conventional organisations. However, they are still distinguished by their relationship with the community and supporters.

The success of the team is the basis of income streams generated by the organisation. Clubs can be divided into those who are consistent profit earners, those whose earnings varies with team success and those who are continual loss avoiders [Baldwin, 1982]. However, over the last decade, clubs have sought to become less reliant upon team success. Hence, attempts have been made to diversify the economic base of football clubs. This has resulted in a growth in merchandising operations and the availability of conference and restaurant facilities at club grounds. For example, approximately 44% of Manchester United's turnover in 1994-5 was attributable to merchandising, conference and catering operations rather than traditional revenues such as gate receipts, television and sponsorship [Manchester United plc, 1995]. This can be viewed as an example of how football clubs are assimilating conventional organisations.

The football industry has undergone massive growth over the last decade. The increased television revenues have brought greater prosperity to the clubs. This has been coupled with greater demand after the decline of hooliganism and stadium modernisation. This, in turn, has triggered greater advertising and sponsorship revenues that have further increased the profile of the football industry. Encouraged by high returns from successful teams, many entrepreneurs made significant investments in football clubs.

Gross gate receipts for the English FA Premier League and the Football League rose from £48.83M. in 1985-6 to £211.50M. in 1995-6 [Football Trust, 1998]. This represents a 433% rise over 10 years. The total turnover for the English football industry has grown by 65% between 1990-1 and 1995-6 [ICC Business Ratios, 1992; Deloitte & Touche, 1997].

Part of this increase is attributable to industry inflation but professional football has expanded. However, this expansion has not been equal. The rewards of commercialisation and growth have been gained mostly by the larger clubs. The FA Premier League accounted for 66.9% of turnover in the English football industry. Furthermore, the turnover of the two largest clubs, Manchester United and Newcastle United, is significantly greater than the whole of Football League Divisions 2 and 3 combined [Deloitte & Touche, 1997]. Concerns have been voiced over the increasing gap in financial and playing capabilities between the larger clubs and those in the lower divisions. This can be viewed as a consequence of decreased cross-subsidisation in the industry.

It can be argued that the financial structure and accounting practices of football clubs have been slow in responding to the growing commercialisation of the football industry. Financial reports are frequently not comparable due to the lack of industry norms for accounting policies. This is in contrast to the Netherlands where the governing body, KNVB,

publishes a model version of accounts that all football clubs must follow [Brummans and Langendijk, 1996].

For the period 1995-6, English FA Premier and Football League clubs, in total, made an operating profit of £9.768M. on a turnover of £517.242M. This represents a return of approximately 1.9%. However, 'book' profitability does not reflect the position of the industry. It can be argued that most clubs present their financial reports in a manner that understates their profits. For most clubs, there is a considerable difference between 'book' and market values. This can be illustrated by 5 English clubs floated on the stock market as at 31/8/96. Their combined book value for periods ending May-July 1996 was £109.832M.: their combined market value was 477% higher at £524.4M. [Deloitte & Touche, 1997]. Much of this difference can be attributed to player registration and brand values not recognised in financial reporting.

The incorporation status of football clubs has responded to increased commercialisation. Table 4.1 displays the number of football clubs organised as private and public companies in 1995 compared to the findings of a 1981 survey [Financial Intelligence and Research, 1982]. The organisational status of football clubs has changed rapidly over the last fifteen years. There has been a considerable shift towards incorporation as public limited companies. This reflects the commercialisation and growth in business attitudes in the industry. Many clubs have taken on public status as they hold and seek to generate greater equity funding.

Table 4.1: Incorporation Status of Football Clubs (1981;1995)

Status	1995	1981
Public limited company	27	0
Private limited company	74	100
Private limited company (limited by guarantee)	1	0
Unincorporated	0	1
Total	102	101

Sources: (1981 data) Financial Intelligence and Research [1982] (1995 data) Club Financial Reports

The increased number of public limited companies demonstrates the widened accountability of football clubs. Both the number of stakeholders and the materiality of their activities has increased. However, financial results presented by football clubs in their annual reports can vary tremendously depending on which accounting policies are chosen. The comparison of operating results over time is difficult. It can be argued that financial reporting in the football industry does not meet the demands of its users. Due to the growth and commercialisation of the industry, clubs are under growing pressure to be financially accountable to their shareholders, creditors, fans and potential investors.

a) Funding

Due to the nature of the industry and financial restrictions, few football clubs have provided a return for shareholders. Thus, the industry has had difficulty in attracting long term capital. In addition, directors are often the main shareholders in many football clubs. Control is often concentrated in one family which can lead to the inequitable treatment of non-director shareholders [Financial Intelligence &Research, 1982]. A 1967 report found that 50% of the shares of football clubs were concentrated in the chairman or the board of

directors [Baldwin, 1982]. In addition, one third of clubs contained clauses to prevent the transfer of shares without director approval.

Clubs have traditionally failed to generate sufficient operating profits to be attractive to investors who provide long term capital with which to fund highly specific assets. Directors who control clubs through their shareholding often resist share issues to prevent their control being threatened. Thus, bank funding is frequently the main source of capital.

Bank loans are usually personally guaranteed by directors. Alternatively, loans are made by directors (or their companies) to the club on favourable terms. Until recently, the return to directors has rarely been financial. It is said that directors invest expecting a return in terms of 'psychic income' rather than any financial gain. Psychic income can consist of publicity, contacts or footballing success. Many clubs receive the patronage of wealthy individuals who fund the club in return for a position as a director or president. For example, Blackburn Rovers FC received a £10.25M. loan and issued twelve million ordinary £1 shares to one benefactor who became senior vice-president [Blackburn Rovers Football and Athletic plc, 1995; Touche Ross, 1993]. As an alternative to bank loans, many clubs fund their operations by bank overdraft.

Loan bonds and debentures have been issued by clubs, often targeted solely at supporters. Schemes offer special rights to fans but provide no compulsory repayment. For example, Arsenal FC issued debenture stock to fund the rebuilding of a new stand. Each debenture, priced between £1100 and £1500, was sold with the right to buy a season ticket in the stand for 150 years [Temple, 1991]. The issue raised £16.5M. but was criticised for exploiting supporters. Such schemes are possible only where demand for tickets exceeds supply.

Public share issues were very rare before the 1990's. Shares were usually offered only to the board of directors or existing shareholders. Hence, debt levels in the football industry have traditionally been high. A questionnaire undertaken as part of this study found that debt was the main source of funding for 53% of the football clubs who responded to the survey.

To finance stadia redevelopment, many clubs were forced to increase their gearing in a period of high interest rates (late 1970's and late 1980's). The borrowing ratio for the Football Industry was 0.6 in 1990-91 [ICC Business Ratios, 1992]⁷. In addition, many smaller clubs use bank overdrafts to fund their working capital. Clubs offering bond schemes to supporters have been able to avoid any liability in their financial reports. This is because the schemes often have no compulsory repayment.

The growth of the football industry has led to the possibility of clubs being able to provide attractive returns for shareholders. In addition, increased debt levels have led many clubs to consider equity as an alternative means of funding. Those football club organisations listed on the London Stock Exchange, either on the Official List or Alternative Investment Market as at 31 December 1997 are shown in Table 4.2.

⁷borrowing ratio = debt / total net assets

Table 4.2: Listed Football Companies as at 31.12.97

Club	When listed	Where listed	Price at 31/12/97 £ ⁸	Market Capitalisation 31/12/97 £M.
Arsenal	5.95	OFEX	2700.00	151.20
Aston Villa	7.5.97	Official 1	7.175	82.15
Birmingham City	7.3.97	AIM	0.365	18.25
Bolton Wanderers (Burnden Leisure)	28.4.97	Official 1	0.265	32.59
Celtic	29.9.95	AIM	245.00	71.05
Charlton Athletic	21.3.97	AIM	0.515	11.26
Chelsea (Chelsea Village)	29.3.96	AIM	1.15	137.31
Heart of Midlothian	19.5.97	Official 1	1.025	10.37
Leeds United (Caspian Group)	2.8.96	Official 1	0.2375	25.92
Leicester City	24.10.97	Official 1	0.605	6.05
Manchester United	6.91	Official 1	1.58	410.50
Millwall (Millwall Holdings)	10.89	Official 1	0.0113	3.87
Newcastle United	2.4.97	Official 1	0.945	135.36
Nottingham Forest	10.10.97	Official 1	0.515	23.38
Preston North End	26.10.95	AIM	4.45	8.95
Queens Park Rangers (Loftus Road)	18.11.96	AIM	0.315	12.59

⁸ OFEX prices as at 1240 on 31/12/97; Other prices as at close 31/12/97

Rangers	5.95	OFEX	5.79	200.72
Sheffield United	16.1.97	Officia l	0.505	25.03
Southampton (Southampton Leisure)	14.1.97	Officia l	0.76	20.66
Sunderland	24.12.96	Officia l	3.45	28.12
Tottenham Hotspur	10.83	Officia l	0.755	76.03
West Bromwich Albion	3.1.97	AIM	145.00	10.62

Sources: Financial Times 2/1/98 Guardian 1/1/98 Extel Company Research 6/1/98

The first club to be listed on the London Stock Exchange was Tottenham Hotspur in 1983. They were followed by Millwall in 1989 and Manchester United in 1991. It was not until 1995 when the continued growth attracted football clubs to the market. Between the end of the 1994-5 season and the start of the 1996-7 season, 15 clubs floated shares on the London Stock Exchange. Initially, shares performed very well, attracting considerable public and institutional interest. The market value of Tottenham Hotspur and Manchester United increased by 179% and 241%, respectively, in 1996 [Feld, 1997]. However, in 1997, share prices fell after future revenue estimates were said to be overstated. A 1997 report by Coopers and Lybrand claimed that the football club equity market was overvalued by £1B. [Horton, 1997]. This was particularly true of revenue estimates associated with the introduction of pay per view television. Viewers would pay directly for each live game viewed on television, effectively increasing the capacity of the stadium. This could lead to large increases in the match receipts of the larger clubs where demand exceeds supply. However, the ease of implementing the new technology and increased revenue estimates were over-optimistic.

Other football clubs were listed on OFEX, an unregulated trading facility for share dealing in unquoted companies. It requires little financial disclosure and provides an alternative to a full public listing.

Most football stocks are still targeted at supporters whose return is viewed as emotional rather than financial. Where financial returns are demanded, such investments provide potential capital gain rather than dividend growth.. However, the larger clubs who remain permanently in the top division are now accepted as sound investments by the City institutions. The economic base of such clubs is used to exploit the brand value of the football team in question. For example, Manchester United is a FTSE 250 company whose shares are held by many of the larger institutional funds.

b) Income

The main income streams of football clubs have changed with commercialisation. Traditionally, the main source of income for football clubs has been gate receipts. Admission charges have been increasing over the last forty years at a rate higher than increases in the general price level. This has compensated for a significant fall in post war attendance's at football matches. Between 1958-9 and 1981-2, football league attendance's fell by 40.5%. During the same period, gate receipts rose by 677.7% despite an increase in the general price level of 540.8% [Football League, 1982]. This increase is partly attributed to the costs of improving facilities at football grounds during this period, particularly the move from standing to seating. However, prices have risen to take advantage of the growing demand for football and to finance increases in wages and salaries.

For the English football industry, gate receipts and season ticket income made up approximately 42% of total income for the period 1995-6 [Deloitte & Touche, 1997]. This proportion is lower for the larger clubs who have sought to supplement their income streams from non-footballing areas.

Earnings from income sharing agreements vary from club to club. The sale of broadcasting rights is the most lucrative agreement. For FA Premier League clubs, 50% of the TV contract is a 'basic award' shared between all members; half a basic award being allocated to clubs relegated from the league in the previous 2 seasons. A 'TV award' of 25% is allocated based on the level of television coverage. The remaining 25% is a 'ladder award' based upon final league position.

The total contract for English Football League clubs is divided between the divisions; 75% is allocated to Division 1, 18% is allocated to Division 2 and 7% is allocated to Division 3. A similar arrangement of 'awards' exists to that used in the FA Premier League. Television rights made up approximately 15% of the total income earned by the English football industry.

Income sharing agreements also exist on gate receipts. These agreements often comprise a significant portion of the total earnings of smaller clubs. For English Football League clubs, a 3% levy exists on the season ticket sales and gate receipts from league matches. However, no such arrangement is found in the FA Premier League or Scottish Football League. A levy usually exists in cup competitions; this is normally about 10%. The levy is distributed via a basic award, to all clubs competing in the competition, and a ladder award dependent upon success in the competition.

Sponsorship and advertising linked to players, clubs, grounds and clothing is a regular source of income for football clubs. Sponsorship of league and cup competitions can also significantly increase the prize money available.

The FA Premier League is currently sponsored by Bass Breweries to the sum of £3M. per annum. However, a new deal has been agreed worth £36M. over 4 years. The English Football League receives £5.25M. over 3 years in a sponsorship deal with the Nationwide Building Society [Sheffield Wednesday Football Club plc, 1997]. Income is allocated via a basic award and a ladder award.

Another source of income, significant for smaller clubs, is donations. Regular donations are raised by supporters clubs. A popular and significant sum is derived from club lotteries, raffles, scratchcards and other fund-raising activities. However, many smaller clubs have expressed concern about competition from the National Lottery decreasing the level of donations generated.

Many clubs have facilities such as conference suites, bars and restaurants to provide additional income. Executive boxes earn higher profit margins per spectator. Club shops usually sell exclusive merchandising at the ground, seeking to generate income on the branded nature of the football club. The larger clubs often have several superstores selling branded items as diverse as clothes, bicycles and food. For example, Manchester United, have opened 6 shops in Thailand and one in Hong Kong [Guardian, 25/7/97]. Indeed, Manchester United have identified the revenue generating potential of their brand logo by recognising the sale of brand licensing rights as intangible assets. To combat the seasonal nature of gate

receipts, many clubs use their grounds for exhibitions and concerts to provide cash flow in the off season.

Income streams from sponsorship, advertising and income sharing agreements are added to turnover, due to their recurring nature. Donations from supporters clubs, being classified as non-commercial, are credited to the profit and loss account.

In addition to the sources listed above, income can be earned from selling player registrations. Many football clubs have also received grant income from the Football Trust to aid stadia redevelopment. Both these issues are explored later in this chapter.

c) Expenditure

The central item of recurring expenditure for football clubs is wages and salaries. Other non-recurring payments include player registration purchases and stadia improvements.

Wages and salaries remain the main outflow at football clubs. However, with the influx of money from television rights, wages have increased sharply over the past 15 years. Members of the FA Premier League and the English Football League paid £298M. over the period 1995-6 [Deloitte & Touche, 1997]. This represents 58% of aggregate turnover. This is not surprising considering that human resources are the central assets of football clubs. Football is a labour intensive industry with one main factor of production. Wages, rent payments to utilise human resources, are expected to be significant. P60 earnings to players rose by approximately 70% between 1992-3 and 1995-6 [Deloitte & Touche, 1997]. This is indicative of significant wage inflation.

Reductions in wage controls and changes in the transfer system since the 1960's have put players in an increasingly stronger bargaining position. The demand for the most talented

players outstrips supply. Clubs have more money from increased television revenues. Hence, premiums payable for the most talented players can be more easily exploited, particularly after the introduction of agents. If one club cannot meet wage demands, a rival club can afford to. This has led to the high wage inflation.

The role of agents has only recently been recognised by the football authorities under a licensing system. Previously, agents could not be officially paid to fix up transfer deals and negotiate salaries. However, agents acting unofficially, instigate and set up lucrative transfer packages. This occasionally involved paying the club manager a 'bung' to persuade the club to pay a transfer fee, a proportion of which would be paid to the agent under false invoices [Daily Telegraph, 20/9/97]. This encouraged a 'cash culture' in many clubs with its associated lack of accountability.

Tax payments constitute a small percentage of football club expenditure. Corporation tax is rarely paid due to the low taxable profits of football clubs. For example, only 15 clubs in the English football industry incurred a tax liability in the 1995-6 period. Clubs which are profitable can usually set any liability against taxable losses from previous years. This is due to the large swings in reported profits which are usually dependent upon transfer dealings. Eleven clubs in the English football industry claimed tax credits in the period 1995-6 when they reported high pre-tax losses after paying corporation tax in prior periods. Football club companies can be used as part of a group in order to surrender their tax losses to other related companies and so reduce the total tax liability of the group [Deloitte & Touche, 1997].

More significant tax expenditure comes from PAYE and National Insurance Contributions, payable on employees (players) wages. A large VAT liability is also payable on gate receipts and season tickets.

Other items of recurring expenditure include ground maintenance, police and travel costs. However, these payments are insignificant in comparison to the amount spent upon wages and salaries. For example, the amount spent upon police and stewarding by all clubs in the FA Premier League in 1995-6 was £6.99M. [Football Trust, 1998]. The amount spent on wages by one of its members, Tottenham Hotspur, for the period ending 1996 was £8.24M. [Tottenham Hotspur plc, 1996].

4.3 Transfer Fees

The single greatest influence on the profits and losses of a football club are transfer fees. Depending upon the level of transfer activity during a season, income can vary greatly from period to period.

The transfer fee is the cost of purchasing a football player's registration. It represents compensation to the selling club for the loss of a players services over the unexpired term of their contract. It commonly consists of a core fee and a number of contingent payments. For lesser experienced players, whose worth is unknown, contingent payments are the norm. Contingent payments usually relate to sums payable if the player completes a specified number of appearances. Alternatively, they can be based upon whether the player receives international recognition or aids the buying team to achieve promotion or avoid relegation. In the case of lesser experienced players, it is also common to pay the club from whom the registration was purchased a percentage of any proceeds from the future sale of the registration.

The impact of transfer fees on football club companies is highly significant. The average FA Premier League club spends approximately 30% of its turnover on transfer fees [Deloitte & Touche, 1997]. Player registration assets, where disclosed, constitute a significant portion of the clubs net worth. For example, player registrations account for 53% of the reported net assets of Sheffield United for the period ending 1995 [Sheffield United plc, 1995].

Transfer fees have increased rapidly over the last ten years. In 1990-1, transfer fees between English professional clubs totalled £46.03M. In 1995-6, £139.6M. was paid representing a 303% increase over five years [Football Trust, 1996; Deloitte & Touche, 1997]. Total expenditure on purchasing player registrations, both from inside and outside the English football industry, is estimated at £247M. for 1995-6 [Deloitte & Touche, 1997]. This represents approximately 48% of total turnover. Hence, these have a considerable impact on football club finances.

A minority of football clubs gain large surpluses on the transfer market. This is usually obtained by pursuing a policy of developing a strong youth development system and promoting young 'home-grown' players instead of purchasing players on the transfer market. If the young players establish themselves in the first team at the club, large amounts can be earned from selling their registrations on the transfer market. This method is often used by smaller clubs as a means of survival. However, some larger clubs pursue a similar policy such as Nottingham Forest and the Dutch club, Ajax. Ajax reputedly earned £16M. profit in the transfer market over the period 1992-1995, from selling players developed through their highly acclaimed youth system [Touche Ross, 1995].

Transfer fees payable are deductible from taxable income. Thus, it is common practice to reduce any tax liability by purchasing registrations, where taxable income exists, towards the end of the accounting period. Hence, taxable profits are converted into non-taxable assets. This strategy results in few football clubs facing a corporation tax liability.

Due to the impact of transfer fees on the profit and loss account, several clubs pay transfer fees out of a special reserve that is funded by non-core profits. Revenue from matches which are not guaranteed (those above the first round of cup competitions) and transfer fees receivable are transferred to a special reserve. Thus, the purchase and sale of player registrations does not directly affect the reported earnings of the club. This practice can smooth the reported earnings of a football club. Alternatively, many clubs capitalise the transfer fee, recognising it as a payment to secure a player registration asset.

4.4 Signing-on Fees

Signing-on fees are payments made to players to induce them to sign a contract with the club. By signing a contract, the player allows the club to use their registration to generate revenue.

Transfer fees are payments exchanged between different football clubs to transfer the ownership of a player registration. Once clubs have agreed a fee to exchange the registration, the buying club must offer terms of employment acceptable to the player. In practice, clubs announce a price for a player registration. Thus, any club meeting this fee can buy the player registration. However, for the player to actually play football for the buying club, personal terms and conditions of employment must be agreed. With several clubs usually meeting the transfer fee, the player will select the club offering the most advantageous personal terms and

conditions. A crucial element of these terms and conditions is the signing-on fee or 'loyalty payment'. It usually consists of a large monetary amount payable in instalments over the length of a players' contract. It is paid to enable the club to hold the player's registration.

The level of signing-on fees payable are determined when the player signs a new contract. This may be after the player registration has been transferred from another club or where an existing contract has been renegotiated.

As a result of the Bosman Ruling, players are free agents at the end of their contracts. Thus, the number of free agents has increased rapidly. As no transfer fee is payable, the player will choose to transfer their registration to the club that offers the best terms and conditions. In this case, the signing-on fee can be viewed as a pseudo-transfer fee.

There are strict rules regarding the tax deductibility of signing-on fees. Tax relief is only given where fees are paid within nine months of the end of the period in which they are charged to the accounts. Football authority rules encourage signing-on fees to be paid in equal annual instalments.

The payment and timing of signing-on fees is often designed to reduce any potential tax liability. Signing-on fees are growing in line with expanded commercialisation and free agency. Hence, the materiality of signing-on fees in football club financial reports is expected to increase.

4.5 Stadium Redevelopment

The majority of football clubs in the UK own rather than rent their stadiums. Approximately 68% of clubs in the FA Premier League, English Football League and Scottish Premier League own the freehold to their stadium. The remainder rent their stadium or share

with other football clubs. The majority of owned stadia were built in the early twentieth century. In addition, the post war decline of the football industry led to a significant investment deficit [Taylor, 1991]. Hence, many clubs have been forced to initiate building programmes to redevelop ageing stadia.

This was accelerated after the first Safety of Sports Grounds Act was passed in 1975 following the Ibrox disaster of 1972, in which 66 spectators were killed. The need for redevelopment was further enforced with greater power in the report issued by Lord Justice Taylor in January 1990 following the Hillsborough disaster, in which 95 spectators died. This required that football grounds must satisfy the requirements of the Football Licensing Authority. It stipulated that all clubs in the FA Premier League and Division One of the Football League would have all seater stadia by 1994-5. In addition, other professional clubs were required to comply by 1999-2000.

To assist the rebuilding work, capital grants were made available from the Football Trust from 1975. The extent and availability of grants was increased in 1990 to help meet the requirements of the Taylor Report. This was undertaken by a 2.5% reduction in the pool betting duty in the 1990 budget statement. Since 1975, safety and improvement grants to clubs in the FA Premier League, English Football League and Scottish Football League has equalled £73.60M. [Football Trust, 1998]. An estimated £417M. was spent on stadia redevelopment by English clubs between season 1991-2 and 1995-6 [Deloitte & Touche, 1997].

Coupled with the availability of public funding through capital grants, spending on stadia redevelopment has had an influential impact on the financial reports of football clubs in recent years.

Summary

It has been shown that the structure of the football industry is heavily influenced by the nature of the product, the football match. This structure is characterised by collective action which impacts on organisational finances. The financing of the industry has been subject to change in response to the recent growth of professional football, precipitated by the introduction of competition for broadcasting rights.

It is argued that a need exists for tighter financial regulation and accountability. In examining the football industry, clubs differ in how they have responded to recent growth and commercialisation. Many are still organised on a similar basis to that which existed when they were set up in the early part of this century. However, many activities of professional football clubs are similar to conventional businesses but regulation (and for some, the financial structure) is still geared towards small, amateur sports clubs.

Three particular material transactions of football clubs were examined; transfer fees, signing-on fees and stadia redevelopment. This, and the structure and financing of the industry, provide information which is relevant to the hypotheses explaining the choice of accounting policies, particularly with reference to the applicability of HRA. Other accounting policies, including recognising the sale of copyright licenses as intangible assets are not dealt with in this thesis due to their immateriality and unique nature.

CHAPTER FIVE

ACCOUNTING POLICIES IN THE FOOTBALL INDUSTRY

Introduction

Chapter 4 identified the structural changes and sources of growth in the football industry that have led to increasing commercialisation. Particular attention was given to three material types of transactions; transfer fees, signing-on fees and stadia redevelopment. This chapter examines the accounting policies with respect to transfer fees and player registrations, signing-on fees, capital grants and stadia depreciation. It starts by describing the types of accounting policies employed by football clubs and then goes on to report the results of a survey into the policies used to account for these transactions. Finally, the accounting policies identified are classified according to their effects on reported income and asset values in preparation for testing the hypotheses in Chapter 6.

In order to assess accounting policies in the UK football industry, a sample of financial reports were examined. The sample consists of all football clubs in the English FA Premier League, the English Football League Division One, Division Two and Division Three and the Scottish Premier League. This sample was chosen to represent all fully professional football clubs operating in the UK. Clubs in the lower leagues in England, Scotland and Northern Ireland have been omitted because their activities tend to operate on non-professional basis. The sample size is 102.

The data set consists of financial reports with a year ending in 1995. Initially, a letter was sent to clubs requesting these reports. Where no response was given, follow-up telephone

calls were made. Thirty-eight clubs were unable to provide financial reports for 1995. These were obtained from Companies House.

The audited financial reports of Exeter City Football Club for both 1995 and 1994 were unavailable due to the club being in administration. Thus, the financial reports for 1993 were used. The reports of six clubs related to periods other than twelve months.

5.1 Accounting for Player Registrations and Transfer Fees

Accounting for transfer fees forms the most controversial area in football industry financial reporting. The accounting treatment of transfer fees depends upon whether player registrations are recognised as assets. Accounting standards are ambiguous on this point. Where registrations are viewed as assets, transfer fees are regarded as the acquisition costs. Where registrations are not viewed as assets, transfer fees are treated as expenses of the period. Hence, the debate centres on whether or not player registrations should be subject to a Human Resource Accounting type approach.

The conventional and traditional treatment of transfer fees is to account for them in the profit and loss account of the period in which the registration changed hands. Transfer fees payable are charged as an expense to the profit and loss account. Transfer fees receivable are credited to the profit and loss account. The transaction is recognised in the period in which the player, the selling club and the buying club have signed a contract transferring the player registration to the buying club. No value for player registrations is carried on the balance sheet. This is known as an expense policy.

The disclosure of transfer fees paid and received in the profit and loss account varies considerably. It is common for transfer fees not to be disclosed separately but included as part

of turnover or operating expenses. Some clubs disclose transfer fees in the trading part of the profit and loss account, which thus affects the gross profit. Others include transfer fees before operating profit with no separate disclosure. These methods reflect the company's belief that the buying and selling of player registrations is a normal trading activity.

An alternative method is to disclose transfer fees separately after gross profit. Transfer fees paid are often treated as an exceptional expense for the period. This reflects the view of some clubs whose transfer fee transactions are divorced from the underlying trading activity of the company. Transfer fees may be disclosed in such a manner so that they do not affect perceptions of trading performance. For example, they can be used to 'smooth' income. This is because transfer fees have the greatest impact on reported profit.

The recognition approach which treats transfer fees as assets adopts a HRA perspective. The costs of purchasing and possibly also generating player registrations are capitalised and carried on the balance sheet as assets. Two popular variations of this policy can be identified.

The most common recognition policy is the capitalisation of purchased player registrations. The transfer fee paid is recognised as a player registration intangible asset. The asset is amortised over the length of the respective players contract to an estimated residual value. The residual value is derived from UEFA regulations that assign a value to a player registration in transfer disputes. The regulations employ a multiplier to the remuneration of the player based upon their age. Provisions are made for any permanent diminution in value below the amortised value, such as through injury or loss of 'form'. Transfer fees receivable are set against the book value of the player registration and the difference treated as a gain or loss on disposal in the profit and loss account. This was the first recognition policy used,

being adopted by Tottenham Hotspur in 1989. No asset value is attributed to non-purchased (home grown) player registrations held by the club.

An alternative recognition policy attributes asset values to all player registrations. All registrations are valued and recognised as assets on the balance sheet. Transfer fees paid are capitalised and added to the player registration account. Changes in the carrying value of both internally generated and purchased player registrations are taken to a revaluation reserve. This policy is consistent with a physical concept of capital maintenance; it seeks to maintain the revenue generating ability of the player registrations held. This is opposed to a capitalisation policy which is consistent with a money capital maintenance concept [Brummans and Langendijk, 1996]. Transfer fees received are set against the carrying value of the associated player registration. Any profit or loss on sale is shown in the profit and loss account.

The industry practice is uniform in respect to contingent elements of transfer fees. Payments or receipts dependent upon the performance of a team or player are not recognised until the events crystallising such payments/receipts have taken place. Accounting policies for transfer fees and player registrations from the 102 sampled clubs are displayed in Table 5.1. The policies are classified on the criteria listed above.

Table 5.1: Transfer Fee Accounting Policies for period ending 1995

Policy	Clubs
Charge to profit & loss account as operating expense in period registration is signed	45
Charge to profit & loss account as exceptional expense in period registration is signed	41
Recognise and capitalise purchased player registrations as assets and amortise over length of player's contract	8
Recognise all player registrations as assets with movements in value going through the revaluation reserve	8
Total	102

Source: Club Financial Reports

Expense policies represent the most common treatment; approximately 84% of clubs adopted this approach. The recognition approach is justified on the grounds that it more accurately represents the financial position of the club. However, clubs use a variety of recognition treatments that are in some cases unique.

Two football club companies, Bournemouth and Swansea City, recognise all player registrations as a current asset investment⁹. Changes in the value of player registrations were dealt with in a revaluation reserve. The carrying value was revalued annually by the directors. Notes to the 1995 statutory accounts of one club stated,

"The directors valuation as professionally advised by the Manager represents a best estimate of current cost, and this treatment is in accordance with the alternative accounting rules allowed for current asset investments under Schedule 4 of the Companies Act 1985."

This policy lacks any sound theoretical basis. Recognition as a current asset implies that the benefits from purchasing player registrations will be exhausted during the accounting period. Annual revaluation is unnecessary as benefits will not extend beyond the current period. Hence, the difference between acquisition cost and current cost will be minimal. The valuation procedure also allows significant freedom for assigning carrying value.

Another club, Bristol Rovers, deals with all transfer fees for the period in the profit and loss account but recognises the value of all player registrations as intangible fixed assets on the balance sheet with no depreciation¹⁰. The separation of the transfer fee transaction and the creation of a player registration asset is questionable. A transfer fee is paid to transfer the ownership of a player registration. This policy writes off the fee as an expense of the period whilst separately and simultaneously creating a player registration asset. The player registration is the consideration gained from payment of the transfer fee. To separate this transaction appears to be contrary to generally accepted accounting practice.

Swindon Town also employs a hybrid of expense and recognition policies¹¹. Transfer fees receivable and payable are treated as an exceptional expense of the period. However, the purchased cost of current player registrations is recognised as a 'dangling debit' from the profit and loss account reserve. This is viewed as a method of employing an expense policy whilst disclosing the cost of player registrations in the balance sheet.

⁹ It is classified in the survey as "Recognise all player registrations as assets with movements in value going through the revaluation reserve."

¹⁰ This policy was classified in the survey as "Recognise all player registrations as assets with movements in value going through the revaluation reserve."

¹¹ This policy was classified in the survey as "Charge to profit & loss account as exceptional expense in period registration is signed"

The survey of 1995 accounts reveals a high level of variability in methods of treating transfer fees and player registrations. The change in transfer fee treatments over time is displayed in Table 5.2. Information for the period 1991-4 and 1996 is derived from surveys by Touche Ross [1992-5] and Deloitte & Touche [1997].

Table 5.2: Transfer Fee Accounting Policies 1991-1995 (%)

Policy	1996	1995	1994	1993	1992	1991
Expense	89	84	87	92	83	87
Recognition	11	16	13	8	9	4
Omitted	0	0	0	0	9	9

Sources: Club Financial Reports, Touche Ross [1992-1995], Deloitte & Touche[1997]¹²

An increase in the popularity of recognition policies is apparent up to 1995. This trend may be attributed to the growing awareness of accounting for intangible assets. However, it appears to have been halted in 1996 possibly due to the Bosman Ruling¹³. Clubs find it more difficult to justify the recognition of all player registrations and opt for a more prudent policy in a period of uncertainty over transfer regulations.

Recognition policies are justified on the grounds that they more accurately reflect the financial position of the company. For example, in the Netherlands all clubs are required to capitalise player registrations as part of uniform financial reporting model specified by the national governing body to ensure consistent and useful reporting [Brummans and Langendijk, 1996]. However, alternative explanations may be offered for the use of

¹² Data for 1991-1994 from Touche Ross [1992-1995]. Data for 1996 from Deloitte & Touche [1997]. 1991 & 1992 n=46; top two divisions of English professional league: 1993 & 1994 n=92; all English professional clubs. 1995 n=102. The policy categories have been narrowed in order to ensure comparability with the Touche Ross surveys.

¹³ Refer to Chapter 4; 4.1(b)

recognition policies. It is suggested that management have relative freedom in selecting a policy that will increase their utility.

A high proportion of Scottish clubs were found to employ recognition policies. Four of the ten Scottish clubs in the sample used the same recognition policy; capitalising purchased registrations. This is thought to be attributable to a 'copycat effect': the accounting policy of the influential industry leader, Rangers, may have been imitated by its competitors.

a) Measurement

In recognising player registrations as intangible fixed assets, several measurement bases are used by clubs in the sample set. Hence, there can be great variability in valuations. The clubs, measurement bases and the valuations they place on player registrations are displayed in Table 5.3.

Table 5.3: Measurement Bases for Clubs Employing a Recognition Policy for Transfer Fees

Club	Recognition Policy	Base	Division	Net Book Value £
Bournemouth	all registrations as current assets	director valuation	English Division 2	2,715,000
Swansea City	all registrations as current assets	director valuation	English Division 2	2,018,750
Portsmouth	all registrations as intangible assets	director valuation	English Division 1	7,205,000
Sunderland	all registrations as intangible assets	director valuation	English Division 1	7,033,750
West Bromwich Albion	all registrations as intangible assets	director valuation	English Division 1	4,680,000
Sheffield United	all registrations as intangible assets	management valuation	English Division 1	8,320,000
Bristol Rovers	all registrations as intangible assets	management valuation	English Division 2	4,015,000
Darlington	all registrations as intangible assets	management valuation	English Division 3	980,000
Derby County	purchased registrations as intangible assets	acquisition cost	English Division 1	5,637,604
Northampton Town	purchased registrations as intangible assets	acquisition cost	English Division 3	36,750
Preston North End	purchased registrations as intangible assets	acquisition cost	English Division 3	683,725
Tottenham Hotspur	purchased registrations as intangible assets	acquisition cost	English Premier	15,816,000
Aberdeen	purchased registrations as intangible assets	acquisition cost	Scottish Premier	1,438,800
Celtic	purchased registrations as intangible assets	acquisition cost	Scottish Premier	6,538,000

Heart of Midlothian	purchased registrations as intangible assets	acquisition cost	Scottish Premier	2,275,000
Rangers	purchased registrations as intangible assets	acquisition cost	Scottish Premier	13,470,000

Source: Club Financial Reports

The recognition of purchased registrations through the capitalisation of transfer fees uses acquisition cost as a measurement base. Acquisition cost valuations are objective and verifiable, being traceable to actual transactions. However, except at the acquisition date, they are generally a poor representation of economic value. Nevertheless, this measurement base is subject to a minimum amount of manipulation and can be considered suitable for preparing statutory financial reports given the impact of transfer fees on published accounts.

Clubs recognising all player registrations as assets are less explicit about the measurement base used. Player registrations are assigned a value by either the team manager or the directors¹⁴. Only two clubs, Bournemouth and Swansea City, explicitly disclosed the measurement base used. Directors valuations were an estimate of the current cost of the asset under reference to 'alternative accounting rules' in Schedule 4 of the Companies Act 1985. Both companies recognised player registrations as current asset investments.

The remainder of clubs recognising all registrations as intangible fixed assets are silent about the basis of valuation. It is assumed that use is made of alternative accounting rules. The Companies Act 1985 states that intangible fixed assets are to be carried in the balance sheet at their historical or acquisition cost. In circumstances where historical costs are unascertainable, alternative valuation rules are permitted. Alternative valuation rules allow

¹⁴ The team manager is rarely a director and is not represented by the term, 'management', used in this thesis.

current cost valuations but restrict the use of market values [ASB, 1993b]. Section 33, Schedule 4 of the Companies Act 1985 requires that use of alternative accounting rules be coupled with additional disclosure on the basis of valuation and a comparable value calculated under historical cost rules. This additional information is rarely disclosed in full.

In estimating the value of a player registration, the current cost is likely to be identical to the market value. The current cost of buying a registration offering a given level of footballing ability is the price paid on the transfer market.

Two clubs, Portsmouth and Sheffield United, disclosed that valuations were estimates of present transfer values. Whether this can be interpreted as market value or current cost is unclear. The recognition of player registrations at estimates of market value may be contrary to the provisions laid down in the Companies Act 1985. Clubs may override the requirements of Companies Act where it necessary to show a true and fair view. However, under UITF 7, any override would require disclosure of the particulars of any departure, the reason for departing and its effect upon the accounts [ASB, 1992]. Such disclosure requirements were not included in their accounts. Hence, such a policy, practised by six clubs in their 1995 reports, may be contrary to company legislation. However, any illegality is in form only; market value may also be interpreted as current cost.

Recognition policies have not been accepted by all auditors. The auditors report for Darlington stated that it was unable to verify the valuation placed upon the players. The auditors of Bournemouth 'draw attention' to the policy. However, the report was not qualified in this respect. No other auditors reports made any reference to the transfer fee accounting policy.

The lack of criteria in transfer fee accounting leads to considerable variability in practice. Variability can be said to also allow scope for manipulation. This can be illustrated by comparing the net book values assigned to player registrations for similar clubs. Portsmouth and West Bromwich Albion competed in the same division in the 1994/5 season. The teams finished eighteenth and nineteenth respectively at the close of the season in early May 1995. Valuations of player registrations were made by Portsmouth and West Bromwich Albion at their year end, 31 May 1995. Both teams disclosed a similar number of football players and management¹⁵. However, there was a £2,525,000 difference between the valuations.

This analysis is very crude. However, the disparity of amounts assigned to registrations for teams possessing a similar level of footballing ability provides some indication of the scope for manipulation. This lack of consistency and comparability in transfer fee accounting is detrimental to the usefulness of financial reporting in the football industry.

b) Disclosure of Player Registration Values Outside the Balance Sheet

Independent of their accounting policies for transfer fees, some clubs disclose the value of player registrations in their annual reports outside of the published accounts. Disclosure is usually found in the directors report, chairman's report or the notes to the accounts. Table 5.4 shows the disclosure practices of the clubs in the sample set.

¹⁵ Portsmouth; 54. West Bromwich Albion; 57

Table 5.4: Disclosure of Player Registrations Values in Financial Reports

	Clubs
No disclosure	72
Disclosure outside balance sheet	13
Recognition within the balance sheet	17
Total	102

Source: Club Financial Reports¹⁶

The number of clubs disclosing registration values is less than the number of clubs recognising registrations in the balance sheet. This is surprising. It might be thought that clubs wishing to make public the value of their registrations would choose to disclose them rather than alter their accounting policy from expensing to capitalisation. This is due to the difficulties in measuring player registrations values in a manner acceptable for statutory accounts.

The disclosure of player registrations outside the balance sheet supports the view that these represent significant future economic benefits. Many clubs expressed the opinion that the disclosure of player registrations was necessary to reflect their financial position. Disclosure could be motivated by a desire by management to make public the revenue generating capabilities of the club and thus avoid the club being undervalued. For example, the 1995 annual report of Hibernian football club included a player valuation of £5,400,000 in the directors report. This was followed by a statement claiming that if the valuation been included in the balance sheet, a net liabilities position would have become a net asset position of £4,200,000.

¹⁶ The 'Recognition within the balance sheet' category includes 16 clubs employing a recognition transfer fee policy and 1 club employing a expense policy with player registrations costs disclosed as a dangling debit.

The reports of many clubs not disclosing player registration values contained a 'warning' highlighting that these had not been included in the accounts. Such a statement typically pointed to the considerable value of registrations held. Without quantifying player registrations, attention was thus brought to the impact these would have on the accounts if they were included.

The constraints imposed by company law do not apply to the measurement of player registrations disclosed outside the balance sheet. Hence, greater flexibility is allowed in the valuation procedure. The measurement bases are displayed in Table 5.5.

Table 5.5: Measurement Bases for Disclosure of Player Registration Value outside the Balance Sheet

Measurement	Clubs
Director valuation	7
Insurance value	3
Acquisition cost	3
Total	13

Source: Club Financial Reports

As can be seen, the disclosure of player registrations outside the balance sheet use several measurement bases. The director estimates are estimates of current market value. Clubs disclosing insurance valuations stated that they were not necessarily estimates of current market value. It is thought that estimates of market value are relevant for decision making in an environment unconstrained by financial reporting guidelines. Where no verification or auditing is required, a valuation may provide a useful information component in user decision making.

c) Classification

Several distinct accounting policies can be identified from the above survey. This section analyses the effect of each on reported income and total asset values. Each policy will be classified in order to test the hypotheses that are outlined in the next chapter.

Recognition policies will, in general, increase the value of net assets and short term reported income of a company in comparison to expense policies. In the year of purchase, either no charge or a depreciation charge is made to the profit and loss account depending upon the recognition policy used. This amount is much smaller than the charge that would be made to the profit and loss account if all transfer fees were expensed in the year of purchase. Thus, short term reported income is generally higher. Income will also be less variable. The level of depreciation charge, if any, will influence whether income in subsequent periods will be lower. Where depreciation was charged, it was found to be approximately 10%.

Where transfer fees are not expensed, the balance on the retained profit and loss account reserve is generally higher. This leads to greater equity/shareholder reserves. Similarly, the assets of the company are increased by the recognition value of player registrations. Hence, under recognition policies, the net asset value of the company is generally higher in comparison to expense policies. Recognition of all player registrations will lead to even greater assets and income than recognition of only purchased registrations.

The classification of accounting policies is shown in Table 5.6. The magnitude column shows the order of the asset/income effects. A higher number represents a policy with a greater income and asset decreasing effect.

Table 5.6: Classification of Transfer Fee Accounting Policy Effects

Policy	Classification	Magnitude	Clubs
Charge to profit & loss account as operating expense in period registration is signed	Asset/Income Decreasing	3	45
Charge to profit & loss account as exceptional expense in period registration is signed	Asset/Income Decreasing	3	41
Recognise and capitalise purchased player registrations as assets and amortise over length of player's contract	Asset/Income Increasing	2	8
Recognise all player registrations as assets with movements in value going through the revaluation reserve	Asset/Income Increasing	1	8
		Total	102

Source: Club Financial Reports

These classifications represent the comparable effects on the financial statements of expense and recognition transfer fee policies. Both recognition policies increase the assets and reported income in comparison to the expense policies. No policies were classified as neutral. The 86:0:16 split between asset/income decreasing, neutral and asset/income increasing policies will be used in testing the hypotheses outlined in Chapter 6.

5.2 Accounting for Signing-on Fees

Signing-on fees or loyalty payments are made to players to induce them to sign an employment contract with a football club. When a player reaches the end of their existing contract with a club, signing-on fees can be viewed as pseudo-transfer fees. The amount spent by clubs on signing-on fees has increased rapidly over the last few years. This is due to the

effects of the Bosman ruling where the number of players who are free agents has risen. Thus, the accounting policy adopted for signing-on fees is of greater importance these days due to the increasing materiality of the transactions.

At present, there is no industry norm in accounting for signing-on fees. Accounting policy in this area is developmental and guidance from accounting standards is limited. Signing-on fees have only been recognised in financial reporting since the 1980's. As a result, many clubs in the sample under examination did not disclose their policy. Also, many of the smaller football clubs did not pay enough in signing-on fees to account for them separately. In such cases, they were generally included as part of wages and salaries.

Signing-on fees are agreed when the player signs a contract with the club holding his/her registration. The accounting policies differ with respect to the period in which the fees are charged to the profit and loss account. There are strict rules regarding the tax deductibility of signing-on fees. Tax relief is only given where fees are paid within nine months of the end of the period in which they are charged to the accounts. Hence, accounting policies can be chosen to recognise signing-on fees in the accounting period that maximises tax relief. This may explain the multitude of policies used.

Fees dependent upon events such as appearances are not considered in this analysis; such fees are recognised when the events crystallising payment have taken place. The bulk of signing-on fees are contingent only upon the player staying with the club over the length of his/her contract. Five separate policies can be identified. These are described below:

The immediate write off method charges all fees payable over a contract to the profit and loss account in the period in which the contract is signed. This conservative method recognises signing-on fees as a part of a transfer fee expense.

The cash method is where signing-on fees are charged to the profit and loss account in the period in which payments are actually made. This basis treats signing-on fees as an addition to wages and salaries.

The contract basis charges fees to the profit and loss account in the period in which payments become due. The due dates are set out in the terms of the contract. They may differ from the period in which the payments are actually made. This distinguishes the contracts basis from the cash basis. However, the two policies are identical where signing-on fees are paid on the dates specified in the contract. This is normal practice in the football industry.

No liability is created in the accounts in respect of fees due in future periods. Some clubs include these sums as a contingent liability but it is disclosed off the balance sheet.

The accruals method charges a portion of fees to the profit and loss account in the period in which the contract is signed. The remainder of fees payable are treated as deferred expenses and charged to the profit and loss account over the remainder of the contract. This is similar to the cash and contracts methods except that contractual fees payable in future periods are also recognised as a liability in the balance sheet rather than being unrecognised or contingent liabilities. This is similar to the accounting treatment of hire purchase interest.

The prepayments method is where signing-on fees payable during the contract are recognised as prepayments in the period in which the contract is signed. Prepayments are either shown as current assets or part of player registration intangible assets. They will be

amortised over the length of the players contract. This policy is usually employed in tandem with a recognition policy for transfer fees.

A variation on this policy was employed by one club, Sunderland. Contractual fees payable were recognised as prepayments. However, no amortisation charge was made in the first year. Hence, fees payable were amortised over the remaining periods of the player's contract. The accounting policies for signing-on fees employed by clubs in the sample set are displayed in Table 5.7.

Table 5.7: Signing-On Fee Accounting Policies for the period ending 1995

Policy	Clubs
Immediate write off	15
Cash method	31
Contract method	27
Accruals method	4
Prepayments method	6
Not applicable	16
Omitted	3
Total	102

Source: Club Financial Reports

Accounting policies differ in the identification of signing-on fees as a liability or an operating expense similar to wages and salaries. FRS 5, Reporting the Substance of Transactions, provides little guidance; signing-on fees only constitute a liability where there is an obligation to pay [ASB, 1994a]. However, clubs are only obliged to pay signing-on fees contracted for if the player registration is not sold. The cash and contract methods are likely to be identical in the majority of football clubs. This is the most popular policy in use. It is also the most likely to create potential off- balance sheet liabilities. Clubs are liable to pay

specified fees in the periods after the contract is signed. However, these liabilities are rarely disclosed as contingencies by clubs employing a cash or contract method. The immediate write off, accruals and prepayment methods are more informative in this respect.

The policies used in accounting for signing-on fees can be analysed over time. Table 5.8 compares this survey of 1995 annual reports to a survey covering 1991 reports by Touche Ross [1992].

Table 5.8: Signing-On Fee Accounting Policies in 1991 and 1995 (%)

Policy	1995	1991
Immediate write off	15	0
Cash method	30	15
Contract method	26	20
Accruals method	4	7
Prepayments method	6	0
Not applicable / Omitted	19	59

Sources Club Financial Reports, Touche Ross [1992]¹⁷

The emergence of prepayment policies can be attributed to the rise in popularity of the recognition policy with regard to transfer fees. Prepayment policies treat signing-on fees in a similar way to transfer fees; as the acquisition cost of a player registration asset. The costs are matched with the revenues expected to flow from the asset over the expected life of the asset, the contractual period.

The frequency of the immediate write off and cash policies has increased in 1995. This is considered to be attributable to the increased disclosure of accounting policies in the

¹⁷ Data for 1991 from Touche Ross [1992]. 1991; n=46; top two divisions of English professional league

1995 survey. This may be a reflection of the commercialisation of football which places financial reporting under greater scrutiny.

a) Classification

The effect of each signing-on fee policy on reported income and total asset values are analysed below in order to test the hypotheses on accounting policy selection in the next chapter.

The immediate write off method assigns all fees payable to the profit and loss account in the initial contracting period. Thus, short term reported income will be considerably lower than for other alternative accounting policies.

The remaining methods have a relatively similar effect on reported income in comparison to the immediate write off method. All will charge a lesser amount to the profit and loss account in the initial period and greater amounts in later periods. Thus, short term reported income using these methods is likely to be higher. Hence, long term reported income is likely to be lower than the immediate write off method. The difference between the effects of signing-on fee policies on reported income essentially relates to timing differences.

The effect on reserves of the cash, contract, prepayment and accruals methods are similar. The retained profit and loss reserve will be slightly higher in the short term and slightly lower in the long term compared to the immediate write off method.

The prepayments method will increase net assets in the short term in comparison to the other policies. This will boost current assets or intangible assets until the prepayment is depreciated over the contract. The accruals method will decrease net assets in the short term

through an increase in the deferred expense account when compared to the other signing-on fee policies. It will be carried on the balance sheet in short term creditors until all charges are made to the profit and loss account over the contract.

The accruals and prepayments methods will also lead to less variability in reported income in comparison to other methods. A similar amount in respect of signing-on fees would be charged each year. This would, *ceteris paribus*, cause reported income to be less volatile. The classification and magnitude of the effects of the policies is shown in Table 5.9.

Table 5.9: Classification of Signing-on Fee Accounting Policy Effects

Policy	Classification	Magnitude	Clubs
Immediate write off	Asset/Income Decreasing	4	15
Accruals method	Asset/Income Decreasing	3	4
Contract method	Neutral	2	27
Cash method	Neutral	2	31
Prepayments method	Asset/Income Increasing	1	6
Not applicable / Omitted	Neutral		19
		Total	102

Source: Club Financial Reports

The immediate write off policy is classified as decreasing as it reports lower income in comparison with the other policies. The accruals method is classified as decreasing as it carries a signing-on fee liability in the balance sheet. The prepayments method is classified as increasing as it carries a signing-on fee asset in the balance sheet. The cash and contract methods have effects in between these extremes. Hence, they are classified as neutral. The

19:77:6 split will be used in hypothesis testing; 19 clubs are classified as asset/income decreasing, 77 clubs are classified as neutral and 6 clubs are classified as asset/income increasing.

5.3 Capital Grants

The Taylor Report required football clubs to update and repair existing stadiums and build new stadia. To assist the rebuilding work, capital grants were available from the Football Trust. In the period covered by this study, capital grants were a common and material feature of the financial statements. The accounting policies for capital grants, accounting policies were subject to less variability than other policies. Two general approaches were identified; a matching policy as described in SSAP 4 and a deduction policy.

SSAP 4, Government Grants, states that grants should be recognised in the profit and loss account so as to match them with the expenditure to which they are intended to contribute. Where grants are made as a contribution towards specific expenditure on fixed assets, they should be recognised over the useful economic life of the related asset [ASC, 1990]. Thus, the proportion of the grant charged per period equals the hypothesised depreciation rate on the asset. The remaining balance is treated as deferred income in long term creditors (creditors falling due after 12 months).

A modified SSAP 4 approach is used by a number of clubs. Under this option, deferred grant income is placed in reserves rather than in creditors.

The deduction policy deducts the grant from the purchase cost of the related asset. The policy is permitted in principle by SSAP 4. However, the standard states that this policy

is not available to companies governed by the accounting and reporting requirements of the Companies Act 1985 [ASC, 1990]. The policy contradicts paragraph 17, Schedule 4 of the Act which requires any fixed asset to be included in the balance sheet at its purchase price or production cost subject to any provision for depreciation or permanent diminution in value. Despite its apparent contradiction of company law, the deduction policy is widely used in the football industry. References to the overriding principle of a true and fair view are rarely made.

One club, Celtic, disclosed that it employed a SSAP 4 policy but received capital grants relating to assets for which no provision for depreciation was made. In this case, the capital grant was deducted from the production cost of the related asset. As the majority of grants related to assets which were not depreciated, the club was classified as employing a deduction policy. The capital grant accounting policies used by football clubs in the survey are displayed in Table 5.10.

Table 5.10: Capital Grants Accounting Policies for period ending 1995

Policy	Clubs
Take to deferred income in creditors and match with depreciation on related asset in profit & loss account (SSAP 4)	58
Deduct from cost of related asset	20
Take to reserves and match with depreciation on related asset in profit & loss account	10
Not applicable	14
Total	102

Source: Club Financial Reports

As expected, the majority of clubs use the SSAP 4 policy. However, the number of clubs employing a deduction policy is surprising given that this appears to be contrary to company law. Clubs who had received no capital grants in their 1995 reports are classed as 'not applicable'. Four clubs omitted their accounting policy with respect to grants. It is assumed that they also received no capital grants during this period.

a) Classification

The effect of capital grant accounting policies on reported income and total asset values are analysed below. The deduction method reduces the fixed asset values in comparison to the SSAP 4 method. Depreciation charges are based on deducted asset costs and will be lower than depreciation charges under a SSAP 4 approach. Ceteris paribus, the reported income of a club adopting a deduction policy will be higher than if it used a SSAP 4 policy.

Under a SSAP 4 policy, fixed assets will be higher as these are shown at their full production cost less depreciation. However, the part of the grant not matched with depreciation will be shown in creditors due after 12 months. Thus, the net asset value of both policies will be similar. The SSAP 4 policy has higher assets and higher liabilities than the deduction policy. The increased depreciation charges for the SSAP 4 policy will result in a lower retained profit and loss reserve in the long term.

The net asset effects of both policies are thus similar. The main difference between the effect of these policies on reported results is that short term income will be higher under the deduction policy.

The effect of the modified SSAP 4 option where deferred income is shown in reserves rather than in creditors is slightly different. Reported income will be lower in

comparison to the deduction policy due to increased depreciation charges. Again, fixed assets will be higher but long term creditors will be identical. Reserves will be greater by the amount of deferred income. Hence, net asset values will be higher than the deduction method.

The same effect applies in comparison with the normal SSAP 4 option. Long term creditors will be lower under the modified SSAP 4 policy as there will be no deferred grant account. Reserves will be higher under the modified SSAP 4 policy, boosted by deferred grant income. Hence, net asset values will be higher. The classification of the effects of capital grant policy is shown in Table 5.11.

Table 5.11: Classification of Capital Grant Accounting Policy Effects

Policy	Classification	Magnitude	Clubs
Take to deferred income in creditors and match with depreciation on related asset in profit & loss account (SSAP 4)	Asset/Income Decreasing	3	58
Take to reserves and match with depreciation on related asset in profit & loss account	Neutral	2	10
Deduct from cost of related asset	Asset/Income Increasing	1	20
Not applicable	Neutral		14
		Total	102

Source: Club Financial Reports

The modified SSAP 4 policy is classed as neutral due to its effect on the balance sheet. Therefore, a 58:24:20 split will be used in hypothesis testing.

5.4 Depreciation of Stadia

Apart from player registrations, the greatest potential asset for the majority of football clubs is the football stadium. The main difference in accounting treatment in this area is whether to make a provision for depreciation. The impact of depreciation policy has increased after the recent redevelopment and rebuilding of many stadia since the Taylor report.

SSAP 12 requires that provision be made for depreciation of fixed assets having a finite useful life including buildings [ASC, 1987]. However, many clubs make no provision for depreciation on stadia. This practice is justified on the grounds that the assets are maintained in such a condition that their value does not diminish over time. Reference is usually made to the Safety of Sports Grounds Acts which requires football stadiums to be maintained in such a manner as to satisfy safety standards. Clubs often disclose the amount of maintenance expenditure. Any element of depreciation is considered immaterial and no provision made.

This policy was referred to in the Auditors Reports of several clubs. For example, the Auditors Report of Bolton Wanderers highlighted their policy of no depreciation stating that it was a departure from SSAP 12 and the usual industry rate of 2%. The auditors of Kilmarnock issued a qualified opinion after disagreeing with the company's decision not to depreciate freehold buildings.

Clubs who make a provision for depreciation commonly use either the reducing balance or straight line method. Depreciation rates ranged from 0% to 10%.

In many cases, the accounting policy for the stadium depreciation was not disclosed separately. The stadium was often grouped with other fixed assets. The depreciation policies in the sample set were taken where they related to buildings or ground developments with a book value of at least £500,000. This criterion was chosen in accordance with the aims of the study; to analyse the choice of accounting policies for transactions which had a material effect on football club financial reports.

In some cases, clubs were building new stadiums to increase capacity. Depreciation policies were taken on the stadium in use rather than on any work in progress. The accounting policies are shown in Table 5.12.

Table 5.12: Stadium Depreciation Accounting Policies for period ending 1995

Policy	Clubs
Straight line basis >0-2% p.a.	34
Straight line basis >2-5% p.a.	13
Straight line basis >5% p.a.	6
Reducing balance basis >0-2% p.a.	1
Reducing balance basis >2-5% p.a.	3
Reducing balance basis >5% p.a.	2
No provision for depreciation	28
Not applicable	15
Total	102

Source: Club Financial Reports

The most common policy was a 2% straight line provision for depreciation. That is, a write down over 50 years. The straight line method was also more popular than the reducing balance method. This reflects the nature of a football stadium which is thought to exhibit a slow but gradual decline over its economic life. Clubs shown as not applicable did not have

their own stadium, and ground developments on leasehold premises were not considered material.

a) Classification

Depreciation policies affect the net asset value and reported income. The rate of depreciation will influence reported income. Higher rates will decrease income and reduce asset values carried in the balance sheet. Hence, net assets will be reduced.

Apart from the first year of depreciation, reducing balance policies will reduce reported income in earlier periods when depreciation charges will be greater than for straight line policies. However, a greater amount will be charged to the profit and loss account in later periods with straight line depreciation. Clubs opting to make no provision for depreciation will have higher reported income and net asset values. The classification of the effects of different depreciation policies for football stadia is displayed in Table 5.13.

Table 5.13: Classification of Stadium Depreciation Accounting Policy Effects

Policy	Classification	Magnitude	Clubs
Reducing balance basis >5% p.a.	Asset/Income Decreasing	7	2
Straight line basis >5% p.a.	Asset/Income Decreasing	6	6
Reducing balance basis >2-5% p.a.	Asset/Income Decreasing	5	3
Straight line basis >2-5% p.a.	Asset/Income Decreasing	4	13
Reducing balance basis >0-2% p.a.	Asset/Income Decreasing	3	1
Straight line basis >0-2% p.a.	Asset/Income Decreasing	2	34
No depreciation	Asset/Income Increasing	1	28
Not applicable	Neutral		15
		Total	102

Source: Club Financial Reports

Thus, 59 clubs are classified as asset/income decreasing and 28 clubs are classified as asset/income increasing. This 59:15:28 split will be used to test the hypotheses in Chapter 6.

Summary

This chapter describes the results of a survey into the accounting policies of the football industry. Accounting policies for four material types of transactions were analysed. For transfer fees, both recognition and expense policies were used despite their opposing

effects on the accounts. Expense policies were found to be the most widely used in the industry. Several accounting policies were used for accounting for signing-on fees. No single policy was prevalent but treatments recognising signing-on fees as part of salaries were most common. In accounting for capital grants, a SSAP 4 policy was most popular. Finally, various types of stadia depreciation policy were used; those clubs making a provision for depreciation were in the majority.

All were in similar in that no industry norm was evident. The lack of industry accounting standards appears to reduce comparability and therefore the usefulness of football industry financial reports. This is examined further in Chapter 9. However, the diversity of financial reporting presents an environment in which the factors affecting the selection of accounting policies can be examined. Hence, policies have been classified according to their effects on reported income and net assets. This will be used to test the hypotheses in the next chapter.

CHAPTER SIX

THEORETICAL FRAMEWORK FOR STUDYING THE SELECTION OF ACCOUNTING POLICY CHOICE

Introduction

This chapter explains the theoretical framework used for a study of financial reporting choice. The framework will be used to develop hypotheses about the selection of policies for financial reporting purposes in the football industry.

The first section explores the different explanations offered for the selection of financial reporting policies. In particular, it examines existing theories relating to the association between economic and organisational variables and the selection of reporting policies. It then explains the theoretical framework used for this study. The second section describes the variables used to test policy choice in this study. The chapter ends with a statement of hypotheses.

It is argued that financial reports are an approximation of the commercial reality of an entity due to their generalisability across different organisational forms. Furthermore, financial reporting standards are subject to a lack of operational specificity, especially in an area such as the football industry. This leads to more ambiguous interpretations of standards and enables discretion and choice in policy selection. This is said to provide a zone of strategic choice for management [Shah, 1996].

Many theories have been put forward to explain the choice of policy by management. In particular, much research has been undertaken into assessing the economic and organisational variables associated with policy changes. Associations have been established

in numerous empirical studies [Zmijewski and Hagerman, 1981; Daley and Vigeland, 1983; Healy, 1985]. The variables most commonly used are size, leverage, management compensation, risk, concentration and capital intensity. However, there have been several different explanations of causality offered for such associations [Holthausen, 1990].

It is suggested that different theories can offer identical predictions of accounting policy choice. Theories use different language to describe different motivations for selecting accounting theory. However, predictions of the policies that will be selected given a particular set of environmental and organisational attributes are often similar. Thus, it is argued that there may be some overlap between competing theories which are regarded as mutually exclusive. This section seeks to examine different theories of the associations between economic variables and accounting policy choice and search for areas of congruence. This leads to an eclectic explanation of why particular accounting policies are chosen.

6.1. Theories of Accounting Policy Choice

a) Positive Accounting Theory

The most popular and widely researched explanation is provided by 'positive accounting theory'. Positive accounting theory developed as an application of agency theory after affirmative evidence on the efficient markets hypothesis [Watts and Zimmerman, 1986]. Evidence on the efficient markets hypothesis [Ball and Brown, 1968] suggested that reported earnings had no systematic effect on share prices due to the existence of alternative information sources. This led to a demand for an explanation of why managers sought to change policies that altered reported earnings when they had no effect on share prices. Positive accounting theory states that financial reporting data is used by other economic agents who can affect organisation cash flows and hence share prices. Thus, agency costs and

hence cash flows will vary amongst different financial reporting procedures [Watts and Zimmerman, 1986]. The agency costs occur due to nonzero contracting and information costs.

Under positive accounting theory, managers are assumed to act as rational utility maximisers. Due to agency costs differing amongst financial reporting policies, management can transfer wealth between contracting parties. Under positive accounting theory, it assumed that managers act opportunistically in selecting financial reporting policies to allocate agency costs that maximise their own utility. It states that managers will use any discretionary control they have over financial reporting policies to increase their own welfare.

From this argument, Watts and Zimmerman [1986] question the regulation of accounting standards. They propose interest groups lobby to ensure that the policies that benefit them are accepted as standards. Thus, accounting standards do not represent best practice but are the product of successful lobbying.

Most research into positive accounting theory has polarised the definition of utility into economic terms. Thus, management are assumed to maximise their economic self interest [Watts and Zimmerman, 1986]. Management calculate how different financial reporting policies will affect their wealth. Researchers examine the effect of financial reporting policies on financial statements and the effect of financial statements on management wealth. This has led to hypotheses that predict the choice of method by management, given economic information about their position and the organisation. This information includes the existence of debt covenants, management compensation plans and the political visibility of the organisation. In summary, management assess the relative income effects of financial reporting procedures and select financial reporting policies that maximise their economic self interest [Williams, 1989].

Positive accounting theory draws heavily on neo-classical economics and in particular, 'Chicago School Economics'. The central assumption of neo-classical economics is that every individual makes decisions to maximise their utility. This assumption has been criticised as unrealistic. It has been suggested that it is not possible, practical or logically possible to maximise utility [Boland and Gordon, 1992]. Alternative assumptions are that individuals are utility satisficers; the costs incurred in gaining the full knowledge and reaching maximum utility are too high. Alternatively, individuals may, in practice, only seek to maximise expected utility.

Positive accounting theory assumes that every social phenomenon is the product of individual decision making and that economic units display stable co-ordinated behaviour [Mouck, 1992]. Thus, positive accounting theory is heavily entrenched in an economic, market-orientated paradigm [Boland and Gordon, 1992]. The success of positive accounting theory is said to be linked to its socio-historical context [Mouck, 1992]. 'Chicago School Economics', agency theory and hence positive accounting theory were compatible with the political climate of the late 1970's. In this way, the theory is said to support free markets and the deregulation of corporations [Mouck, 1992]. Thus, it is said to have an implicitly biased stance.

Much emphasis has been placed on the positive nature of this accounting theory. Positive implies that the theory is of a scientifically acceptable nature; all knowledge can be induced from positive evidence [Boland and Gordon, 1992]. Positive theory is argued to be theory that is capable of explanation and prediction [Watts and Zimmerman, 1986]. Watts and Zimmerman [1978] argue that previous accounting research was normative in attempting to

prescribe best practice. Under positive accounting theory, such prescriptions gave managers a justification for their choice of method and so acted as a 'supply of excuses'.

The use of 'positive' has been strongly criticised as merely rhetoric [Boland and Gordon, 1992; Mouck, 1992]. Mouck [1990] evaluates the scientific basis of positive accounting theory. He suggests that the theory does not meet the falsification criteria of Popper. Positive accounting theorists are criticised for methodological intolerance in refusing to question the central assumptions on which their theory is based [Mouck, 1990]. However, it is argued to be scientific under Lakatos' 'methodology of scientific research programmes'. Watts and Zimmerman [1990] respond by suggesting that all research is value laden and is very difficult to prescribe 'best' research policies.

Positive accounting research is also said to suffer from a logical flaw in design [Williams, 1989]. This occurs because management utility is often defined in terms of accounting variables.

Positive accounting theory suggests that management self interest determines preferences amongst financial reporting policies. Management preferences determine the choice of financial reporting policies. The financial reporting policies used determine accounting measures. Due to the difficulties in observing self interest, positive accounting researchers often use accounting measures as proxy variables. Thus, accounting measures, determined by financial reporting policies, are used to explain financial reporting policies. Accounting variables are the phenomenon that management utility is trying to explain. This produces a tautologous statement of the form; existing accounting measures affect existing accounting measures. This can be minimised by avoiding a reliance on accounting measures

to proxy for self interest. In addition, existing accounting measures can be controlled for the policies that generate them.

b) Efficient Contracts Perspective

A different perspective on positive accounting theory is that the choice of policies is not solely the product of opportunistic action. This interpretation of positive accounting theory suggests that the contracts an organisation enters into, and the nature of relationships with other economic agents are dependent upon the organisation's investment opportunity set [Watts and Zimmerman, 1990]. Hence the choice of financial reporting policies are also dependent upon investment opportunities. The investment opportunity set is made of its financial, dividend and compensation policies.

This perspective argues that financial reporting policies are chosen that minimise contracting and monitoring costs. Thus, policies are chosen which provide the most efficient monitoring of contracts between all economic agents [Malmquist, 1990]. For example, entities that find the capitalisation of brands 'efficient' are also entities that find high leverage efficient [Smith, 1993].

This theory assumes the scope for management to transfer wealth between economic agents, motivated by a desire to increase their utility, is minimal. Thus, management are not driven solely by economic self-interest. They select policies that increase the wealth of all contracting parties. In practice, the efficient contracting perspective assumes that management seek to maximise entity value. In this way, the objectives of management and shareholders are assumed to be closely aligned.

The efficient contracting perspective and the 'traditional view' of positive accounting theory are not mutually exclusive. However, they will only offer the same prediction if management and shareholder interests are congruent. For this to hold, management human capital must decline by the amount of any loss in organisation value resulting from an opportunistic choice of financial reporting policies [Holthausen, 1990]. Management human capital refers to the employability or marketability of managers in the labour market. Thus, in this case, any loss in entity value is attributable to a decline in the 'employee value' of management. That is, managers that have selected accounting policies which are not optimal for the organisation will be considered less valuable in the labour market.

For example, management could select policies that increase short term compensation but lead to a decrease in organisation value. The decrease in organisation value could lead to negative perceptions of management that would affect future employment and compensation prospects. Therefore, neither management utility nor entity value are increased in the long term. In this way, it is in the managers economic self interest and the interests of the shareholders to avoid the policy that will increase short term compensation.

c) Information Perspective

Under an information perspective, financial reporting policies are chosen to reveal management's expectations about future cash flows [Holthausen, 1990]. It is assumed that the choice of policy acts as an external signal of internal expectations. By providing information about cash flows, reporting procedures are said to be influential. Management will select the policies that provide signals which are consistent with their expectations.

In addition, policies may be chosen as a response to institutional or societal expectations. For example, policies may be selected on the basis of their legitimacy or

rationality [Puxty, 1997]. This is due to institutional pressure to select only policies regarded as legitimate. It is argued that management will perceive that failure to conform to institutional pressure will negatively influence expectations about the entity's prospects.

This view is incompatible with positive accounting theory and an efficient contracts perspective in that financial reporting policies do not directly affect contracting costs [Holthausen, 1990]. It is argued that this explanation is also incompatible with evidence on the efficient markets hypothesis. Share prices (estimates of future cash flows) will be based upon all publicly available information. In particular, prices will compound all information in financial reports regardless of how it is reported. In short, the market can interpret cash flow information no matter what reporting policies are used. Hence, share price estimates would not be affected by changes in accounting policy unless policy also affected cash flows. This argument suggests that the information perspective therefore does not explain the selection of particular financial reporting policies [Watts and Zimmerman, 1990]. However, it may be argued that management may perceive that the choice of policy can affect share prices. It is the perception of the relationship between reporting policy and share prices rather than the actual relationship that is important. Hence, this perspective implicitly assumes that those people selecting policy perceive they can influence share prices through their selection.

d) Contingency Theory

It has also been argued that contingency theory can be used to explain the choice of financial reporting policies. In essence, contingency theory postulates that financial reporting policies are contingent upon constraints such as organisational attributes and environmental

uncertainty [Thomas, 1986]. Management react to these constraints by choosing reporting policies that will ensure organisational survival and effectiveness.

Contingencies that have been commonly suggested as influential include environmental predictability and diversity, organisational strategy and decentralisation. For example, it has been hypothesised that management will select income smoothing policies when operating under more unstable conditions to decrease organisational risk when contracting. Organisational and environmental attributes can be operationalised as economic variables.

The assumptions about management motivation implicit in contingency theory are that management act to ensure organisational survival and effectiveness rather than maximising their utility. This is similar to the efficient contracts perspective but both are demarcated in the policy choice literature. However, there appears little distinction between selecting policies that provide organisational effectiveness and those which ensure efficient contracting. Both suggest selecting policies that will increase shareholder wealth. From this similarity, it is suggested that positive accounting theory and contingency theory are not mutually exclusive. Under certain conditions, the maximisation of manager self interest and organisational effectiveness will suggest the same accounting policy.

However, contingency theory can be said to suggest a pool of available policies from which to choose rather than the selection of a particular policy. For example, the organisational and environmental attributes may govern what policies will ensure organisational effectiveness and survival. However, this may not isolate a single policy. Several policies may have a similar effect on shareholder wealth. However, they may transfer

wealth between other economic agents. The subsequent choice, from this pool, can then be based upon management self-interest or signalling.

Contingency theory is also similar to the information perspective in that both suggest that management respond to external pressures. The information perspective suggests management will be influenced by ideas of legitimacy and reputation in their choice of policy. This view suggests legitimacy and reputation constitute elements of management utility. For example, Greiger and Ittner [1996] imply a reconciliation in their study of policy selection by government accounting entities. They found that those units faced with more market pressure made greater use of cost accounting data. Contingency theory would suggest that this was necessary in order to control costs more effectively and prevent funding shortfalls. However, the information perspective suggests that cost accounting data was used to project a more businesslike and cost conscious approach. This was required to ensure future funding for an unit subject to market pressure. Both theories indicate that the entity should select the most acceptable policy given its position. This view suggests that the most acceptable policy for a given state is also the most effective. That is, its acceptability in a particular situation is based upon its suitability and effectiveness. However, contingency theory argues that policies can affect share prices; the suitability of reporting policies is a subset of its investment opportunities and hence can influence contracting costs. The information perspective suggests management respond to external pressures where there is no evidence that efficiency will increase [Greiger and Ittner, 1996].

e) Theoretical Framework

Different explanations of causality for the association between economic variables and accounting policy have been offered. It is argued that these competing explanations are not mutually exclusive. This view seeks to combine different perspectives upon the selection of financial reporting methods. The efficient contracts perspective and contingency theory suggest a range of policies that will be acceptable. Positive accounting theory and the information perspective suggest which policy will be selected on the basis of maximising management utility.

Most research has been undertaken from a positive accounting theory perspective. However, it is argued that this paradigm does not give a full explanation for the selection of financial reporting policies due to the assumption that managers maximise their utility in purely economic terms.

Management decision making is inseparable from the social relations of managers. It is suggested that management utility is not confined to economic gain. Choices are constrained by individual, institutional and societal factors in addition to economic consequences [Neu, 1992].

This view maintains that managers seek to maximise their utility. However, individuals are concerned with social as well as economic factors in seeking to maximise their utility. Traditional positive accounting theory implicitly assumes self-interest, opportunism and greed as normal behaviour. No consideration is given to ideas about maintaining legitimacy or societal norms of fairness [Mangos and Lewis, 1995].

The underlying assumption of each perspective is that management select policies that they believe will ultimately maximise their utility. This can be independent from whether

the policy has any affect on contracting costs, organisation value or that it leads to any wealth transfers. For example, management may select a policy that has no direct impact on cash flows but which is legitimate and conforms to capital market expectations. This can maximise management utility in terms of an increase in their human capital value through the enhancement of their reputation. Managers are more highly demanded in the labour market and can request higher compensation. Whether it actually has any indirect affect on the cash flows of the entity is unknown.

This framework differs from positive accounting theory in that policies are not chosen solely due to their effect on contracting costs. The Efficient Markets Hypothesis only implies that reporting policies have no direct affect on share prices. Positive accounting theory suggests that reporting policies may affect third parties that can have an affect on share prices. However, positive accounting theory restricts third party interaction to contracting costs. This framework suggests that share prices can be affected by policy through factors other than contracting costs.

Share prices are estimates of future cash flows. Those estimates are not confined to solely quantifiable factors. They will also be subject to estimates of intangible factors such as human resource capabilities. Such estimates can be influenced by the reputation and perception of reporting entities. For example, frequent departures from GAAP will alter perceptions of an entity and will lead to increased scrutiny of its practices.

Perceptions and reputations of entities are often historical. Furthermore, perceptions of management's view of the relationship between policy and share prices may have been formulated before efficient market theories were widely publicised. That is, many managers may believe the choice of accounting policy can directly affect share prices. This belief will

influence their opinions of a company and may be influential on other industry actors.

Therefore, a controversial policy selection can have no direct affect on share price. However, it can harm the reputation of the entity or the management. This can have an effect on future share prices.

In this study it is suggested that the causal explanation for the link between financial reporting practices and economic variables is that management seek to maximise their own utility. This explanation follows positive accounting theory but seeks to widen the definition of utility from that which is traditionally used [Neu, 1992]. Thus, this study seeks to expose the association between managers choice of financial reporting policies and socio-economic variables.

The present study examines the selection of financial reporting policies in the football industry. This facilitates the examination of organisational differences where product and industry are held constant. Thus, it is assumed that each organisation faces a similar set of acceptable financial reporting policies from which to choose. However, this constrains the inferential power of the study outside the football industry.

This study aims to test associations between socio-economic variables and policy choice. Two types of test are proposed; one using individual policies and one using a portfolio of policies.

The individual test estimates the policy selected for a particular transaction given a value for each socio-economic variable. The selection of one reporting policy is assumed to be independent of other policies.

The portfolio test assumes financial reporting policies are not chosen in isolation. Due to the number of choices, a portfolio of policies providing a range of expected earnings is available [Watts and Zimmerman, 1986]. Thus, managers will select a combination of accounting choices that will maximise their utility. The portfolio test is based on the design employed by Zmijewski and Hagerman [1981].

The financial reporting policies used in this study are those relating to transfer fees, signing-on fees, capital grants and stadium depreciation. Each has been selected due to the choice of accounting policies available for each transaction and their material effect on the financial reports of football club companies.

The set of acceptable financial reporting policies for football club companies was discussed in Chapter 5. The methodology used in the individual and portfolio tests is discussed in Chapter 7. To estimate the selection of accounting policy, 6 explanatory variables will be used as follows.

6.2 Explanatory Variables

The explanatory variables are hypothesised to influence management utility. This is hypothesised to impact upon management decision making which in turn affects their selection of financial reporting policies. The variables described below relate to underwriter pressure, debt contracting costs, youth development policy, ownership structure, normative accounting influences and political contracting costs.

a) Underwriter Pressure

This hypothesis suggests management utility is influenced by institutional pressure. The decision making process of management is restricted by a desire to conform to the expectations of the capital markets. Policies selected must be satisfactory to other capital market agents.

It is suggested that securities underwriters are resistant to underwriting an issue on the market with low or negative book value [Malmquist, 1990]. If demand for the issue is low or the company subsequently goes bankrupt, underwriters will incur bad publicity and can be sued by clients. The probability of bankruptcy or poor price performance will be affected by cash flows and not the financial reporting method selected. However, Malmquist [1990] suggests that if an organisation does go bankrupt, the underwriter is in a better position if an accounting method gives a higher net worth and/or more stable earnings. Thus, it is argued that underwriters will protect themselves by pressuring organisations to employ net worth increasing policies.

A study by Menon and Williams [1991] supported the claim that underwriters were resistant to bring issues to the market unless those organisations had 'credible' auditors¹⁸. Those organisations without credible auditors faced higher underwriting fees. Thus, it can be said that pressure is exerted upon organisations to employ credible auditors. The pressure is exerted in the form of intervention in the preparation of published financial statements. Those who may be liable for the reliability of the information published in the financial statements have an incentive to influence the preparation of those financial statements; an incentive exists to minimise the probability of liability. This can be viewed as another mechanism used

¹⁸ Credible was defined as the US 'Big 8' auditing firms

to pressure organisations in order to protect underwriters should the public offering perform poorly.

Football club companies have traditionally low accounting net worth as a result of their low equity funding. Due to the growth and commercialisation of the industry, many clubs are now seeking equity capital. The football industry provides a good example of underwriters planning share issues of companies with low (or negative) net worth.

Employing an asset/income increasing policy will not directly affect contracting costs. Hence, it is not thought to have any direct effect on cash flows. However, conforming to institutional pressure is thought to increase management utility. By resisting institutional pressure, management impair their reputation. They may also face higher future underwriting costs and, possibly, higher costs of capital.

Underwriter pressure will occur only in clubs undertaking public share issues. Therefore, it is hypothesised that organisations whose shares are quoted on the London Stock Exchange or those seeking a listing will employ asset/income-increasing financial reporting policies.

b) Debt Contracting Costs

The debt contracting hypothesis proposed by Watts and Zimmerman [1986] states that financial reporting policies can affect debt contracting costs. Hence, management will aim to maximise their utility by selecting policies that minimise debt contracting costs.

Debt contracts (or covenants) are written to limit potential conflicts of interest between the economic agents of the organisation [Begley, 1990]. These covenants often employ accounting numbers. They can be classified as affirmative or negative [Smith, 1993]. Affirmative covenants maintain a specified level of an accounting based ratio such as working capital or net worth. Negative covenants limit investment and financing activities unless specific accounting based conditions are met.

Debt contracting costs can be incurred before and after technical default of a debt covenant. After technical default, costs of covenant renegotiation, bankruptcy and ultimately, liquidation will be imposed on the organisation [Smith, 1993]. In addition, renegotiation may include refinancing or restructuring costs plus extended creditor influence over organisational matters. Before technical default, efforts to avoid default may be costly to the organisation.

It is hypothesised that debt contracting costs decrease manager utility in terms of job security and compensation where it is related to company financial performance. Managing an organisation subject to bankruptcy may also impair the reputation of management. In this way, human capital value may be also decrease. Thus, managers have an incentive to avoid a decrease in utility. Debt covenants using accounting numbers are usually based upon GAAP. Thus, managers have an incentive and the ability to avoid technical default by selecting financial reporting policies that increase net assets and/or income where a choice is available. A study by Mohrman [1993] provided affirmative evidence on the debt contracting hypothesis.

This hypothesis is dependent upon the existence of football clubs with debt covenants and those debt covenants being based upon accounting numbers. In addition, those

covenants based upon accounting numbers must include intangible assets for the hypothesis to be meaningful¹⁹. To assess the use of debt covenants in the football industry, a questionnaire was sent to banks having lending agreements with football club companies. Banks were selected from football club annual reports and share prospectus'. Analysis is undertaken in Chapter 7.

Debt is the main source of finance in the football industry. Therefore, it is hypothesised that football club companies with debt covenants based on accounting numbers are more likely to use asset/income increasing reporting procedures. Amongst clubs with covenants based on accounting numbers, those that are closer to default are predicted more likely to use asset/income increasing procedures [Begley, 1990].

However, it is argued that debt contracting costs were still incurred by football organisations where no debt covenants existed. It is thought that football clubs closer to default will be subject to creditor influence over organisational matters. Influence manifests itself in the form of restrictions upon investing and financing decisions. For example, the bank may force the sale of player registrations. The case of the Bank of Scotland forcing the sale of Stuart Slater for £650,000 by Celtic football club only one year after he was purchased for £1,500,000 is documented by Morrow [1996]. The 1995 financial reports of Scunthorpe United Football Club Limited also suggest creditor influence over organisational matters. The notes to the accounts claim that "the bank is not to receive less than 25% of the transfer fee on any player sold after 17 March 1992" [Scunthorpe United Football Club Limited, 1995]. This is in recognition of the disparity between the going concern and the net realisable value of the assets of football clubs. Clubs nearing debt default will be encouraged by their creditors to

¹⁹ Acceptable transfer fee and signing-on fee policies include recognising them as intangible assets

continue trading. This is because the main assets of a football club, the ground and the player registrations, will only be marketable if the club is a going concern.

Thus, significant creditor influence is thought to exist for clubs nearing debt default. However, it is thought that the selection of reporting policy may reduce creditor influence even where no debt covenant exists. This is because most banks in the questionnaire used the audited financial reports as the central means of assessing credit risk. Hence, management still have an incentive to increase their utility. The costs of creditor influence may be reduced through the selection of asset/income increasing policies. Morrow [1995], in an investigation of the Scottish football industry, suggests that those clubs employing asset/income increasing recognition policies have the greatest financial problems.

It is also thought that an incentive exists to select asset/income increasing policies in order to avoid a negative equity position on the balance sheet. This position often leads to a qualified audit report. This can reduce the borrowing powers bestowed upon the club by creditors and lead to increased scrutiny of the clubs actions. Here no direct affect on contracting costs (and hence cash flows) is evident. Management utility may be increased by avoiding a negative equity position where it is perceived that it will lead to less influence over organisational matters

Due to the high cost and low availability of obtaining actual debt covenant details for football club companies, a proxy must be used. The proxy used in this study is the debt-to-equity ratio.

c) Youth Development Policy

This hypothesis suggests that management select accounting policies that ensure organisational effectiveness and efficient contracting. It assumes that management utility is increased where policies are chosen that recognise those items where significant resources have been expended on their procurement. This hypothesis relates only to the selection of reporting policies for transfer fees and signing-on fees.

It is postulated that managers will seek to recognise unrecorded assets where resources have been consumed in creating those assets. Thus, football club companies that spend more on enhancing player registration values will have an incentive to recognise player registrations as assets.

Transfer fees developed as paid compensation to a holding club for giving general industry training to a football player. Player registration values derive from these compensation payments. The accounting practice of treating player registrations as an asset is in recognition of the investment value of training football players. Training increases footballing ability, which in turn, increases the revenue generating ability of a player registration. It is thought that clubs that invest more heavily in training and development will have a greater incentive to disclose player registration values in their financial reports.

Malmquist [1990] suggests that organisations deploy assets where a comparative advantage exists. In the case of football clubs, some clubs will operate more effectively through a 'make' approach to player development. That is, some clubs will invest heavily in training and developing youth players. They can be said to exercise a 'make' approach to staffing decisions as opposed to a 'buy' approach. Young players are developed to benefit the

first team with their footballing ability and hence their revenue generating ability. The registrations of those players that are surplus to the requirements of the first team can be sold to other football clubs. It is hypothesised that clubs finding a 'make' approach effective will thus find a particular set of reporting policies effective.

The transfer fee and signing-on fee reporting policies hypothesised to prove effective are asset/income increasing. Such policies publicise the asset value of the player registrations held. Management utility can be said to be increased through positive signalling.

Thus, it is hypothesised that the management of a club with a greater commitment to youth development (a 'make' club) will have a greater incentive to recognise player registrations as assets. It will increase perceived management utility through emphasising the comparative advantage of the organisation. This strengthens the balance sheet as an endorsement of the quality of their training. This may possibly increase future cash flows and utility through their reputation as management of an effective organisation.

Commitment to youth development must be measured by a proxy variable. Information will be obtained by questionnaire and previous buying/selling policies.

d) Ownership Structure

This hypothesis suggests contracting costs differ between public and private companies. It is argued that management have the potential to increase their utility by selecting policies that reduce current and potential contracting costs.

Public firms have more formal contracts, due to the separation of ownership from control. They also tend to be larger than private organisations. Conversely, privately structured organisations have less formal contracts. Corporation tax laws can be viewed as contracts between an organisation and the government. Hence, the reporting policies can be seen as measurement rules in those contracts [Lee and Hsieh, 1985].

It is suggested that an organisation may reduce contracting costs by employing the same policies for tax and financial reporting purposes. Contracting costs are reduced and management utility is increased. It is argued that the incentive to undertake this course of action is greater in a private organisation. Management are expected to have less opportunity to increase their utility by employing different financial reporting and tax policies.

Furthermore, the financial reporting function will be more entwined with the taxation function in a private organisation with less emphasis on stewardship. Private firms are less reliant upon equity financing. Hence, they are subject to less institutional expectations in selecting reporting policies. They also have less incentive to signal. Therefore, it is argued that private organisations have more to lose and less to gain from employing different policies for taxation and financial reporting purposes.

It is also argued that where financial accounting and tax treatments are ambivalent, selecting policies that conform to tax treatment reduces the probability of a challenge by the Inland Revenue [Cloyd, Pratt and Stock, 1996]. Thus, a private organisation can reduce potential contracting costs by employing the same policies for financial reporting purposes as those which are used for taxation. However, public organisations are hypothesised to have less incentive to conform to conservative, tax preferred policies [Penn and Simon, 1986].

Reporting policies acceptable for tax computation are generally more conservative and report lower short term earnings. Hence, it is hypothesised that private firms will select more asset/income decreasing accounting policies. The management of public firms will have more opportunity of increasing their utility by deviating from the policy used for taxation. Thus, it is hypothesised that public firms will employ more asset/income increasing policies.

e) Normative Accounting Influence

It is suggested that normative influences will affect management decision-making [Neu, 1992, Mangos and Lewis, 1995]. It is thought that management perceptions of legitimate financial reporting methods will affect management utility.

Managers are influenced by society and can respond to this influence. Professions such as accountancy will influence the problems perceived and potential solutions offered [Neu, 1992]. It is generally recognised that through training and socialisation, professions standardise the expertise of their members. Thomas [1989] suggests that the extent to which a professional accounting culture exists will affect the selection of financial reporting policies.

The accounting influence on the company will provide prescriptions of best practice. It is argued that professional accounting influence gives the appearance of rationality and legitimacy [Thomas, 1989]. Management perceptions of rational and legitimate reporting policies will affect selection of those policies. Where no other incentives exists, it is suggested that management utility can be increased by selecting legitimate and rational financial reporting methods. Management may perceive that legitimacy will enhance the reputation of the organisation and hence the management. This may be expected to increase management human capital value in the long run.

Neu [1992] and Thomas [1989] suggest that professional accountants actively favour generally accepted reporting practices and techniques. In adhering to perceptions of rationality and legitimacy, an incentive exists to select policies that are more consistent with accounting concepts and standards. This also usually implies less controversial, and more established reporting policies. In the transactions used in this study, those policies that satisfy these criteria are asset/income decreasing.

For example, the asset status of player registrations is disputed. Hence, the prudent concept would suggest expense techniques. The SSAP 4 capital grant policy is asset/income decreasing in comparison to alternative policies. A SSAP 12 depreciation policy is asset/income decreasing compared to a 'no provision' policy. Hence, it is hypothesised that organisations under a greater normative accounting influence will select more asset/income decreasing financial reporting policies²⁰.

Normative accounting influence will be measured by the existence of one or more qualified professional accountants on the board of directors. It will also be measured through a questionnaire to the management of football club companies.

f) Political Costs

The political cost hypothesis proposed by Watts and Zimmerman [1986] states that political sensitivity will affect potential contracting costs. Management will seek to minimise contracting costs in order to increase their own utility.

²⁰ See Chapter 5 for clarifications of the asset/income affects of different accounting policies

It is suggested that politicians (like management) aim to maximise their utility. Thus, by proposing solutions such as wealth transfers and gaining subsequent media exposure, they can improve their re-election chances, job security and human capital [Watts and Zimmerman, 1986]. It is argued that politicians use reported earnings as a justification for proposing wealth transfers [Watts and Zimmerman, 1986]. To the extent that the organisation is subject to potential wealth transfers in the political process, management is hypothesised to adopt accounting procedures that reduce the probability of transfer. Thus, managers of politically sensitive organisations are hypothesised to select asset/income decreasing financial reporting policies.

The football industry is far more influential, both socially and politically, on a nation than other industries of a comparable size. The link between politics and football has been well documented. For example, Silvio Berlusconi's use of his popularity as chairman of AC Milan to become president of Italy [Armstrong and Julianotti, 1997]. Thus, it is argued that football club companies are susceptible to incurring political costs. Political costs, in this context, include negative publicity, greater financial scrutiny and regulation.

Negative publicity is created by significant media attention and can affect a club's income. For example, negative media reports regarding the merchandising sales of replica playing kit and ticketing prices have been widespread. It is thought that a football club will, if able, avoid such publicity. High operating profits and bad publicity regarding finances may lead to tighter constraints and more comprehensive inspection. It can be said that the football industry has traditionally enjoyed less financial regulation than the mainstream commercial sector. However, it is thought that the industry may come under increased financial scrutiny due to increased commercialisation.

For example, several regulatory initiatives were begun in the 1990's as a response to the commercial growth of the football industry. The Office of Fair Trading began a preliminary investigation into the prices of replica football kits after public pressure and allegations of resale price maintenance. The OFT wrote to all Premier League clubs asking for details of licensing and royalty agreements [Guardian, 24/2/98]. A Football Task Force was set up by the government in 1997 headed by the sports minister to investigate all aspects of contemporary football [Horton, 1997]. Despite having no statutory powers, it is regarded as influential in policy matters. In addition, recent independent reports have urged for the appointment of a sports broadcasting regulator to monitor television deals [Times, 19/1/98]. The OFT is currently investigating the current FA Premier League television deal. A finance regulator for the football industry has also been suggested to monitor financial dealings and investigate breaches of FA rules [Financial Times, 14/1/98]. Furthermore, an investigation was undertaken in the early 1990's by the Inland Revenue into financial irregularities by football clubs.

Constraints caused by tighter financial regulation and bad publicity are considered costly to football club management. It is thought that management will, where possible, seek to avoid such constraints. It is suggested that politicians and regulatory bodies are only attracted to potential 'irregularities' where their scale is large enough to arouse public attention. This is said to provide management with the opportunity to increase their utility through avoiding regulatory scrutiny.

This hypothesis requires a proxy for the likelihood of incurring political costs. A size variable, average attendance, is proposed.

6.3 Statement of Hypothesis

This study hypothesises that the selection of accounting policy, in terms of whether it is asset/income increasing or decreasing, is explained by six variables. Hence the alternative hypothesis, H_1 , is;

$$\text{POLICY SELECTION}_i = \alpha_i + \beta_1 \text{UNDERWRITER}_i + \beta_2 \text{DEBT}_i + \beta_3 \text{YOUTH}_i + \beta_4 \text{OWNERSHIP}_i + \beta_5 \text{NORMATIVE}_i + \beta_6 \text{POLITICAL}_i + \varepsilon_i$$

The null hypothesis, H_0 , is that the selection of accounting policy is random and independent of the 6 specified variables. The methodology used in analysing these hypotheses is outlined in Chapter 7.

One variable omitted from this study is management compensation. The bonus plan hypothesis proposed by Watts and Zimmerman [1986] states that the existence of a compensation plan will influence managers' selection of financial reporting policies. Compensation plans are usually linked to financial reporting measures due to the difficulties in observing the market value of debt and equity²¹. It is hypothesised that where compensation plans are linked to accounting numbers, managers have an incentive to select asset/income increasing policies. However, the actual selection of policies will be dependent on the form of the compensation plan.

In the football industry, the use of management compensation plans linked to financial reporting measures is rare. Furthermore, many management officers hold significant shareholdings. Thus, the incentive to increase management utility by transferring wealth

²¹ There may be no active market for an entity's equity or debt

between management and shareholders is limited because the same people comprise both groups.

Summary

This chapter explained the theoretical framework to be used in the empirical study of financial reporting policies. The framework is based upon different explanations for the associations between economic variables and policy choice. Positive accounting theory suggests that policies are chosen that allocate agency costs so as to increase their own utility. The efficient contracts perspective, similar to contingency theory, determines which policies are acceptable for organisational survival. Finally, the information perspective suggests policies are selected that convey the desired information to users.

Therefore, the framework used suggests that management select accounting policies that will increase their utility; but that utility is not totally dependent on economic gain and actual cash flow changes. It is argued that utility can be affected by societal factors such as legitimacy and institutional pressure, and perceived cash flows which may indirectly affect economic self interest.

The second section of the chapter describes six variables that are hypothesised to have an effect on management utility in the football industry; underwriter pressure, debt contracting costs, youth development policy, ownership structure, normative accounting influence and political costs.

The chapter concludes with a statement of hypotheses. This will be used to predict the selection of financial reporting policies for transfer fees, signing-on fees, capital grants and stadia depreciation in the football industry. The methodology for this test is described in Chapter 7.

CHAPTER SEVEN

METHODS OF DATA COLLECTION AND ANALYSIS

Introduction

This chapter discusses the sampling and data collection techniques used in studying the selection of financial reporting policies by football clubs in the UK. It examines the responses to two postal questionnaires and outlines how the variables have been constructed from data sources.

7.1 Sampling

The sample for this study comprises all professional football club companies in the UK. This includes the English Premier League, English Football League and the Scottish Premier League. Other football club companies excepting these leagues are omitted because they are not all full-time professional football clubs. The sample size is thus 102. Data was collected from three sources; financial reports, a questionnaire to football clubs and a questionnaire to their bankers.

Financial reports for the period ending during 1995 were collected for all football clubs in the sample. The relevant information from these reports was discussed in Chapter 5. In summary, the audited accounts and disclosed accounting policies of 102 clubs were available plus additional information from the annual reports.

A postal questionnaire was sent to the banks that dealt with football club companies. This questionnaire sought to collect data for testing the debt contracting cost hypothesis.

Banks were identified as dealing with football clubs where they were named in football club financial reports or share prospectuses. Seventy bank branches were identified and approached. The cover letter and questionnaire are reproduced in Appendix 1.

There were 7 negative responses and 16 positive responses. This represents a 33% response rate, with a usable response rate of 23%. The low usable response rate could be attributable to the sensitivity of the football industry and the reluctance of banks to release any information regarding their clients. Bankers that served only one football club claimed it was easy to derive sensitive information about a particular football club from their responses to the questionnaire and thus produced negative responses. A greater response rate may have been obtained had greater emphasis been placed on the non-club specific nature of the questionnaire. The questionnaire was not investigating a bank's individual relationship with a particular club but its methods of dealing with football club organisations. Unfortunately, due to the number of banks dealing with single clubs, this problem was difficult to avoid. In sum, 16 bank questionnaires were used to provide qualitative information in testing the debt contracting cost hypothesis.

A postal questionnaire was sent to the company secretary of each football club in the sample (102). The cover letter and questionnaire are reproduced in Appendix 2. Completed questionnaires yielded information about financial reporting policies, youth development policy and directors qualifications. There were 9 negative responses and 33 positive responses. This represents a 41% response rate, with a useable response rate of 32%.

Publicly available information relevant to this study includes share prices, capital market availability and ownership status of football club companies.

7.2 Bank Questionnaire

Out of the 16 respondents to the questionnaire, 14 were completed by corporate managers, 1 was completed by a credit controller and 1 by a corporate managers assistant. All respondents stated that they had worked with football club companies in a role as relationship manager. All respondents had been involved in making loans to football club companies. All but one of these loans were secured. The types of security are displayed in Table 7.1.

Table 7.1: Nature of Security used in lending to Football Club Companies

Nature of Security	No.	%
Fixed charge over land and buildings	10	33
Floating charge over moveable assets	4	13
Director/Shareholder/Holding Company Guarantee	9	30
Unspecified	7	23
Total	30	100

Source: Bank Questionnaire²²

The questionnaire sought to ascertain the extent to which player registration values were used by banks in their transactions with football club companies. 25% of respondents replied that player registrations are used in estimating the value of a football club company.

Respondents were asked what financial information they used in estimating the credit risk of football club companies. The answers are displayed in Table 7.2.

²²Many banks used different types of security for different clubs and thus gave multiple responses. All responses are given.

Table 7.2: Information used in estimating the credit risk of Football Club Companies

Information	No.	%
Audited Financial Accounts	15	31
Projections (cash flow/budget/income)	10	21
Monthly Management Accounts	9	19
League Payments	6	13
Player Registration Values	5	10
Bank Account Behaviour	1	2
Property Valuation	1	2
Check on Published Gate Receipts	1	2
Total	48	100

Source: Bank Questionnaire²³

Approximately one tenth of respondents said they used player registration values in estimating credit risk. This is surprising considering the subjectivity and variability inherent in reliably measuring player registration value. Due to their effect on cash flows, it is thought the use of player registration values would be more widespread if reliable measures were available.

The main purpose of the questionnaire was to assess the existence and extent to which banks entered into debt covenants with football club companies. Of the respondents to the questionnaire, 38% stated they entered into debt covenants.

The debt covenants described by respondents can be classified as affirmative covenants²⁴. They maintain a limit based on accounting ratios. The restrictions shown in the debt covenants are displayed in Table 7.3.

²³ Many banks gave multiple responses. All responses are shown.

Table 7.3: Restrictions used in debt covenants between Banks and Football Club Companies

Restriction	No. of clubs
Maximum Gearing	2
Minimum Net Worth	1
Net Tangible Assets	1
Interest Cover	1
Dividend Payments	1
Asset Cover	1
Total	7

Source: Bank Questionnaire

The use of debt covenants by banks is found to be limited. Fewer clubs will thus have an incentive to select asset/income increasing accounting policies in order to avoid incurring debt contracting costs by evading limits specified in debt covenants. However, it is argued that management still have an incentive to select asset/income increasing policies in order to avoid costs incurred through increased creditor influence over organisational matters²⁵.

Respondents to the questionnaire were also asked to give general comments on the nature of the relationship between banks and football clubs. Most stated that football club companies must be assessed as businesses and not given any special treatment because football is a high profile public sport. The assets of football clubs often do not provide acceptable security to banks due to their specialised nature. The volatility of cash flows means that lending against the club alone is considered high risk. Banks thus normally require

²⁴ Refer to Chapter 6; 6.2 (b)

²⁵ Refer to Chapter 6; 6.2 (b)

external security from smaller clubs; usually from an officer of the company (chairman, director).

The information given by the bank questionnaire must be tempered by the low response rate. Interpretations may not be representative of all football clubs. For example, the lack of debt covenants may be explained by a non-response bias; the banks that have not responded have done so because they have debt covenants and therefore consider the completion of the questionnaire as a breach of confidentiality.

However, information gained from the bank questionnaire suggests the traditional debt contract hypothesis may not be relevant in the football industry. The lack of formal debt covenants between clubs and banks reduces the incentive to select asset/income increasing policies to reduce actual contracting costs. An incentive may exist to reduce perceived costs. However, the findings of this questionnaire can be said to reduce the power of the debt contracting cost hypothesis.

7.3 Football Club Questionnaire

The questionnaire was addressed by name to the company secretary of each football club. Names and addresses were obtained from Rothmans Football Yearbooks [Rollin, 1994-6] or from previous correspondence with the club. The positions of the 33 respondents are summarised in Table 7.4.

Table 7.4: Positions of Respondents to Football Club Questionnaire

Position	No.	%
Administration (secretary/general manager)	14	42
Financial (director/manager/controller/accountant)	13	39
Management (chief executive/chairman/managing director)	5	15
Omission	1	3
Total	33	100

Source: Club Questionnaire

Many of the respondents, particularly from smaller clubs, occupied more than one function at the club. It was common for the administration and financial functions to be combined. The positions classified in Table 7.4 are based on the main function or the first function listed where this was not specified.

A majority of the questions sought to measure the extent of normative accounting influence on the selection of reporting policies. One aim of the questionnaire was to differentiate between clubs whose accounting systems were designed to be used by the club for control, monitoring and planning and those whose accounting systems were designed primarily to comply with company legal requirements.

Question 2 in conjunction with Question 11 was intended to ascertain the professional accounting status of the officer of the company responsible for selecting reporting policies. Question 2 asked whether or how many of the company management (company directors and secretary) had professional accountancy qualifications. It is assumed

that the selection of accounting policies was undertaken by the management board. The answers are summarised in Table 7.5.

Table 7.5: Question 2: Number of Professional Accountancy Qualifications held by the management board of Football Club Companies

Number	No.	%
none	10	30
1	17	52
2	4	12
3 or greater	2	6
Total	33	100

Source: Club Questionnaire

Question 11 asked which officer of the company was responsible for selecting reporting policies. In conjunction with Question 2 and information obtained from financial reports, it was possible to determine whether policies were chosen by a professional accountant. This was to be used as a measure of normative accounting influence.

Question 3,5 and 6 are taken from a questionnaire by Thomas [1989]. The questions seek to ascertain the extent to which a professional accounting subculture exists. It is argued that the existence of a professional accounting subculture would lead to greater prescriptive accounting influence on the choice of reporting policies.

Question 3 enquires about the frequency with which clubs produce internal profit reports. Clubs producing reports on a more frequent basis were more likely to possess a professional accounting subculture. The replies are displayed in Table 7.6.

Table 7.6: Question 3: The Frequency of the Internal Profit Reports of Football Club Companies

Frequency	No.	%
Annually	1	3
Half Yearly	2	6
Quarterly	3	9
Monthly	27	82
Weekly	0	0

Source: Club Questionnaire

A large majority of respondents produced internal profit reports on a monthly basis. This decreases the ability of the question to identify differing degrees of professional accounting subculture. However, the responses to Question 5, described below, are consistent with those to Question 2. Both questions use different measures to indicate that around 80% of respondents exhibit a professional accounting orientation.

Question 5 asked to what extent accounting information was used as a means of planning, implementing corporate policy, co-ordinating and controlling activities. Like Question 3, it was designed to measure the extent to which a club exhibits a professional accounting subculture. The responses are displayed in Table 7.7.

Table 7.7: Question 5: To what extent is Accounting Information used as a means of Planning, Implementing Corporate Policy, Co-ordinating and Controlling Activities?

Response	No.	%
Not Used	0	0
Little	2	6
Moderate Use	5	15
High	26	79
Exclusive Use	0	0
Total	33	100

Source: Club Questionnaire

The majority of respondents considered the use of accounting for co-ordination and control to be high. This is consistent with the answers to Question 3. The omission of answers from the two extreme categories may indicate that respondents did not fully understand the question or sought a safe response by answering a middle category.

Question 6 asks to what extent the published accounts of the club were regarded as a means of communicating information about managerial efficiency and the quality of financial control. It was intended to measure the degree to which annual reports are used to demonstrate rationality and legitimacy. Rationality was exhibited through management competence and legitimacy through a display of financial stability, particularly to providers of finance. The replies are displayed in Table 7.8.

Table 7.8: Question 6: To what extent do you regard your Organisation's Published Accounts as a means of Communicating Information about Managerial Efficiency and the Quality of Financial Control?

Response	No.	%
Not Used	2	6
Little	6	18
Moderate Use	16	48
High	9	27
Exclusive Use	0	0
Total	33	100

Source: Club Questionnaire

The spread of answers may be indicative of the differing ownership structures between football clubs. Larger clubs tend to have greater separation of ownership from control than smaller clubs. Thus, the demand for accounting to be used for demonstrating rationality and legitimacy to stakeholders for larger clubs is likely to be greater. For example, the mean average total net assets for clubs responding 'high' was £4,953,703 compared to a mean of £2,037,982 for clubs responding 'not used', 'little' or 'moderate use'. Thus suggests that larger clubs are more likely to have a professional accounting subculture as size will require more organisation and standardisation of accounting information.

Questions 14 and 15 were designed to assess youth development policy. Question 14 sought to ascertain the extent of youth development at the football club. Club's were initially asked whether they ran a youth development scheme. All clubs gave a positive response and were asked for a brief description of their youth development policies. Respondents then had

to rate the extent of their youth development activities. The answers are displayed in Table 7.9.

Table 7.9: Question 14: How would you rate the extent of [Youth Development] activities?

Response	No.	%
Very Active	26	79
Moderately Active	7	21
Not Very Active	0	0
Total	33	100

Source: Club Questionnaire

The response spread can be attributed to a possible flaw in the question design. It is unlikely that a football club would classify its youth development activities as 'not very active' immediately after describing those activities. It would imply failure of the youth development scheme.

Question 15 asked whether the Bosman Ruling by the European Court of Justice had affected their youth development policy. It is predicted that club's may abandon or scale down youth development activities in response to this ruling. This is because club's lose the right to protect general industry training given to younger players²⁶.

One club stated that it was scaling down its youth development policy as a result of the Bosman Ruling. It said that it was taking on fewer apprentices and reviewing all youth development activities. Two clubs stated that they awaited the effect of the Bosman Ruling on the UK transfer system. The remainder of respondents (90%) claimed that the Bosman Ruling had no effect on youth development policy or had focused their attention on the importance of a strong youth policy.

Question 9 sought to obtain information that could be used to measure underwriter pressure. Respondents were asked if they had any intention to raise finance through a listing on the Stock Exchange. A positive answer led to a question regarding where shares would be traded. Answers to these questions are displayed in Table 7.10.

Table 7.10: Question 9: Has your club announced an intention to raise finance through a listing on the Stock Exchange in the foreseeable future?

Response	No.	%
Yes	5	15
No	24	73
Already Listed	3	9
Considering	1	3
Total	33	100

Source: Club Questionnaire

The responses show that the sample contains an appropriate balance between listed and non-listed clubs. Of the 102 football clubs in the population, 19% were listed as at 31 December 1997²⁷. The questionnaire sample reflects this and gives no indication of a non-response bias in this area.

Of the 8 clubs (24%) who were already listed or who had announced listing plans, 3 were on the full London Exchange, 4 were on the Alternative Investment Market and one has shares traded on the OFEX market. This information is summarised in Table 7.11.

²⁶ Refer to Chapter 4; 4.1 (b)

²⁷ Refer to Chapter 4; Table 4.2

Table 7.11: Market used for Trading Shares by Listed Clubs (those responding 'yes' or 'already listed' to Question 9)

Response	No.	%
London Stock Exchange	3	38
Alternative Investment Market	4	50
OFEX	1	13
Total	8	100

Source: Club Questionnaire

Question 4 asked for the policy used by the club for reporting transfer fees, signing-on fees, stadia depreciation and capital grants. This information verified or added to the information taken from club financial reports. The policies are shown in Table 7.12.

Table 7.12: Question 4: Financial Reporting Policies used by Football Clubs

Table 7.12.a: Transfer Fees

Policy	No.	%	Table 5.1 %
Charge to profit & loss account as operating expense in period registration is signed	20	61	44
Charge to profit & loss account as exceptional expense in period registration is signed	2	6	40
Recognise and capitalise purchased player registrations as assets and amortise over length of player's contract	6	18	8
Recognise all player registrations as assets with movements in value going through the revaluation reserve	1	3	8
Omitted	4	12	0
Total	33	100	100

Source: Club Questionnaire

Table 7.12.b: Signing-On Fees

Policy	No.	%	Table 5.7 %
Immediate write off	3	9	15
Cash method	15	45	30
Contract method	5	15	26
Accruals method	0	0	4
Prepayments method	4	12	6
Not applicable	1	3	16
Omitted	5	15	3
Total	33	100	100

Source: Club Questionnaire

Table 7.12.c: Capital Grants

Policy	No.	%	Table 5.10 %
Take to deferred income in creditors and match with depreciation on related asset in profit & loss account (SSAP 4)	20	61	57
Deduct from cost of related asset	6	18	20
Take to reserves and match with depreciation on related asset in profit & loss account	1	3	10
Not applicable	1	3	14
Omitted	5	15	0
Total	33	100	100

Source: Club Questionnaire

Table 7.12.d: Stadium Depreciation

Policy	No.	%	Table 5.12 %
Straight line basis 0-2% p.a.	13	39	33
Straight line basis 2-5% p.a.	0	0	13
Straight line basis >5% p.a.	0	0	6
Reducing balance basis 0-2% p.a.	0	0	1
Reducing balance basis 2-5% p.a.	0	0	3
Reducing balance basis >5% p.a.	0	0	2
No provision for depreciation	8	24	27
Not applicable	6	18	15
Omitted	6	18	0
Total	33	100	100

Source: Club Questionnaire

The accounting policies used by the clubs responding to the questionnaire are compared below with those policies displayed in the survey of all clubs accounts as shown in Chapter 5.

Transfer fee reporting policies can be compared with those in Table 5.1. The number of clubs charging fees to the profit and loss account as an exceptional expense is underrepresented. 40% of clubs in the survey used this policy whereas only 6% were represented in the sample. Although no explanation for this finding is apparent, it is not considered to invalidate the questionnaire; a non-response bias is unlikely to exist. Signing-on fee reporting policies can be compared with those in Table 5.7. The sample policies give a reasonable approximation of the population policies surveyed. However, no clubs employing the accruals method are contained in the sample. Capital grant policies can be compared with those in Table 5.10. The sample gives consistent results with results of the survey. Stadium

depreciation policies can be compared with those in Table 5.12. No clubs in the sample employed depreciation above 2%. In addition, no clubs employed reducing balance policies. However, the sample results remain quite consistent. The two most popular stadium depreciation methods remain a 0-2% straight line policy and a no provision policy.

Overall, the distributions of policies of those clubs responding to the questionnaire exhibit a similar structure to those surveyed in Chapter 5. It appears that there is no systematic non-response bias to the club questionnaire.

Question 8 asked what was the largest source of funding for the company's activities. It sought to verify the dominance of bank funding and the rise of shareholder investment. The responses to Question 8 are displayed in Table 7.13.

Table 7.13: Question 8: What is the largest source of funding for the company's activities?

Response	No.	%
Bank Loans	12	36
Shareholder Investment	8	24
Director Loans	6	18
Other Loans	2	6
Supporter Bonds/Debentures	1	3
Transfer Fees	2	6
Other	2	6
Total	33	100

Source: Club Questionnaire

In line with expectations, bank and equity funding are the most popular forms of funding. This provides limited support for the viability of the debt contracting cost and

underwriter pressure variables. 'Other' forms of funding that were listed included gate receipts, television royalties and sponsorship.

The remainder of the questions sought general information on issues that were not directly related to the selection of financial reporting policies.

Question 7 was intended to assess the degree of corporate social responsibility. The impact of the football industry on society is disproportionately greater than its size. It carries a very high media profile with individual clubs subject to significant scrutiny. The impact of success (or failure) of a football club on the surrounding community is great. Thus, there is a strong perception of affinity between club and community, and a *prima facie* case for high accountability.

In addition, ownership and control at many football clubs is combined. Directors often have a large shareholding in the club. It is common for the major shareholders to be active members of the board of directors. Where concentration of control is high, it can be said that accountability to outside stakeholders may be lower. Thus, the nature of the football industry imposes a corporate responsibility on football clubs whilst their structure is mostly detrimental to accountability. Question 7 sought to ascertain whether financial reports were used as a means of facilitating corporate accountability by the football club. The results are displayed in Table 7.14.

Table 7.14: Question 7: To what extent is the club's annual report and accounts used as a means of communicating information about the company's impact on the community?

Response	No.	%
Not Used	6	18
Little	17	52
Moderate Use	7	21
High	3	9
Exclusive Use	0	0
Total	33	100

Source: Club Questionnaire

The answers to Question 7 suggest that the use of financial reports to provide information to outside stakeholders is low. It might be expected that a higher concentration of control, and hence lower corporate responsibility, will exist in smaller clubs. However, there was no discernible difference in the size of clubs responding 'not used' or 'little' compared to clubs responding 'moderate use', 'high' or 'exclusive use'²⁸.

Question 10 was intended to identify the objectives of football clubs. Respondents were asked to choose between 'footballing success subject to financial solvency' and 'commercial success subject to satisfactory football performance'. The question was designed to ascertain whether the focus of the organisation was that of a club or a business. Both available objectives included football club and business goals; the difference being the focus. This was meant to avoid a 'public relations response' where a choice between straight commercial and football objectives would lead to preference for football as it is more

²⁸ Size is measured by the mean average attendance over 3 years (1993-4 to 1995-6) for 'not used' and 'little' is 12,693 compared to 12,215 for clubs responding 'moderate use', 'high' or 'exclusive use'

favourable in terms of public relations. A straight choice of commercial objectives would be an unacceptable response for supporters of the club despite the confidentiality of the questionnaire. The responses are shown in Table 7.15.

Table 7.15: Question 10: Organisational Objectives of Football Club Companies

Response	No.	%
Footballing success subject to financial solvency	2	6
Commercial success subject to satisfactory football performance	24	73
Both of the above	5	15
Omission	2	6
Total	33	100

Source: Club Questionnaire

The strong preference for commercial objectives is surprising. It could be said to reflect the new business ethic of football clubs and is evidence of the growing commercialisation of the football industry.

Questions 12, 13 and 16 are general enquiries about the usefulness of financial reporting in football.

Question 12 asked whether football club financial reports were a useful indicator of a club's performance and financial position. The majority of respondents claimed they were a useful indicator of performance as much as any other business. Criticism was made of the historical cost system of measurement and the neglect of cash flows. The lack of uniformity in reporting practices in the football industry was also criticised. Likewise, it was argued that performance and financial position can be distorted by the nature of the transfer market.

Question 13 asked whether a need for change in financial reporting was perceived.

The responses are summarised in Table 7.16.

Table 7.16: Question 13: Do you perceive a need for change to financial reporting in the football industry

Response	No.	%
Yes- standardisation	11	33
No	15	45
Other	2	6
Omission	5	15
Total	33	100

Source: Club Questionnaire

Those responding 'yes' said that commonality of accounting treatment was required for transfer fees, signing-on fees and depreciation. Many expressed a need for an industry standard.

Those responding 'no' said that normal company rules were adequate. 'Other' responses were that more information should be disclosed and that financial reports were of limited interest to supporters and shareholders. This last response suggests that financial reports provide little useful information and hence, a need for change exists.

Question 16 asked respondents to list any major issues or areas of concern affecting the accounting and finance functions of football clubs. The majority of respondents (55%) omitted to answer this question. Of the answers given, the Bosman Ruling was the most frequently mentioned. Clubs saw the Bosman Ruling leading to higher signing-on fees and significant wage inflation. Some stated that wage costs were greater than operating income.

Many clubs also expressed concern over the continual rise in transfer fees. This rise is inconsistent with the Bosman Ruling that allows many out-of-contract transfers to incur no transfer fee. In addition, the increased supply of players available after the lifting of restrictions on European Union nationals would be expected to reduce transfer fees. However, these factors are tempered by the increase in television revenues that have led to industry-wide inflation.

Another issue was the increase in television revenue and its effect on widening the gulf between the larger 'premier' clubs and the smaller clubs. One club voiced concern over the effect of live televised football on attendance's, particularly at smaller clubs. As a consequence of the big club, small club divide, one club stated that the major clearing banks were less willing to support the smaller football clubs.

Finally, one club stated that its fund-raising activities had been limited by the national lottery. It voiced concern over the decrease in Football Trust grants after funding of the Trust decreased, again citing the national lottery as a diversion of funds.

The bank questionnaire and particularly the football questionnaire yielded much useful information. This information, and data contained in the financial reports, were used to construct the variables described below in order to test the hypotheses outlined in Chapter 6.

7.4 Variable Construction

The information collected was used to construct the response variables and the explanatory variables. For some explanatory variables, more than one measure was offered. This was intended to provide variables that could be tested using the full data set ($n=102$) and

variables that could be tested using a reduced data set including only respondents to the football club questionnaire (n=33).

a) Response Variables

A portfolio test and an individual test were proposed for both the full sample and the reduced sample. The portfolio test followed the methodology developed by Zmijewski and Hagerman [1981]. A response variable, STRATEGY, was required which measured the asset/income effects of the four individual accounting policies; transfer fees, signing-on fees, capital grants and stadia depreciation.

All policies taken from the financial reports and questionnaires were classified as either asset/income increasing or asset/income decreasing. Thus, the policies for each item were listed, classified and combined to derive the STRATEGY variable.

From the information on the four policies for each club, five strategies were developed. Strategies were computed by allocating a score to each policy. The effects of each policy on reported results were analysed in Chapter 5. A summary of that analysis is shown in Table 7.17.

Table 7.17: Summary: Classification of Accounting Policies²⁹

Transaction	Asset/Income Increasing	Neutral	Asset/Income Decreasing
Transfer Fees	Recognise		Charge to profit & loss account
n=102	16	0	86
Signing-on Fees	Immediate write off Accruals	Cash Method Contract Method	Prepayments
n=102	19	77	6
Capital Grants	SSAP 4	Modified SSAP 4	Deduction
n=102	58	24	20
Stadium Depreciation	No provision		Provision
n=102	59	15	28

If a policy was classified as asset/income increasing it was assigned a score of +2.

An asset/income decreasing policy was assigned a score of 0.

If the accounting policy was not applicable or omitted, it would receive a score of +1. These clubs were not omitted to ensure that the full sample is represented. No single club omitted the accounting policies on all transactions. Thus, the variable includes the accounting policies on at least one transaction for each club.

Neutral policies also scored +1. Policies were classed as neutral where their effects upon reported income and net assets were considered to lie in between the asset/income increasing policy and the asset/income decreasing policy.

²⁹ Policy names and methods are defined in Chapter 5.

The classification of policies is arbitrary in that there is no objective basis for the demarcation of different policies. The effects of each policy will depend upon the circumstances of the football club. The effects of each transaction on the financial statements are not consistent and will vary between clubs. Policy effects were analysed under the assumption that all other factors remained equal. Nevertheless, such methodology has been established and is highly feasible in accounting policy choice studies. It is thought to indicate that clubs select policies which have a positive or a negative asset/income effect on the financial statements.

From the four policies, the maximum score attainable was 8, the minimum was 0. These scores were converted into five strategies in order to nullify the effect of missing values. This conversion from the score obtained from the four accounting policies to policy strategies is shown in Table 7.18. The strategies are numbered from 0 to 4 in order of their positive effect on income. The full opportunity set for each score and its resultant strategy is shown in Appendix 3.

Table 7.18: Derivation of Accounting Policy Strategy

Score	Strategy	Clubs	
0	0	11	most income decreasing
1	0	24	
2	1	19	
3	1	22	
4	2	11	
5	2	10	
6	3	3	
7	3	0	
8	4	2	most income increasing
	Total	102	

A summary of the number of clubs classified into each accounting policy strategy is shown in Table 7.19.

Table 7.19: Classification of Accounting Policy Strategy

Strategy	Number of clubs
0	35
1	41
2	21
3	3
4	2
Total	102

It could be argued that the effects of transfer fees have a proportionately larger effect on income than the other accounting policies under investigation. No assumptions have been made regarding the relative effect of each individual policy. This represents a departure from

the research design of Zmijewski and Hagerman [1981] who make three different assumptions on the relative effect of each policy.

However, no justifiable assumption can be made about the relative effects of each policy in the football industry; it is dependent on individual football clubs. The youth development hypothesis is only relevant to transfer fees and signing-on fees. The extent of youth development is not hypothesised to have any effect on capital grants or stadia depreciation. Therefore, an individual test is proposed using a transfer fee response variable, TRAN.

Transfer fee policy is the most material accounting policy in the study and has the most influential impact on financial statements. Therefore, a transfer fee dummy variable, TRAN, will be subject to a reduced sample and a full sample test using the same explanatory variables as the STRATEGY tests. Overall, there will be four models under analysis.

b) Explanatory Variables

Six explanatory variables were outlined in Chapter 6. Measures for each variable were developed from both the financial reports and questionnaire data. The measures taken from the questionnaire data were used in the reduced sample tests. Financial report data were used to design measures in the full sample tests.

The underwriter pressure variable was constructed from three dummy measures; UNDLIST, UNDCON and UNDRUM.

UNDLIST was rated positive where a football club was listed on the London Stock Exchange or the Alternative Investment Market as at 1 January 1996. This date was used in an attempt to capture the influences on the selection of accounting policies around this date.

The majority of accounting policies used for this study are taken from financial reports for the period ending during 1995. The underwriter pressure variable was designed to capture the effect of underwriter pressure as designated by listing status at the time financial reporting policies were selected. The dates upon which the 1995 financial statements were approved by the directors of each football club were examined. The dates range from 26 June 1995 to 21 November 1996. Accounting policies are selected during the preparation of financial statements. It is assumed that selection will take place approximately 1-2 months before the statements are approved by the directors. Five clubs were listed at 1 January 1996 and hence have a positive UNDLIST rating.

UNDCON was designed to capture those clubs who were planning a flotation as at 1 January 1996. Where a future flotation was planned, it is hypothesised that some 'underwriter pressure' would be exerted upon the officers of the company in selecting reporting policies. Thus thirteen clubs that were subsequently floated after 1 January 1996 until 30 June 1997 were given a positive UNDCON rating.

For example, Aston Villa floated in May 1997. However, press reports detailing flotation plans were circulated almost 12 months earlier [Times, 10/6/96]. For example, a share restructuring by Aston Villa to prepare the club for flotation, took place in August 1996 [Times, 5/8/96]. If flotation plans are circulated to the press 12 months before flotation, it is argued that the internal planning horizon for a flotation will be at least 18 months. Those clubs with a positive measurement for UNDCON or UNDLIST are shown in Table 7.20.

Table 7.20: Football Clubs Classified as UNDLIST and UNDCON

Club	Where listed	When listed	Variable Status
Aston Villa	Full	7.5.97	UNDCON
Birmingham City	AIM	7.3.97	UNDCON
Bolton Wanderers (Burnden Leisure)	Full	28.4.97	UNDCON
Celtic	AIM	29.9.95	UNDLIST
Charlton Athletic	AIM	21.3.97	UNDCON
Chelsea (Chelsea Village)	AIM	29.3.96	UNDCON
Heart of Midlothian	Full	19.5.97	UNDCON
Leeds United (Caspian Group)	Full	2.8.96	UNDCON
Manchester United	Full	6.91	UNDLIST
Millwall (Millwall Holdings)	Full	10.89	UNDLIST
Newcastle United	Full	2.4.97	UNDCON
Preston North End	AIM	26.10.95	UNDLIST
Queens Park Rangers (Loftus Road)	AIM	18.11.96	UNDCON
Sheffield United	Full	16.1.97	UNDCON
Southampton (Southampton Leisure)	Full	14.1.97	UNDCON
Sunderland	Full	24.12.96	UNDCON
Tottenham Hotspur	Full	10.83	UNDLIST
West Bromwich Albion	AIM	3.1.97	UNDCON

Those clubs traded on the unregulated trading facility OFEX, are not thought to be susceptible to underwriter pressure. Shares are thinly traded and are rarely offered en masse. This facility also requires little financial disclosure of its members. Thus, institutional pressure upon the selection of financial reporting policies is considered minimal.

UNDRUM sought to capture clubs who were planning a flotation but had not floated by 30 June 1997. It is thought that 'underwriter pressure' might be influential before the club was listed. A financial position acceptable to underwriters and institutional investors would

have to be attained before the club was floated. It is hypothesised that reporting policies acceptable to underwriters would have to be put in place before flotation plans continued. Clubs were identified as planning a flotation but not floated by 30 June 1997 from questionnaire returns or share offer prospectuses. Questionnaires returned from three clubs stated that they were planning to float in the foreseeable future. One club announced an intention to float in two to three years time' in a share prospectus. Thus, it is thought that financial and administrative preparations for flotation, which includes the selection of appropriate reporting policies, will commence well before flotation takes place.

A positive relationship is hypothesised between UNDLIST, UNDCON and UNDRUM and the TRAN/STRATEGY variables. That is, clubs with a positive underwriter pressure measure will, ceteris paribus, select asset/income increasing reporting policies.

The debt contracting cost variable, DEBT, was represented by the gearing ratio of the club. This was used for the reduced and full sample tests. It is said that although leverage is positively related to closeness to covenant violation, it is inferior to actual covenant data [Duke, Hunt and Franz, 1995]. However, the ability to obtain covenant data for football clubs was considered minimal due to their sensitive nature.

The use of gearing as a proxy for the probability of incurring debt contracting costs has been documented. Press and Weintrop [1990] found accounting based covenants amongst firms with more debt and higher gearing, and that higher gearing is associated with the closeness to covenants. Duke and Hunt [1990] also identify a positive relationship between gearing and the restrictiveness of debt covenants. This study assumes that gearing is also a proxy for the probability of incurring bankruptcy costs where no debt covenant exists. A

greater probability of incurring bankruptcy costs manifests itself in the form of greater creditor influence over organisational matters.

The gearing ratio used in this study is total book value of debt divided by the book value of total assets. Duke and Hunt [1990] found that numerous versions of the gearing ratio have been used as proxies but all had a similar relationship to the existence and tightness of debt covenant restrictions.

Book values rather than market values were used because it is not possible to obtain market values of debt (and equity) for most football clubs. Total debt consisted of short term and long term loan creditors. Short term debt was extended to include the extent of a club's overdraft. It seems that many clubs used short term bank lending as a constant source of funding. Total assets consisted of current assets plus fixed assets less intangible fixed assets. Intangible assets were omitted because they comprise of player registrations. The inclusion of intangibles would give lower gearing ratios to clubs with player registrations on the balance sheet. These figures were taken from club financial reports.

A positive relationship is hypothesised between DEBT and the TRAN/STRATEGY variables. That is, clubs with a positive proximity to debt contracting cost measure will, ceteris paribus, select asset/income increasing reporting policies.

For the youth development variable, one measure was offered for the full sample tests and two measures for the reduced sample tests.

The full sample measure is a dummy variable, YOUTHF. This measures whether the club is a net seller of player registrations. Those clubs who are net sellers of registrations are assumed to have a greater commitment towards youth development. It is argued that they employ a 'make' approach to staffing decisions rather than a 'buy' approach. The variable was

constructed from information given in the 1995 financial reports. A positive value was assigned to clubs who were net sellers of player registrations over the period.

The reduced sample measures were dummy variables, YOUTHQEX and YOUTHQBOS. Both were based on questionnaire responses. YOUTHQEX was derived from answers to Question 14 on the football club questionnaire, "How would you rate the extent of [youth development] activities?". A positive rating was given where respondents answered 'very active'. YOUTHQBOS was derived from answers to Question 15, "Has the Bosman Ruling by the European Court of Justice affected your youth development policy ?". A positive rating was given where responses were negative or where respondents indicated that investment in youth development policy would increase. A rating of zero was allocated where respondents indicated that youth development was (or had been) scaled down as a result of the Bosman Ruling.

A positive relationship is hypothesised between YOUTHF, YOUTHQEX and YOUTHQBOS and the TRAN/STRATEGY variables. That is, clubs that display a greater commitment to youth development will, ceteris paribus, select asset/income increasing transfer fee and signing-on fee reporting policies.

The ownership variable, OWNER, sought to distinguish between those clubs that were privately owned and those which were publicly owned. The ownership status was taken from financial reports or share prospectus' as at 1 January 1996. This date was used as the study aimed to capture the influences at the time accounting policies were selected. The ownership variable refers to the status of the company from which financial report data were derived. .A positive rating was assigned to public limited companies and a zero rating to private limited companies. OWNER was used in the full and reduced sample tests.

A positive relationship is hypothesised between OWNER and the TRAN/STRATEGY variables. That is, clubs that publicly owned will, ceteris paribus, select asset/income increasing reporting policies.

Four variables were used to measure the existence of normative accounting influence. NORMQUAL was used for the full sample test and NORMIP, NORMQUSE and NORMQEFFECT were used for the reduced sample test.

NORMQUAL was a dummy variable that sought to show which club's had professionally qualified accountants on their management board as at 1 January 1996. The management board is defined as consisting of the company directors and company secretary. This proxy was used in a study by Neu [1992] on the use of earnings forecasts in Canadian companies.

The date is set in order to capture any normative accounting influence present in the football club at the time accounting policies were being selected. A positive rating is given where a member of the management board held a qualification with ICAEW, ICAS, ICAI, CIMA, ACCA or CIPFA. These accounting bodies are thought to represent the main accountancy qualifications available in the UK. This information was obtained from the 1995 financial reports and share prospectuses. A positive value was assigned to clubs with professionally qualified accountants on their board.

The reduced sample measures were variables, NORMIP, NORMQUSE and NORMQEFFECT. All were based on questionnaire responses. NORMIP was derived from answers to Question 3 on the football club questionnaire, "Do any members of the management board hold one of the following professional accountancy qualifications?". The NORMIP represented the number of members of company management who had the

specified qualifications. NORMQUSE was derived from answers to Question 5, "To what extent is accounting information used as a means of planning, implementing corporate policy, co-ordinating and controlling activities?". NORMQEFFECT was derived from responses to Question 6, "To what extent do you regard your organisation's published accounts as a means of communicating information about managerial efficiency and the quality of financial control?". The 5 responses were coded 1 to 5. For example, a rating of 1 was assigned to a response of 'not used' and a rating of 5 to a response of 'exclusive use'. The variable measures, NORMQUSE and NORMQEFFECT are taken from a questionnaire designed to measure professional accounting subculture, by Thomas [1989].

A negative relationship is hypothesised between NORMQUAL, NORMIP, NORMQUSE and NORMQEFFECT and the TRAN/STRATEGY variables. That is, clubs under a greater normative influence will, ceteris paribus, select asset/income decreasing reporting policies.

The measure chosen to represent the susceptibility of a football club incurring political costs is POLATT. This measure will be used in the full sample and the reduced sample tests.

POLATT is a size proxy. Organisation size is commonly utilised as a proxy in many accounting choice studies. In the football industry, larger clubs will be more visible and are more likely to be subject to scrutiny. Size is predicted to be positively related to the probability of incurring political costs. The use of a size variable as a political sensitivity proxy is workable, well established but limited.

POLATT was constructed from the mean of average league attendance's over the previous three seasons (1993-4, 1994-5, 1995-6). This was thought to be a superior measure of size than sales, net assets or league division.

A negative relationship is hypothesised between POLATT and the TRAN/STRATEGY variables. That is, clubs more susceptible to incurring political costs will, *ceteris paribus*, select asset/income decreasing reporting policies.

7.5 Model Specification

The measures of the variables outlined above will be used to test the hypotheses given in Chapter 6. This section will specify the four models tested, describe the statistical tests used and justify their selection.

Tests will be undertaken on four models. There will be a full sample and a reduced sample test using STRATEGY as the response variable and a full and reduced sample test using the TRAN response variable. This enables both transfer fee policy in isolation and reporting policy strategy to be analysed. The measures in each of the four models are summarised in Table 7.21.

Table 7.21: Summary of Models Tested

Test	1. n=102	2. n=33	3. n=102	4. n=33	
Response (y)	STRATEGY	STRATEGY	TRAN	TRAN	Sign
Underwriter Pressure	UNDLIST UNDCON UNDRUM	UNDLIST UNDCON UNDRUM	UNDLIST UNDCON UNDRUM	UNDLIST UNDCON UNDRUM	+
Debt Contracting Costs	DEBT	DEBT	DEBT	DEBT	+
Youth Development	YOUTHF	YOUTHQEX YOUTHQBOS	YOUTHF	YOUTHQEX YOUTHQBOS	+
Ownership Structure	OWNER	OWNER	OWNER	OWNER	+
Normative Accounting Influence	NORMQUAL	NORMQUSE NORMQEFFF NORMIP	NORMQUAL	NORMQUSE NORMQEFFF NORMIP	-
Political Costs	POLATT	POLATT	POLATT	POLATT	-

a) Descriptive Statistics

Analysis of the descriptive statistics can be used to assess the distributional characteristics of the response and explanatory variables. Descriptive statistics for the response variables (y_k) and the measures representing the explanatory variables (x_k) are shown in Table 7.22.

Table 7.22: Descriptive Statistics

	Mean	Mode	Median	Min	Max	Std Dev	Skewness
STRATEGY	0.980	1	1	0	4	0.923	0.888
TRAN	0.157	0	0	0	1	0.365	1.915
UNDLIST	0.049	0	0	0	1	0.217	4.24
UNDCON	0.127	0	0	0	1	0.335	2.268
UNDRUM	0.039	0	0	0	1	0.195	4.819
DEBT	1.318	-	0.872	0.157	9.383	1.437	3.348
YOUTHF	0.275	0	0	0	1	0.448	1.026
YOUTHQEX	0.788	1	1	0	1	0.415	-1.476
YOUTHQBOS	0.970	1	1	0	1	0.174	-5.745
OWNER	0.265	0	0	0	1	0.443	1.083
NORMQUAL	0.373	0	0	0	1	0.486	0.535
NORMQUSE	3.697	4	4	2	4	0.585	-1.841
NORMQEFFF	2.970	3	3	1	4	0.847	-0.597
NORMIP	3.697	4	4	1	4	0.728	-2.555
POLATT	11358	-	7821	1738	43993	9800	1.497

The descriptive statistics show the distribution of the response variable, STRATEGY, to be skewed slightly to the left. This is because more clubs select asset/income decreasing reporting policies. The TRAN response variable distribution is also skewed to the left. This reflects that the most common expense policies in the industry are comparatively income decreasing.

The underwriter pressure measures, UNDLIST, UNDCON and UNDRUM are all skewed towards no underwriter pressure. This is due to a minority of clubs having a listing on the Stock Exchange. The debt contracting cost measure, DEBT, has a distribution skewed to the left. Most values fall around the mean of 1.32 with extreme values stretching the

distribution to the right. Of the youth measures, YOUTHQBOS and YOUTHQEX are skewed to the right. This reflects that most clubs gave positive responses about their youth development policy in the questionnaire. YOUTHF is skewed left, demonstrating that most clubs are net buyers of player registrations. The distribution of NORMQUAL is well balanced. The distributions of NORMQUSE, NORMQEFFF and NORMIP are all skewed right. The averages show that answers from the questionnaire generally came from the higher end of the response scale. The POLATT measure has a widely spread distribution skewed towards the left. This is because more clubs have lower attendance's but the distribution is stretched towards the right by very high average attendance's of the largest clubs.

The data set, common with much accounting research data, contains explanatory variables with skewed distributions. Hence, a statistical test is required that will not be distorted by skewed explanatory variables.

b) Statistical Tests

To test the hypotheses outlined in Chapter 6, a statistical test was required to investigate the relationship between the response probability and measures representing the explanatory variables.

In this study, the response variables were of a qualitative, discrete nature. Hence, the most popular technique for investigating the relationship between response and explanatory variables, Ordinary Least Squares, would be invalid. Ordinary Least Squares regression assumes that error terms are homoscedastic; the variance of the error terms is constant. However, this assumption is unlikely to hold for discrete response variables. For example, if the discrete response variable is dichotomous, the error term can only assume 2 possible values. Thus, the error terms for discrete models are likely to be heteroscedastic. Furthermore,

Ordinary Least Squares regression 'explains' the choices individuals make. With qualitative response data, a model is required that produces probabilities corresponding to the choices in question [Dhrymes, 1986]. Ordinary Least Squares regression does not restrict its 'predictions' to the bounds of probability; between 0 and 1. Thus, Ordinary Least Squares estimators would be inefficient for the purposes of this study.

For the probability of the chosen model to vary monotonically with x and yet remain within the bounds of 0 and 1, a sigmoid-type curve was required. These properties are shared by the cumulative distribution function of any random variable with a symmetric density function that allows for linear transformation of the argument [Cramer, 1991]. A general class of linear models has a function, $g = g(u)$ of the mean of the response variable, which is linearly related to the explanatory variables. The function, $g = g(u)$ provides a link between a random (stochastic) component and a systematic (deterministic) component of the response variable. Thus, $g = g(u)$ is the link function.

The link function chosen in these tests is the Normit function, $g(p)=\Phi^{-1}(p)$. This represents the inverse of the cumulative standard normal distribution function³⁰. It was originally designed for biologists to investigate the relationship between a dosage given to an organism and its associated response. Alternatives to the Normit link function include the Logit and the complementary log log functions. The Normit function was initially chosen due to its general applicability where frequency distributions approximate to it even if individual observations behave differently. It enables responses from 0 to 1, and the explanatory variables can range from $-\infty$ to $+\infty$. Normit was chosen over Logit due to its smaller variance.

³⁰ Normit is also known as Probit in statistical literature. The difference between them is the constant +5 which was added to Probit to enable easier computation before the introduction of computers. Normit and Probit are viewed interchangeably in the remainder of this thesis.

The variance of Normit is 1. The variance of Logit is $\pi^2/3$. Thus, for Normit, smaller probabilities are given to choices in the tails of the distribution. However, the similarity of the two models and their generalisability makes a choice between them difficult to justify on empirical grounds [Greene, 1990]. Hence, comparable tests shall be undertaken using the Logit and complementary log log link functions.

Normit regression equations were derived using maximum likelihood estimation. Estimates of regression parameters are computed using iteratively re-weighted least squares. The process of going through iterative schemes stops when the convergence criterion, the log-likelihood function, is maximised.

The Normit model assumes the error terms have a joint multivariate normal distribution with zero mean and arbitrary variance-covariance matrix [Daganzo, 1979]. Hence, the variances of the error terms may be non-constant and error terms may be correlated. Thus, the restrictive assumptions of the Ordinary Least Squares regression model are dropped. The skewness inherent in the explanatory variables is irrelevant to the efficiency of this model.

The Normit regression procedure allows the estimation of parameters where the response variable has more than two categories. It fits a parallel lines regression model based on cumulative distribution probabilities rather than individual probabilities [SAS Institute, 1990]. Hence, it can be used to model both the multinomial response variable, STRATEGY, and the binary response variable, TRAN. The Normit regression procedure will provide a model of the probability of selecting a particular reporting policy given a set of attributes for the explanatory variables. The model will take the form;

$$P(y_i=k) = \Phi(a_{ki} + b_j.x_{ji} + e_i)$$

c) Selection Procedure

Variables used in the tests are described in Chapter 6. Several measures were originally planned to be used but were dropped due to inconsistency or invalidity.

Average attendance is used as a size/visibility measure to proxy for the susceptibility to incurring political costs. An alternative size measure was net tangible assets taken from the 1995 financial reports³¹. However, upon closer inspection this was not thought to be a reliable indicator of club size. This was due to the high debt levels carried by football clubs and high reporting losses sustained due to their treatment of transfer fees. Thus, many clubs had negative net tangible assets. Many of the largest clubs had very low net tangible assets due to their higher debt levels and the write-offs of expensive purchased player registrations. In addition, it is thought that net assets would be correlated with the underwriter pressure measures. Listed clubs would presumably have greater net assets (shareholders equity) through increases to the share capital and share premium account. The use of turnover may have been a valid measure of size but comparative figures were difficult to gather as the composition of turnover varied greatly from club to club. Differences were due to the division of commercial and football income and the inclusion (or exclusion) of transfer fees and donations.

An alternative youth variable was tested. This sought to assess the club's youth development policy from its financial reports. The criteria established included the number of schoolboys and apprentices associated with the club, the existence of a youth academy and the number of first team players who had not been purchased. However, comparative

information was difficult to obtain, particularly from clubs whose accounts were obtained from Companies House, which tend to offer little information than that which is legally required.

7.6 Parameter Estimation

Regression estimates were obtained using the SAS 6.12. and SPSS for Windows 6.1.3.

In order to assess the appropriateness of the Normit link function for the multinomial cases, a statistical test was undertaken. The Score test for the equal slopes assumption delivers a test statistic with a chi-squared distribution. The link function will be appropriate where the test is non-significant³². The test statistics for each equation are shown in Table 7.23.

Table 7.23: Appropriateness of Normit Link Function for STRATEGY tests

Equation	Test Statistic	Degrees of Freedom	p-value
1	39.1875	24	0.0261
2	23.9645	22	0.3491

The use of the Normit function for the reduced sample equation (Equation 2) is established. However, the significance of the test statistic for the full sample equation (Equation 1) is significant. This questions the suitability of the Normit function.

However, substitution with Logit and complementary log log functions provide inferior test results. The results of these tests are displayed in Appendix 4. The Logit and complementary log log functions gave test statistics for the link function with lower

³¹ Comparative figures were obtained by converting the accounts, where necessary, to represent net tangible assets where the club used a capitalisation policy with respect to transfer fees.

³² In line with common statistical practice, non-significant shall be defined as being where p-value is greater than 5%, unless specified otherwise.

respective significance levels than the Normit function. Model fit statistics are also computed with the alternate link functions. Results are similar but less robust than those computed with the Normit function. Hence it is concluded that these alternative link functions are not superior to the Normit link function in the regression models on the basis of these tests.

Model fit statistics for each equation are shown in Table 7.24.

Table 7.24: Model Fit Statistics

Test	1. n=102	2. n=33	3. n=102	4. n=33
Log Likelihood	246.061	58.242	72.738	13.939
Akaike Information Criterion	270.061	86.424	90.738	37.939
Schwartz Criterion	301.561	107.376	114.363	55.897
model χ^2 statistic	6.812	22.384	15.885	24.734
model χ^2 p-value	0.5570	0.0216	0.0440	0.0100
'c' Rank Correlation	0.614	0.836	0.765	0.972

Goodness of fit statistics are represented by the log likelihood statistic, the Akaike Information Criterion and the Schwartz Criterion. The log likelihood statistic, -2LL, is the convergence criterion for parameter estimation. A high likelihood of observed results translates into a small log likelihood value. The remaining goodness of fit statistics adjust the log likelihood statistic for the number of terms in the model and the number of observations used. For all goodness of fit statistics, a lower value represents a better fit.

Equations 1 and 2, using the STRATEGY response variable have a poorer fit in terms of all goodness of fit statistics than Equations 3 and 4 (using the TRAN response variable). This suggests the explanatory variables are more effective at explaining the choice

of transfer fee reporting policy than explaining reporting policy strategy over four reporting policies. The reduced sample models more closely fit data than the full sample equations. This is expected as a reduction in sample size generally reduces variability in the sample set. In addition, the reduced sample models contained a greater number of explanatory variables.

The model chi-square statistic represents the difference between a model fitted with an intercept and no parameters, and the specified model (with an intercept and the specified explanatory variables). It tests the null hypothesis that all parameter estimates in the specified model are equal to zero.

Equations 3 and 4, using the TRAN response variable, show a better fit than Equations 1 and 2. The hypothesis that all the parameter estimates in Equation 1 are zero cannot be rejected. This hypothesis can be rejected at the 5% significance level for Equations 2, 3 and 4. However, the assumption of a chi-squared distribution for this statistic with models holding sample sizes of 33 may not necessarily hold. Thus, the results of Equation's 2 and 4 must be viewed with some scepticism.

The rank correlation is shown as an indicator of the predictive ability of each model. Pairs of responses are classified as concordant or discordant based upon their predicted probabilities and their observed probabilities. The rank correlation coefficient, c , is based upon the number of pairs of observations with different response values.

The degree of rank correlation mirrors the goodness of fit statistics. The TRAN equations provide a better fit than the STRATEGY equations and the reduced sample equations show a better fit than the full sample equations.

The parameter estimates and their associated standard errors for each test are shown in Tables 7.25 - 7.28. The standard errors are computed as the square root of corresponding diagonal element of the estimated covariance matrix.

The standardised estimates assess the relative proportion of the data set explained by each parameter estimate. Higher values show that a parameter estimate is more powerful in fitting the data set.

Wald statistics are calculated for each estimate. The Wald statistic is an asymptotic t-statistic. It tests a null hypothesis that the associated parameter estimate is zero. Two-tailed tests are undertaken due to the exploratory nature of this study. Wald statistics and their significance with respect to a chi-squared distribution are shown in Tables 7.25 - 7.28.

Table 7.25: Parameter Estimates: Equation 1

Variable Measure	Estimate	Std Error	Wald χ^2 statistic	Wald χ^2 p-value	Stdised Estimate
Intercept 1	-0.5360	0.2701	3.9389	0.0472	-
Intercept 2	0.5587	0.2705	4.2673	0.0389	-
Intercept 3	1.6127	0.3192	25.5268	0.0001	-
Intercept 4	2.0759	0.3875	28.6962	0.0001	
UNDLIST	-1.0940	0.5389	4.1211	0.0424	-0.237376
UNDCON	-0.2009	0.3513	0.3271	0.5674	-0.067341
UNDRUM	-0.5549	0.5751	0.9310	0.3346	-0.108235
DEBT	-0.0302	0.0796	0.1445	0.7039	-0.043443
YOUTHF	0.3566	0.2663	1.7940	0.1804	0.159933
OWNER	-0.1986	0.2818	0.4965	0.4810	-0.088029
NORMQUAL	0.0252	0.2393	0.0111	0.9160	-0.012259
POLATT	0.000018	0.000014	1.5932	0.2069	0.173754

In estimating the response probability of Equation 1;

$$P(\text{STRATEGY}=k) = \Phi(a_k + b_j \cdot x_{ji})$$

For the 5 possible strategies, 4 intercepts are generated;

STRATEGY=0	no intercept
STRATEGY=1	Intercept 1
STRATEGY=2	Intercept 2
STRATEGY=3	Intercept 3
STRATEGY=4	Intercept 4

The only parameter estimate in Equation 1 which is significantly different from zero is UNDLIST. This has a negative estimate suggesting that those clubs with a positive rating for UNDLIST select asset/income decreasing reporting policies. From the remaining parameter estimates the youth development policy measure, YOUTHF, stands out in exhibiting some potential explanatory power.

Table 7.26: Parameter Estimates: Equation 2

Variable Measure	Estimate	Std Error	Wald χ^2 statistic	Wald χ^2 p-value	Stdised Estimate
Intercept 1	-3.8288	2.6536	2.0819	0.1491	-
Intercept 2	-2.2018	2.5932	0.7209	0.3958	-
Intercept 3	-0.7547	2.5956	0.0845	0.7713	-
UNDLIST	-7.4099	569.8	0.0002	0.9896	-1.289904
UNDCON	-1.6888	0.7179	5.5337	0.0187	-0.614900
UNDRUM	-1.4864	0.8710	2.9123	0.0879	-0.433933
DEBT	-0.5831	0.2433	5.7437	0.0165	-0.584076
YOUTHQEX	-0.2610	0.5961	0.1918	0.6615	-0.108367
YOUTHQBOS	2.2429	1.5729	2.0336	0.1539	0.390447
OWNER	-0.2336	0.5548	0.1773	0.6737	-0.109025
NORMIP	-0.3884	0.3479	1.2465	0.2642	-0.282812
NORMQUSE	1.1054	0.4245	6.7817	0.0092	0.647179
NORMQEFF	-0.1198	0.3204	0.1398	0.7085	-0.101497
POLATT	-0.00000163	0.000034	0.0023	0.9618	-0.016732

In estimating the response probability of Equation 2;

$$P(\text{STRATEGY}=k) = \Phi(a_k + b_j \cdot x_{ji})$$

a_k intercept for Strategy 'k'

b_j explanatory variable 'j'

x_{ji} parameter estimate for related explanatory variable

Φ Standard Normal Distribution

There are no sample points representing STRATEGY=4 in this reduced sample.

Hence, for the four possible strategies, three intercepts are generated;

STRATEGY=0 no intercept

STRATEGY=1 Intercept 1

STRATEGY=2 Intercept 2

STRATEGY=3 Intercept 3

Several explanatory variables in Equation 2 suggest they may be useful in explaining reporting strategy. The underwriter pressure measures, UNDCON and UNDRUM exhibit some explanatory ability. UNDCON is significantly different from zero at the 5% level, UNDRUM is significantly different from zero at the 10% level. The debt contracting cost measure, DEBT, is significant at the 5% level. Finally, a normative influence variable, NORMQUSE, is significantly different from zero at the 1% level. The remainder of the parameter estimates, apart from a youth development policy measure, YOUTHQBOS, show little explanatory ability.

Table 7.27: Parameter Estimates: Equation 3

Variable Measure	Estimate	Std Error	Wald χ^2 statistic	Wald χ^2 p-value	Stdised Estimate
Intercept	1.3443	0.3965	11.4935	0.0007	-
UNDLIST	-1.9617	0.7267	7.2868	0.0069	-0.425644
UNDCON	-0.9682	0.4811	4.0499	0.0442	-0.324465
UNDRUM	-0.4800	0.7712	0.3875	0.5336	-0.093640
DEBT	-0.0970	0.1054	0.8482	0.3571	-0.139372
YOUTHF	0.8767	0.5263	2.7748	0.0958	0.393163
OWNER	0.0852	0.4355	0.0382	0.8450	0.037762
NORMQUAL	-0.4349	0.3499	1.5445	0.2139	-0.211293
POLATT	0.00001	0.000021	0.2349	0.6279	0.101321

In estimating the response probability of Equations 3 and 4;

$$P(TRAN) = \Phi(a + b_j \cdot x_{ji})$$

The underwriter pressure measures, UNDLIST and UNDCON, are significantly different from zero at the 5% level. YOUTHF shows some explanatory ability and is significant in the Wald tests at the 10% level.

Table 7.28: Parameter Estimates: Equation 4

Variable Measure	Estimate	Std Error	Wald χ^2 statistic	Wald χ^2 p-value	Stdised Estimate
Intercept	-23.0655	416.5	0.0031	0.9558	-
UNDLIST	-6.6619	416.2	0.0003	0.9872	-1.159691
UNDCON	-7.9343	5.2855	2.2534	0.1333	-2.888960
UNDRUM	-9.4393	6.9674	1.8354	0.1755	-2.755682
DEBT	-4.2015	3.6565	1.3203	0.2505	-4.208344
YOUTHQEX	2.1555	2.0988	1.0548	0.3044	0.894861
YOUTHQBOS	13.4157	416.2	0.0010	0.9743	2.335370
OWNER	0.5122	1.9700	0.0676	0.7948	0.239058
NORMIP	-0.5678	1.0984	0.2672	0.6052	-0.413475
NORMQUSE	4.0826	3.2829	1.5465	0.2136	2.390339
NORMQEFP	1.7119	1.7051	1.0080	0.3154	1.450410
POLATT	-0.00007	0.000123	0.3237	0.5694	-0.719460

None of the parameter estimates in Equation 4 are statistically significant from zero. The most explanatory power is displayed by the underwriter pressure measures, UNDCON and UNDRUM.

7.7 Sensitivity Analysis

The statistical tests are assessed with respect to multicollinearity, sample size, model assumptions, omission of terms and Type I and Type II errors.

High correlation between explanatory variables can lead to inefficient estimation of the parameters. To check for any multicollinearity, Spearman's rank correlation coefficients were computed between explanatory variables used in all equations. The results are shown in Appendix 5. High correlation coefficients, interpreted as greater than 0.40, were found between NORMQEFFF and UNDRUM.

The correlation coefficient between NORMQEFFF and UNDRUM is 0.43. This coefficient is significantly different from zero at the 5% level. This can be interpreted as those football club's stating a willingness to float tended to use their accounts for communicating managerial efficiency and the quality of financial control. This could be explained by both variables sharing a degree of commercialism.

The impact of multicollinearity on the validity of Equations 2 and 4 can be investigated. The regression were repeated with UNDRUM omitted and again with NORMQEFFF omitted. The results are shown in Appendix 6.

The omission of NORMQEFFF does not greatly alter the goodness of fit of Equations 2 and 4. In Equation 2, UNDRUM becomes significant at the 5% level and YOUTHQBOS exhibits greater explanatory power. In Equation 4, UNDRUM becomes significant at the 10% level and UNDCON becomes significant at the 5% level. In addition, DEBT and NORMQUSE display some potential explanatory power.

The omission of UNDRUM slightly alters the goodness of fit statistics for Equation 4. The parameter estimates are only significantly from zero at the 10% level compared to the 5% level when UNDRUM is included. In Equation 2, the omission of UNDRUM has little impact. In Equation 4, UNDCON becomes significant at the 5% level when UNDRUM is omitted.

The correlation between NORMQEFF and UNDRUM is does not invalidate the Normit regression analysis of Equations 2 and 4. The omission of NORMQEFF leads to increase in the potential explanatory ability of the underwriter pressure measure, UNDRUM. However, the omission of both terms does not significantly affect the remaining terms in both models.

The validity of the equations must be assessed given the relatively small sample sizes. Normit model test statistics may be miscalibrated where sample sizes are small [Stone and Rasp, 1991; Noreen, 1988]. Sample sizes under 50 may yield invalid test statistics. For Normit models with sample sizes under 100, miscalibration in the form of empirical error rates may be greater than error rates incurred by Ordinary Least Squares regression. For Normit models with small sample sizes, the error rate for model χ^2 square statistic may be twice its nominal rate and the error rate for the Wald test statistics may be lower than its nominal rate. This suggests that test statistics, particularly from Equations 2 and 4, could be inaccurate and their implications should be regarded with caution. Equations 1 and 3 have 102 observations and can be regarded as valid.

A Normit model was selected as it outperforms Ordinary Least Squares in terms of classificatory ability and power. It is more appropriate given the type of data available and the purposes of this study. The small sample size could not be avoided due to the nature of the industry. The sample size could only have been increased by including football clubs that did not operate on a full time basis, or football clubs from other countries that had different characteristics; particularly in terms of financial reporting. Thus, the sample size could have only been increased by diluting the sample set that was designed to represent professional football club organisations in the UK.

The error term of the model is assumed to be normally distributed with a mean of 0. Should this assumption not hold, the model may be invalid. The error term will likely account for parameters omitted from the model. The model will not be invalid as long as omitted terms are independent from existing terms. The omission of terms will be discussed in Chapter 8.

Common to all statistical testing, the existence of erroneous hypothesis testing must be accepted. Type I errors are set at 5%. This is the rejection region common to statistical testing. Hence, a 5% probability exists that where test statistics indicate that a null hypothesis should be rejected, the null hypothesis is in fact true.

Type II errors are where test statistics indicate that the null hypothesis should be accepted when it is actually false. It is the acceptance zone given the true population parameters. This may occur where the hypotheses stated in Chapter 6 are true but this is not verified in the statistical tests due to misspecification of variable measures.

The results from Equations 1-4 will be interpreted in Chapter 8. In analysing the assumptions of the regression models, the test statistics from Equations 1 and 3 are found to be more robust than those from models 2 and 4. Thus, analysis of statistics from Equations 2 and 4 should be regarded with caution.

Summary

This chapter outlined the sampling and data collection techniques used in studying the selection of reporting policies. Data was collected from financial reports, a questionnaire

sent to banks, and a questionnaire sent to football clubs. The responses from these sources were analysed and used to construct measures of the variables. Measures were designed to represent the six explanatory variables and two response variables used to study the choice of financial reporting policies.

The latter parts of this chapter described the test procedure and the statistical tests used in this study. The validity of the tests has been analysed and the results of four model equations are displayed. This enables the variables outlined in the hypotheses to be analysed using data from all clubs, and from those responding to the questionnaire. Analysis can also take place using a selection of four accounting policies or using the transfer fee accounting policy. The next chapter will provide an interpretation of results and relate them to the hypotheses under examination.

CHAPTER EIGHT

TEST RESULTS AND INTERPRETATION

Introduction

This chapter will assess the validity of the models in Chapter 7. It will interpret the results of the statistical tests and relate them to the specified hypotheses. This will enable the appropriateness of the hypotheses to be assessed and conclusions to be drawn.

In testing the specified models, Equations 3 and 4, using the TRAN response variable, were found to provide a closer fit of the data than Equations 1 and 2. In all comparable tests, the strategy Equations (1 and 2) fitted the data set less accurately than the transfer fee Equations (3 and 4).

A summary of the hypotheses and results for the explanatory variables are shown in Table 8.1. As discussed in Chapter 7, the results from the reduced sample models, Equations 2 and 4, should be viewed with caution. Hence, Table 8.1 only shows the results of Equations 2 and 4, where those variables were not used in Equations 1 and 3; specifically YOUTHQEX, YOUTHQBOS, NORMQEFFF, ACCUSE and NORMIP.

Table 8.1; Summary of Statistical Tests; Explanatory Variables

Variable measure	Hypothesis	Hypothesised sign	Estimate d sign	p-value range
UNDLIST	Underwriter Pressure	+	-	0.01 to 0.04
UNDCON	Underwriter Pressure	+	-	0.04 to 0.57
UNDRUM	Underwriter Pressure	+	-	0.33 to 0.53
DEBT	Debt Contracting Costs	+	-	0.36 to 0.70
YOUTHF	Youth Development Policy	+	+	0.10 to 0.18
YOUTHQEX	Youth Development Policy	+	-/+	0.30 to 0.66
YOUTHQBOS	Youth Development Policy	+	+	0.15 to 0.97
OWNER	Ownership Structure	+	-/+	0.48 to 0.85
NORMQUAL	Normative Accounting Influence	-	-/+	0.21 to 0.92
NORMIP	Normative Accounting Influence	-	-	0.26 to 0.61
ACCUSE	Normative Accounting Influence	-	+	0.01 to 0.21
NORMQEFF	Normative Accounting Influence	-	-/+	0.32 to 0.71
POLATT	Political Contracting Costs	-	+	0.21 to 0.63

In the STRATEGY models tested (Equations 1 and 2), the parameter estimates cannot be interpreted as being significantly different from zero. Thus, analysis is speculative.

In the full sample model (Equation 1), only the underwriter pressure variable, UNDLIST, was significant at the 10% level. Few of the other specified variables appeared to have a significant effect on the selection of financial reporting policies. In the reduced sample model (Equation 2), the underwriter pressure variables, UNDCON and UNDRUM, the debt

contracting cost variable, DEBT and the normative influence measure, ACCUSE, were significant at the 5% level.

The models specified in Equations 3 and 4, using the TRAN response variable, were a better fit of the data. The results of Equation 4 are to be interpreted with caution. However, the tests on Equation 3 can be considered robust.

In the full sample model (Equation 3), the underwriter pressure measures, UNDLIST and UNDCON appeared to be sound predictors of transfer fee accounting policy, being significant at the 5% level. The youth development measure, YOUTHF, was also significant at the 10% level. In the reduced sample model (Equation 4), none of the parameter estimates were significantly different from zero.

The only statistically sound tests are made in Equation 3. Tests on individual variables in Equation 1 are difficult to interpret due to poor overall model fit. Results from Equations 2 and 4 are inconclusive due to their small sample sizes. Quantitative analysis on sample sizes of less than 100 is difficult due to restrictive model assumptions. Hence, qualitative analysis shall be used to supplement quantitative analysis in assessing the validity of each hypothesis.

8.1 Underwriter Pressure Hypothesis

The underwriter pressure measures, UNDLIST and UNDCON, displayed significant explanatory power in Equation 3. Underwriter pressure measures were significant in both the strategy and transfer fee equations. However, the results in all equations show that the direction of the relationship is the direct opposite of the hypothesised relationship. The

statistical tests suggest a negative relationship indicating that those clubs susceptible to underwriter pressure select more asset/income decreasing accounting policies. The hypothesis stated that clubs susceptible to underwriter pressure would select asset/income increasing accounting policies.

It is thought that the explanatory significance of the underwriter pressure measures in the strategy equations is related almost wholly to its effect on transfer fees. This is supported by stronger and more valid results for the transfer fee equations than the strategy equations. This suggests that underwriter pressure can influence the selection of transfer fee accounting policy more strongly than other accounting policies. This is due to transfer fees being the most influential factor on reported results. Thus, in attempting to select suitable accounting policies that provide results which are acceptable to underwriters and other agents of the club, concentration is placed on the policy which has the greatest effect on reported performance. The management board is under less pressure to alter accounting policies with respect to signing-on fees, capital grants and stadia depreciation because the effects of any changes may be considered too small to make a material difference on reported results. This argument is given greater credence by the flexibility allowed in selecting a transfer fee accounting policy in comparison to any other transaction with a similar impact on reported results. More flexibility and variability was found in the selection of transfer fees than any other policy examined in this study³³.

The statistical tests indicated a positive relationship between underwriter pressure and asset/income decreasing accounting policy. This result can be explained by three factors;

³³ Refer to Chapter 5; 5.1

an erroneous hypothesis, misspecification of underwriter pressure by the variable measures or erroneous testing procedures.

The specification of underwriter pressure measures is considered sound. The use of independently corroborated data is rare in the football industry. The use of listing status was deemed to be an accurate indicator of underwriter pressure. This was verified by the chronological checks on the data set; those classed as considering flotation at the time accounting policies were selected must have floated in the subsequent 18 months. The factual nature of listing status was thought to prove that a misspecification of the variable measures was unlikely.

The testing procedures for Equation 3 were considered to be adequate. The results from the reduced sample equations were questionable due to the small sample size. However, the results for underwriter pressure measures are consistent for all equations. Thus, it is thought that faulty testing procedures cannot explain the results displayed.

Hence, it is concluded that the stated hypothesis may be inaccurate. Thus, an assessment of explanations concordant with the statistical tests will be undertaken.

The hypothesis stated that clubs would be under pressure to select asset/income increasing accounting policies in order to show 'stronger' financial statements upon their introduction to the market. This was required to ensure demand for the issue was adequate and that the reputation of the underwriters would be intact regardless of subsequent price performance. The statistical results indicate that clubs listed on a stock exchange or planning to float, select asset/income decreasing accounting policies, particularly with respect to transfer fees. Asset/income decreasing policies tend to be more conservative, generally

accepted policies³⁴. Thus, it could be argued that management are put under pressure to select conservative non-controversial accounting policies prior to flotation due to the increased scrutiny which a listing will bring. An incentive may exist for the underwriter to avoid offering shares for sale on the basis of financial statements containing controversial accounting policies. It may also be that other parties such as auditors exert pressure on accounting policy selection. They have an incentive not to support a company's financial position which proves misleading upon flotation [Beattie et al, 1994].

The financial reports of Newcastle United football club are consistent with this explanation. The 1995 annual report for Newcastle United Football Company Limited was authorised on 3 May 1996. Changes had been made to the accounting policies for transfer fees and signing-on fees. Transfer fees had been changed from a capitalisation policy (asset/income increasing) to an expense policy (asset/income decreasing). The reports stated that the change was attributable to the Bosman Ruling which led to uncertainty over the recoverable amounts available from the sale of the player registrations. Signing-on fees had been altered from charging them to the profit and loss account when paid (asset/income increasing) to charging them to the profit and loss account in the period in which the player is signed. The effect of these changes led to a reduction in income for the period of £5,272,000. The club was floated on the London Stock Exchange in May 1997. It could be argued that underwriter (and institutional) pressure on a high profile club subject to considerable scrutiny had led the management board to adopt conventional accounting policies.

Both the statistical tests and the specified hypotheses highlight that a relationship exists between underwriter pressure and accounting policy selection. The ex post explanation,

³⁴ Refer to Chapter 5; 5.1(c)

outlined above, would fit the results but should be viewed with caution. It may be that a more complex relationship exists. Contrary to the statistical tests, a link between clubs changing to asset/income increasing transfer fee policies shortly before flotation exists as shown below.

The possible influence of underwriter pressure can be explored in the case of Preston North End football club. Preston North End (Holdings) Limited approved its 1995 annual reports on 7 August 1995. Included in the annual reports was a change to transfer fee accounting policy. The 1995 accounts had been constructed using a capitalisation policy in place of the previous write-down policy. The effects of selecting an asset/income increasing policy (capitalisation) instead of an asset/income decreasing policy (expense) were apparent. Net assets(liabilities) for the period ending 1994 were restated at £(18,164) from £(411,419) and the retained profit for the year rose to £24,208 from a loss of £(165,772). The change also helped provide a positive net assets balance for the period ending 1995 of £937,437. The company stated that the change was made to provide a fairer presentation of trading performance and financial position.

The company was re-registered and re-named as Preston North End plc on 5 September 1995. On 11 September, a share prospectus was issued which included a copy of the 1995 audited accounts as part of the Accountants' Report. However, the note on prior year adjustments concerning the accounting policy change had been omitted from the prospectus³⁵. This is the only change between the audited accounts as returned to the Registrar of Companies and those contained in the prospectus. Thus, no mention is made of a very recent change in accounting policy and its influential impact on the past and future reported results of the company. Finally, shares of the company were admitted to the Alternative Investment

Market on 14 September 1995. These events are in accordance with behaviour specified in the hypothesis. However, they are not consistent with the behaviour implied by the statistical tests. This can be interpreted as evidence of a link between flotation on an open market and the selection of transfer fee accounting policies. The direction of this link is unsupported by the statistical tests.

Similar evidence exists with respect to the Scottish club, Celtic. The audited annual reports of The Celtic Football and Athletic Company Limited for the year ending 1994 showed several accounting policy changes.

The reports were authorised on 16 August 1994. The accounting policy for stadium depreciation had changed to a no depreciation policy. This was justified on the grounds that buildings were maintained in such a condition that residual disposal values were at least equal to their book values. An associated change in the treatment of capital grants was made. Grants were no longer matched against depreciation on the assets to which they relate but transferred to revenue annually over the estimated useful life of the asset. A change was also made to the accounting treatment of donations. Donations had been transferred directly to a development fund reserve. From 1994, they were added directly to turnover. The cumulative effect of these changes was to increase the profit and loss account reserves by £6,824,003. £5,929,056 of this figure can be interpreted as a reclassification of reserves. However, £894,947 was added to net assets as a result of accounting policy changes.

The company was re-named and re-registered as Celtic plc on 15 December 1994. Coupled with alterations to the share capital structure, it can be argued that the company was planning a flotation on a stock exchange.

³⁵ Audited accounts in the prospectus do not constitute statutory accounts within meaning of section 240 of the

The 1995 annual reports were approved on 12 September 1995. An accounting policy change was made to transfer fees. The policy was changed from a asset/income decreasing, expense policy to an asset/income increasing, capitalisation policy. In contrast to the hypothesised behaviour, this change increased the loss for the period ending 1994 by £1,286,000. However, it increased net assets by £3,883,000. Shares of Celtic plc were admitted to the AIM in 29 September 1995.

This case can also be said to provide further evidence of a relationship between the selection of several accounting policies and flotation of shares on an open market. All the accounting policy changes made prior to flotation had a material impact on the net assets and/or income of the company.

Further anecdotal evidence of a link between transfer fee policy selection and flotation is provided by the cases of West Bromwich Albion and Sunderland football clubs.

The annual report of West Bromwich Albion Football Club Limited was authorised on 24 August 1995. The accounting policy with respect to transfer fees was changed from an expense policy to a capitalisation policy. This had the effect of increasing net assets by £4,399,375.

A prospectus for the sale of shares of West Bromwich Albion plc, the holding company of West Bromwich Albion Football Club Limited, was released on 20 December 1996. Included in the prospectus was the statement, "admission to the AIM will continue the process begun by the Board 2 years ago to build a modern commercially successful football club". This can be interpreted as confirming that a flotation was planned when transfer fee

policy was changed in 1995. The shares of the company were admitted to the AIM on 3 January 1997.

The 1994 annual reports of Sunderland Association Football Club Limited, approved on 15 November 1994, included a change of transfer fee accounting policy. An expense policy was dropped in favour of a capitalisation policy. This had the effect of increasing the net assets of the company by £4,307,051. By 9 December 1996, a holding company, Sunderland plc, had acquired all the share capital of the Sunderland Association Football Club. On 10 December 1996, a share prospectus for Sunderland plc was published. It included audited accounts for periods ending 1994-1996, omitting any mention of the accounting policy change. Shares were admitted to the London Stock Exchange on 24 December 1996.

Both examples illustrate cases where accounting policies have been changed prior to flotation. In both cases, the direction of change has been to select asset/income increasing policies. This provides further support for the correlation between stock market flotation and accounting policy selection.

The correlation appears to centre on changes to transfer fee accounting policies. However, it is thought that this relationship is not confined to transfer fees; the focus is explained by their greater impact on reported results.

All the policy changes outlined above were justified on the grounds that the change led to a better representation of performance and financial position or made reference to 'a true and fair view'. This explanation, although possible, appears unlikely. The 'true and fair view' appears to be used as a 'get-out clause' to justify any non-standard accounting practice.

The link between accounting policy changes and flotation on a capital market may be attributable to ownership changes. It could be that the football club's examined underwent ownership changes in the period before flotation. A new management team may have an incentive to change accounting policies as part of a wider financial review. At the football clubs under examination, some ownership changes did take place before accounting policy changes were effected. Ownership of controlling stakes changed hands at Preston North End and Celtic in the period before accounting policies were altered. The Baxi Partnership acquired a controlling stake at Preston in September 1994. A consortium headed by Fergus McCann acquired a controlling stake in Celtic in March 1994. However, this does not provide a full explanation of why policies were changed and why this change was correlated with flotation. There was no change of ownership at West Bromwich Albion or Sunderland. Moreover, it does not explain the direction of the policy change. Despite this, ownership changes may be a factor in the relationship between capital market flotation and accounting policy change found in this study.

The examples listed above all provide evidence contrary to that found in the statistical tests. Results from the tests found that flotation or planned flotation led to a selection of asset/income decreasing accounting policies. The hypothesised relationship and qualitative evidence from individual clubs found that flotation or planned flotation led to the selection of asset/income increasing policies. Hence, it is proposed that a relationship exists between changes in accounting policy and planned flotation. This relationship would be consistent with the evidence examined. However, such a proposed relationship, derived ex-post, would have to be tested before being given any credence.

It may be concluded that a link between accounting policy change and planned flotation has been established. An ex-post proposition is that the selection of accounting policies prior to flotation is subject to change under influence from institutional pressure. Changes of ownership may also play a role in the institutional pressure applied and changes in accounting policy. This pressure is communicated through the expectations of underwriters, auditors and capital markets. The expectations of these agents form the perceptions of credibility and legitimacy held by those selecting accounting policy. Hence, these perceptions constrain and influence the choice of accounting policy. Whether the policies selected are asset/income increasing or decreasing cannot be ascertained from this study. However, it can be argued that perceived expectations from capital markets and economic institutions are influential.

It is recommended that further research be undertaken to assess these proposals. It would be useful to test the relationship between capital market flotation and accounting policy change whilst controlling for ownership changes. Furthermore, the relationship found in this study could be tested in other industries. Finally, this finding provides a useful starting point for building theory around the association between institutional pressure or status and accounting policy choice.

8.2 Debt Contracting Costs Hypothesis

Little explanatory significance for the debt contracting cost variable was found in the statistical tests. DEBT was significant at the 5% level in Equation 2 but this test is considered unreliable due to the small sample size. Furthermore, the parameter estimates show a negative relationship; clubs with higher leverage select more asset/income decreasing accounting policies. This is the opposite of the hypothesised, positive relationship.

The lack of significance of these results is consistent with information from the bank questionnaire that there are few formal debt covenants entered into between banks and football clubs³⁶. However, the results do not support the hypothesis that clubs will seek to avoid creditor influence when debt levels become too high or where the club is susceptible to debt default. This could be interpreted as confirmation that the underlying theory is weak. Alternatively, the hypothesis may be valid but the DEBT measure did not capture the attributes of the variable; namely, probability of creditor influence. This latter view is supported by anecdotal evidence in the football industry.

Millwall football club provides an useful case study for analysing the practices of a club in financial distress. The 1994 annual report of Millwall Holdings plc was authorised on 16 November 1994. The group recorded short term debts of £4,026,000 and long term debts of £3,459,000. Included was a change to signing-on fee policy: an asset/income decreasing policy (charge to profit and loss account when signed) was rejected in favour of an asset/income increasing policy (charge to profit and loss account when paid). This meant that signing-on fees payable in the latter years of a contract would not be carried on the balance sheet until they were paid. Thus, creditors would be decreased.

The 1995 report showed the company falling further into debt. Creditors falling due within the year were £5,361,000 and long term creditors amounted to £2,680,000.

The annual report for period ending 1996 was authorised on 14 November 1996. An overdraft of £2,340,000 and long term loans of £2,000,000 meant the club remained under pressure from its principal bankers, Natwest. High operating losses were sustained during this

³⁶ Refer to Chapter 7; 7.2

period; this had increased from £2,057,000 in 1994 to approximately £3,500,000 in 1995 and 1996. Significant net gains from transfer fees were made during this period as the club was forced to sell its best players. Approximately, £6,200,000 was realised between 1994 and 1996.

The club entered administration on 21 January 1997, unable to pay interest on debts reported to be £10,000,000 [Financial Times, 22/1/1997]. This occurred after Natwest Bank refused to extend its £1,000,000 loan facility. Share dealings in Millwall Holdings were suspended on 22 January 1997 after pressure from creditors. An agreement was sought whereby the bank would take a second charge over property and enable the company to raise fresh capital in a rights issue in order to repay its debts. The bank insisted that the management board should either find new money or appoint an administrator.

The value of DEBT for Millwall was 0.60. This is low compared to the mean of 1.32 and median of 0.87. The equivalent measure for the 1994 reports is 0.58. Hence, DEBT is ineffective in measuring the closeness to financial distress in this case.

Millwall thus provides an example of a club under financial distress. The amount of player registrations sold in the period before administration demonstrates the pressure that is placed upon a company in financial distress. The validity of the hypothesis developed centres on the ability of the company to avoid/decrease creditor pressure through its selection of accounting policies. This case provides evidence of the incentive to avoid the costs of financial distress in the absence of formal debt covenants in the football industry. Whether the change of accounting policy is correlated with the company entering financial distress cannot be ascertained.

The case of Bournemouth football club provides further evidence of a club seeking to avoid creditor influence through accounting policy change. The 1995 annual report of the Bournemouth and Boscombe Athletic Football Club Company Limited was authorised on 8 January 1996. Included in the auditors report is a note referring to the transfer fee accounting policy,

"Without qualifying our opinion, we would draw attention to the valuation of players included in the balance sheet for the first time and referred to in notes 9,17,18 and 24. This is based upon the directors valuation, as professionally advised by the manager, of players under contract at the year end".

The policy is asset/income increasing. It treats player registrations as current asset investments with changes in value going to the revaluation reserve. The previous, expense policy was asset/income decreasing. Investments in players are carried at £2,715,000. This has the effect of turning a net liabilities balance of £(692,663) in 1994 to net assets of £424,598 in 1995.

The auditors opinion also highlights the policy of not depreciating freehold buildings. This is asset/income increasing. The net book value of freehold land and buildings was £1,358,273.

Included in the balance sheet are short term creditors amounting to £3,174,916 and long term creditors of £759,767. The auditors report also includes a 'fundamental uncertainty'. The preparation of the accounts on a going concern basis is dependent upon the continued support of directors, bank and other creditors.

On 24 January 1997, the company went into receivership on the prompting of its main creditors, Lloyds Bank and the Inland Revenue. Debts were valued at £3,750,000; this included £2,100,000 owed to Lloyds Bank and £400,000 owed to the Inland Revenue.

Bournemouth thus provides an example of a club undergoing a controversial accounting policy change shortly before entering financial distress. Recognising player registrations as current asset investments at directors valuation with no depreciation can be regarded as the most disputable transfer fee policy used in the sample. It is also asset/income increasing. The correlation between this change and the consequent financial distress of the club is thought not to be independent. The DEBT for Bournemouth is 2.39. This is higher than average but is not indicative of a club in financial distress.

The DEBT measure appears not to be an efficient indicator of proximity to financial distress. DEBT was not adjusted for the effects of signing-on fee, capital grant and stadium depreciation policies. Signing-on fee policy may result in a short term liability being recognised (creditors falling due within 12 months). Capital grant policy may result in a deferred income long term liability being recognised (creditors falling due after 12 months). Finally, stadium depreciation policy can affect the book value of total assets. Thus, the choice of accounting policy could affect the level of DEBT.

The inefficiency of DEBT could also be affected by the financing arrangements of football club companies. At many clubs, it is common for the major shareholder to guarantee the debts of the football club. Thus, proximity to financial distress is dependent on the strength of guarantees and not the debt shown in the football club financial statements. It is based on the funding and position of the agent guaranteeing the debt. The level of debt shown in the financial reports may bear no relationship to the 'true' proximity to financial distress. This may explain the inefficiency of the DEBT measure.

The findings suggest that size may be a mitigating factor in testing the association between debt contracting costs and accounting policy choice in the football industry. Football

clubs, similar to other small organisations, are likely to have less sophisticated debt contracting arrangements. Generally, contact between owners, controllers and creditors will be greater in smaller organisations. Hence, there is less demand for formalised structures to ensure that the interests of all parties are congruent. Thus, in smaller organisations, where no debt covenants or similar accounting based debt constraints exist, the gearing ratio (DEBT) is inefficient in measuring the proximity to financial distress.

Support is given to the debt contracting hypothesis in other industries. Many research studies have been undertaken on the debt contracting cost variable. Zmijewski and Hagerman [1981] found that higher leverage is correlated with selection of income increasing accounting policies. Studies by Daley and Vigeland [1983] and Malmquist [1990] found the hypothesis to be significant in the oil and gas industry³⁷.

Thus, most affirmative tests of the debt contracting costs use samples of large firms. It may be concluded that the debt contracting hypothesis does not apply in smaller industries. Alternatively, the debt contracting hypothesis may apply but cannot be tested using gearing ratios in smaller industries. This latter explanation is a conclusion of this study.

In sum, anecdotal evidence from the football industry and research in other industries support the hypothesis under question. However, the lack of public debt in the football industry distinguishes itself from research in other industries. In the football industry, formal controls and agreements with their associated debt contracting costs do not apply. Creditor pressure is hypothesised to be more informal. It is concluded that the variable measure, DEBT, is poor and does not capture the proximity to financial distress in this industry. The

³⁷ See Christie [1990] for a summary of previous research on the debt contracting cost hypothesis

misspecification of this measure explains the lack of support of this hypothesis in statistical tests.

It is suggested that further tests of the debt contracting cost hypothesis using gearing ratios be undertaken using smaller organisations. This would ascertain whether the gearing ratio is indeed inefficient in measuring this hypothesis on smaller firms. Furthermore, tests using alternative measures of proximity to financial distress in the football industry (and other small industries) could help assess the applicability of this hypothesis on smaller firms.

8.3 Youth Development Hypothesis

The youth development hypothesis was specified only in relation to changes in transfer fee accounting policy. Hence, only Equations 3 and 4 are of interest.

The full sample measure, YOUTHF, showed some explanatory ability being significant at the 10% level in Equation 3. This measure represented whether a club was a net buyer or seller of player registrations over the previous accounting period. It suggested a positive relationship between YOUTHF and accounting policy; clubs that were net sellers of player registrations are more likely to adopt asset/income increasing transfer fee policies. The reduced sample measures, YOUTHQBOS and YOUTHQEX, displayed no explanatory ability in Equation 4. All estimated coefficients suggested positive relationships with asset/income increasing accounting policy in line with the hypothesised relationship.

YOUTHQBOS and YOUTHQEX were derived from responses to the questionnaire. It is thought that they did not efficiently capture the attribute of the variable; whether a club concentrated the majority of its developmental resources in 'making' its own players or buying in established players. The questionnaire responses often reflected what the club's policy was

and not what the club actually did. Thus, they were susceptible to 'public relations' responses where positive, self-promotional answers were given regardless of actual policy. This is not surprising. It would be very unlikely for a club to admit that it was altering its recruitment programme by placing more emphasis on purchasing the registrations of foreign players and less emphasis on youth development. Such a statement would have a serious impact on any existing youth development programme, apprentices and staff involved.

As both YOUTHQBOS and YOUTHQEX measure the same attribute, it is expected that they would be highly correlated. The Spearmans correlation coefficient is -0.09 and is not significantly different from zero. Therefore, these measures are not thought to be internally consistent and are invalid. Thus, the lack of explanatory power for the youth development hypothesis in the reduced sample models can be explained by poor specification of these measures.

The youth development hypothesis is given some support but leaves the assertion open to discussion. The full sample measure, YOUTHF, only measures player registration trading policy over one accounting period. This may not be representative of the club's long term youth development policy.

The lack of strong significance may be due to an alternative explanation for the influence of youth development on accounting policy selection.

It could be argued that an incentive to capitalise registrations occurs where a club recruits mainly from the transfer market. That is, clubs with little emphasis on youth development and who employ a 'buy' approach to recruitment, select asset/income increasing accounting policies. This is the opposite of the specified hypothesis. A club purchasing

several expensive player registrations per year would incur large write-offs to the profit and loss account by adopting a conservative, income-decreasing accounting policy. The cost of purchased player registrations would be written off in the year of purchase.

It is likely that this would result in the club sustaining a negative profit and loss account balance leading to a negative equity position. The management board of many football club's would desire to avoid a negative equity position due to the publicity and scrutiny it would entail. This would include an auditors qualification on whether the accounts should be prepared using a going concern basis. Creditor and shareholder inquiries would also be likely. This provides an incentive to select an asset/income-increasing, recognition policy which would not only prevent the club holding a negative equity position but would increase net assets. Such a justification for a negative relationship between youth development and accounting policy choice cannot be fully eliminated by the above statistical tests.

This explanation of the effect of youth development on accounting policy is directly opposed to the hypothesis tested. However, parallels between the behaviour proposed above and the choice of brand accounting policy can be made. For example, many acquisitive companies sought to avoid an erosion of their reserves from writing off goodwill upon acquisition. Brands were recognised after goodwill write-offs had depleted shareholder reserves. Part of the goodwill, (purchase price - separable net assets), could be recognised as brands and capitalised as intangible fixed assets. Therefore, the incentive to recognise brands was due to an attempt to avoid writing off large sums to the profit and loss account which would result in low profits and/or low or negative equity.

This alternative explanation uses an information perspective in explaining accounting policy choice. Policies are chosen that convey certain information: recent acquisitions of player registrations (or brands) are thought to benefit the company over more

than one accounting period and are considered to be assets rather than expenses. The information conveyed is that the cash flows of the club are concordant with player registrations representing assets rather than operating expenses.

However, for this argument to hold, the effect on other explanatory variables must be considered. For example, a 'negative equity explanation' should also influence the debt contracting cost variable; firms with high gearing have a greater probability of displaying negative equity. Thus, they would select asset/income increasing accounting policies to reduce the likelihood of such an occurrence. However, the statistical tests on the DEBT measure are not supportive. There is no evidence in this study to suggest that those firms with higher gearing select asset/income increasing accounting policies. In addition, despite the lack of strong statistical significance, all estimated coefficients were strongly positive. Thus, the plausibility of this alternative explanation is doubtful without new evidence.

In assessing the original hypothesis, it is useful to review the results of research in the oil and gas industry by Malmquist [1990]. Oil companies with a greater proportion of their resources devoted to drilling and exploration were hypothesised to select a full cost accounting policy. The full cost method 'strengthens' the reports of 'exploration' companies in a similar manner to the way in which capitalisation transfer fee policies strengthen the reports of youth development intensive football clubs. This hypothesis was strongly supported by statistical tests. Malmquist [1990] suggests that the incentive arises as the policy highlights the firms comparative advantage and reduces risk.

Therefore, football clubs with a comparative advantage in developing youth players and enhancing player registration values would seek to exhibit this in the financial statements. This argument would be supportive of the statistical tests.

In the light of comparable research, the initial youth development hypothesis proposed currently provides the most valid explanation. This assertion is given limited support from the statistical tests outlined above. However, alternative arguments exist to explain the relationship between youth development policy and transfer fee accounting policy. It is suggested that further research would be useful. Measures could be designed that capture the variable more efficiently.

8.4 Ownership Structure Hypothesis

The ownership structure measure was shown to have no explanatory power in any of the statistical tests. The relationship was hypothesised to be positive; that publicly structured clubs were more likely to select asset/income increasing policies. This was the case for the transfer fee equations (3 and 4). The strategy equations (1 and 2) exhibited a negative relationship. However, none of these parameter estimates were significantly different from zero.

No evidence was found to suggest that public and private companies selected different accounting policies. It was thought that the costs of preparing separate accounts for reporting purposes and tax purposes would provide an incentive for private companies to avoid selecting unorthodox, asset/income increasing accounting policies. It was argued that public firms would have the necessary systems in place to prepare reporting and tax accounts with little cost. Any costs would be more easily borne by a larger, public firm. Hence, it could be argued that the hypothesis is based on size rather than ownership structure. However, results on the size hypothesis are not consistent with this finding; no significant relationship was found between club size and the selection of accounting policies.

The validity of this hypothesis is not proven in these tests. Penno and Simon [1986] found that public firms selected income increasing policies when accounting for depreciation and inventory. Their findings with respect to depreciation are not corroborated by these tests. Cloyd, Pratt and Stock [1996] found that the management of public firms were less likely than private firm management to select accounting policies that conformed to the tax treatment. Thus, it would be expected that, in the football industry, private firms have a preference for tax preferred, asset/income decreasing accounting policies. Again, this proposition is not concordant with the findings of this study. This could be due to the particular circumstances in the football industry or erroneous data collection and testing procedures.

It could be argued that privately structured football clubs have no incentive to adopt tax preferred accounting policies due to low tax liabilities. Traditionally, football clubs pay little corporation tax; 15 clubs in the English football industry incurred a tax liability in the 1995-6 period [Deloitte & Touche, 1997]. Thus, there may be no expected gain for clubs adopting tax preferred, asset/income decreasing policies.

However, another explanation may be suggested with respect to the selection of transfer fee accounting policies. Profitability, rather than size or ownership structure, may affect whether a firm selects a tax preferred, asset/income decreasing policy for transfer fees.

A finance director of a large English football club suggested that because tax computations generally use the same policies used in financial reports, a club would select the policy that maximised tax relief [Anon, 1998]. Thus, his club selected an expense policy which due to the club's extensive purchasing of player registrations, minimised their tax

liability. Conversely, it was suggested that those clubs capitalising players (an asset/income increasing policy) would have greater difficulty in claiming tax relief on transfer fees paid.

Therefore, highly profitable clubs (before transfer fees payable) would seek to employ an asset/income decreasing policy. Alternatively, less profitable clubs would have more incentive to employ an asset/income increasing policy.

This proposition is consistent with traditional accounting theory. Tax liabilities can be viewed as contracting costs between an organisation and the government. Thus, a policy is selected that minimises contracting costs for the entity, transferring them away from the utility maximising manager.

A recent investigation into the investigation of fiscal fraud by top Italian football clubs highlights the use of transfer fee accounting policy to minimise tax liabilities. Clubs were alleged to have organised fake transfer deals in order to write off transfer fees payable against taxable profits [Guardian, 2/4/98].

Ownership structure is independent of profitability. Thus, this argument may explain the test results in this study. It may also be consistent with several other hypotheses. For example, a less profitable club would have no tax liability and may be closer to financial distress. Under the debt contracting cost hypothesis, it would have more incentive to select an asset/income increasing accounting policy. In addition, profitable clubs (before transfer fees payable) are likely to comprise the 'buying' clubs characterised in the youth development hypothesis. This gives more support to the notion that 'buying' clubs would employ expense transfer fee policies.

Research designed to test the association between profitability and tax preferred accounting policies would be useful to support or refute the assertions presented above.

In sum, the testing procedures in Equation 3 and the specification of the variable measure are thought to be valid. Therefore, it can be concluded that without new evidence, the hypothesis concerning the effect of ownership structure on accounting policy selection in the football industry is unsupported. However, a link between profitability and tax preferred accounting policies in the football industry is proposed.

8.5 Normative Influence Hypothesis

A negative relationship was hypothesised between the extent of normative, professional accounting influence on the management board and the selection of asset/income increasing accounting policies. Several measures were tested giving varied results. The NORMQUAL, NORMQEFP and NORMIP measures were not significantly different from zero in any of the statistical tests. The ACCUSE measure exhibited a positive relationship with the selection of asset/income increasing policy and was statistically significant in Equation 2 at the 5% level. However, it was not significantly different from zero in Equation 4. Furthermore, the results from Equations 2 and 4 are to be viewed with caution due to their small sample sizes.

The ACCUSE and NORMQEFP measures are thought to be poorly specified. These measures were derived from the football club questionnaire. Both seek to gather the views of the management board on the role of financial reporting at the club. It can be argued that both are susceptible to 'public relations' responses. It is expected that responses given represent what the club perceives as good practice rather than what actually happens. Both measures were used only in the reduced sample models. Thus, due to the difficulty of the measures in

capturing normative influence and the caution afforded to results from the reduced sample model, the nature of the relationship and the statistical significance of ACCUSE are not considered valid.

An alternative measure used in the reduced sample tests was NORMIP (the frequency of producing internal profit reports). This was derived from the club questionnaire but was based more on measurable events than opinion. It is thought that NORMIP is less susceptible to public relations responses.

The NORMQUAL measure was used in the full sample models. Research by Neu [1992] using a similar measure of normative influence found it to be significant at the 10% level when estimating the inclusion of earnings forecasts in financial reports. However, the NORMQUAL measure was not found to be statistically significant in this study. This may be attributable to data collection problems. The existence of professionally qualified accountants on the management board was detected through analysis of director and secretary returns to Companies House and from annual reports. However, information about the management board was far from uniform. Hence, the validity of this measure can be questioned.

The internal validity of the normative influence measures can be assessed by computing the correlation between each measure. A high correlation would be expected from the reduced sample measures that seek to capture the same attribute. The Spearmans correlation coefficients between NORMIP and NORMQEFFF, and NORMIP and ACCUSE are not significantly different from zero. The correlation coefficient between NORMQEFFF and ACCUSE is 0.36.

The NORMIP measure is not internally consistent with the NORMQEFFF and ACCUSE measures. Furthermore, NORMQEFFF and ACCUSE do not share a high degree of

consistency. Hence, the variable measures used may be inefficient in capturing normative accounting influence.

Problems with measuring normative influence in football clubs have limited the interpretation of these results. A study by Thomas [1989] found that a professional accounting sub-culture variable was significant in explaining the choice of goodwill accounting policy and the inclusion of a value added statement in financial reports. It may be suggested that the hypothesis is not applicable in the football industry. Previous studies have used large firms in finding affirmative results. For example, Thomas [1989] used the 1000 largest UK companies whilst Neu [1992] used companies entering the Toronto Stock Exchange. However, these assertions cannot be corroborated by the tests. The normative influence hypothesis has not been adequately tested with this data set to draw satisfactory conclusions.

8.6 Political Cost Hypothesis

This hypothesis suggested that larger, more visible clubs would select asset/income decreasing policies in order to avoid incurring political costs. The statistical tests do not support this hypothesis. None of the coefficients for this parameter estimate were significantly different from zero. The full sample models using POLATT suggested a positive relationship whereas the reduced sample models showed a negative relationship.

Many studies have analysed the relationship between size and asset/ income decreasing policies suggested by the political cost hypothesis. The research has been generally supportive of the hypothesis. For example, see Zmijewski and Hagerman [1981] and Malmquist [1990].

However, a formal relationship between the probability of incurring political costs and size has not been established. It is argued that size may be a surrogate for other effects [Watts and Zimmerman, 1990].

The proxy measure for the sensitivity of incurring political costs is organisation size. Average attendance was deemed a valid measure of size in the football industry. It is suspected that size interacts with several other variables tested in this study.

Club size is thought to be positively correlated with underwriter pressure. It is the larger clubs that tend to be floated on a stock exchange. In addition, once a club is floated, its size in terms of book net assets will tend to increase due to the extra purchasing power and share premiums that a share issue will bring.

Size is also thought to have a positive relationship with the ownership structure variable. Public limited companies are thought to be generally larger than private limited companies.

Both interactions listed above can be examined by the correlation coefficients shown in Appendix 5. The highest correlation coefficient between an underwriter pressure measure and POLATT is 0.38. The correlation between POLATT and OWNER is 0.31. Both correlation's are not excessive and lend limited support to the interaction effects of the size variable.

These interactions are expected to produce a positive relationship with asset/income increasing accounting policies. This is in contrast with the negative relationship forecast by the political cost hypothesis. This reduces the power of the tests as the effects of individual measures can cancel themselves out. The inconclusive results from the statistical tests may be

attributable to these interactions. Thus, it is difficult to assess the applicability of the political contracting cost hypothesis in the football industry.

It is concluded that size is an inefficient surrogate for the proximity to incurring political costs. Organisational size interacts with many other economic variables. Hence, testing becomes problematic. It is suggested that alternative measures of the proximity to incurring political costs be sought other than organisational size.

Summary

The results of statistical testing on explaining accounting policy changes in the football industry have been analysed. Due to the nature of the football industry, comparable data measuring the hypothesised attributes is difficult to gather. Thus, hypothesis testing is difficult because many variable measures maybe misspecified.

A link was found between accounting policy change and planned stock market flotation. Football clubs offering shares on public capital markets were found to employ asset/income decreasing transfer fee accounting policies. It is thought that this association is linked to institutional pressure. Institutions such as capital markets and large auditing firms communicate norms of legitimacy. Those selecting accounting policies are influenced by perceptions of this legitimacy and credibility. This cannot be explained by the underwriter pressure hypothesis specified. Thus, further research is recommended to explain this finding.

It is also suggested that using gearing ratios to test the debt contracting cost hypothesis may be inefficient. Thus, further research assessing the applicability of the debt contracting cost hypothesis in smaller organisations using alternate measures would be useful.

This chapter reviewed the findings of the statistical tests and related them to the hypotheses specified in Chapter 5. Significant results were found with the underwriter pressure measures. The ownership structure hypothesis is rejected in the football industry. However, an association between tax preferred accounting policies and profitability is proposed. A link between youth development and transfer fee accounting policy is given some support. However, conclusions on the debt contracting cost, the political cost and normative influence hypotheses are difficult to draw due to difficulties in efficiently measuring the variables of interest. This is indicative of the problems faced in collecting data in the football industry.

The lack of significant results from several hypotheses may be interpreted as suggesting that the existing theories used to generate the hypotheses are not applicable to the football industry and contain fundamental limitations which mean that they are not universally relevant.

CHAPTER NINE

THE FEASIBILITY OF INTANGIBLE ASSET ACCOUNTING IN THE FOOTBALL INDUSTRY

Introduction

The study into the selection of accounting policies in the football industry suggested that institutional pressure, by influencing norms of legitimacy and credibility, could affect which policies are chosen. These findings are particularly relevant to the selection of transfer fee accounting policies. This chapter examines why particular transfer fee accounting policies may be legitimate and credible.

The first section assesses the legitimacy of recognition transfer fee policies; that is, whether player registrations satisfy the criterion laid down in UK GAAP for them to be recognised as intangible assets. The second section describes the practices used in other countries, and examines the feasibility of the measurement of player registration assets in terms of financial reporting criteria. The third section evaluates the possibility of reliable measurement techniques for both purchased and internally generated player registrations, and provides a valuation model of player registrations that may be feasible for financial reporting purposes. The last section assesses the usefulness and feasibility of the player registration valuation model.

9.1 Transfer Fee Accounting

The most popular and seemingly legitimate policy used in accounting for transfer fees is to charge them to the profit and loss account in the period of purchase. That is, transfer fees are recognised as expenses of the period in which they are incurred. They can be

classified as either operating or exceptional expenses. Treating transfer fees as operating expenses is an application of the prudence concept. However, treating transfer fees as exceptional expenses appears less justifiable where transfer fees are paid each year and are thus intended to maintain the ordinary course of business of a football club. This policy can be said to reflect a desire to 'income smooth'³⁸. However, it is generally regarded as an acceptable and thus legitimate policy in the football industry.

It may be argued that under current UK GAAP, recognition policies are equally legitimate. To be classified as an intangible asset, an item must be non-monetary, have no physical substance and be identifiable as an asset. A player registration is non-monetary because it does not represent fixed or determinable amounts of money. Furthermore, since a player registration is a licence to the exclusive services of a football player, it has no physical substance.

To be identifiable as an asset, an item must have rights to future economic benefits as a result of past transactions and these future economic benefits must be controlled through legal protection or physical custody. The next section evaluates whether there are future economic benefits associated with player registrations and if regulations within the professional football industry provide a right to and control over these future economic benefits. It then goes on to examine whether player registrations meet the recognition criteria for an asset.

a) Identification

An asset can be identified where an entity controls a right to future economic benefits as a result of past events. The existence of future economic benefits associated with a

³⁸ Refer to Chapter 5; 5.1

player registration is derived from the football playing ability of the associated player. A player registration is purchased with the intention of enhancing future economic benefits. A direct relationship between footballing ability and revenues earned by the organisation owning the registration can be demonstrated.

Footballing ability is defined as the contribution by a player to team success. The greater the footballing ability of a player, the more successful the team. The level of potential revenue increases with the success of the team; more successful teams enjoy greater television and media exposure. Thus, the level of revenue from broadcasting rights increases. Media exposure can often lead to greater sponsorship deals. Team success can also be rewarded by prize money and extra revenues earned from qualifying for additional competitions. Qualification for European competitions can greatly increase prospective revenues. The more successful teams also attract larger crowds and generate higher gate receipts. Hence, footballing ability is positively correlated with cash inflows via team success. Thus, footballing ability, in its contribution to team success, is a potential source of future economic benefits to the club owning the player registration.

Greater footballing ability and team success increases the value of a player registration. A registration can be resold on the transfer market if the associated player is under contract. Therefore, economic benefits can be derived from the sale as well as the use of a player registration.

In addition, future economic benefits can be derived from the reputation or charisma of a player via gate receipts and merchandising. Higher attendance's can be independent of team success as crowds are drawn to watch a particular player. Thus, ownership of that

player's registration can increase gate receipts for the organisation. It can also increase merchandising revenues. For example, an English club, Arsenal, signed the registration of a Dutch player, Dennis Bergkamp, for £7.5M prior to the 1995-6 season. As part of his signing, Arsenal arranged two friendlies with Inter Milan (the team he was signed from); the game in England attracting a crowd of 37,000. After his signing, Arsenal reported record season ticket sales and earned extra broadcasting right revenues from being awarded the opening live televised game of the season. In addition, approximately £0.5M revenue was earned from the sale of Arsenal replica football shirts with Bergkamp's name printed on the back [Financial Times, 19/8/95]. Therefore, Arsenal earned at least £1M in revenue directly related to the ownership of a player registration before that player had represented the side in a competitive football match. However, the reputation of a player creating economic benefits independent of current footballing ability is usually derived from past footballing ability.

It can be argued that player registrations are viewed as assets by external agents. In Chapter 8, examples were given where creditors sought to influence the purchase and sale of registrations. In 1997, a Hungarian first division club, Szombathely, had 2 of their player registrations seized by a creditor, the Vas County Social Security Fund, after non-payment of health and social security taxes [Guardian, 13/11/97]. This supports the view that external agents of the club view player registrations as items yielding future economic benefits.

In the case of intangible assets, control over future economic benefits associated with a player registration must be exercised through legal protection or physical custody [ASB, 1997]. A football club has a right to and control over the footballing services of a player. This

is due to the regulations governing all professional football clubs controlling the transfers of player registrations³⁹.

Player registrations can be viewed as patents or licences over the human resources to which they relate. The transfer fee can be viewed as a payment to acquire the licence. Salaries and signing-on fees represent the rental payments for using the services of human capital. A player can only play professional football for the team that owns his registration. A contract must be signed with the club governing the terms and conditions of his employment. Thus, the football club has physical custody of the registration.

The club must agree before the registration of a player under contract is transferred to any other club. Any transfer is subject to the payment of a transfer fee from the buying club to the selling club. It can be said that regulations relating to the transfers of player registrations amount to quasi legal protection. The regulations are enforced by the governing body that has the power to prevent a club or player participating in league and cup competitions. In the absence of a competitive playing structure, the revenue generating abilities of both club and player are severely restricted. A player cannot resign from a football club: they can withhold their services but will be prevented from playing for any other club [Morrow, 1996]. In this way, labour market restrictions give the holder of the player registration control over the future economic benefits it may generate.

It may be thought that the identification of player registrations as assets is dehumanising. In that players are treated in a similar accounting manner as slaves. However, financial reporting is concerned with what is rather than what should be. Restrictions on the movement of professional players between employers derive from the nature of the industry.

³⁹ Transfer regulations are outlined in further detail in Chapter 4; 4.1(b)

It is a consequence of the product, the football match, and its effect on the structure of the industry. Only registrations relating to players under contract are subject to the control of the accounting entity. It is the creation of a contract between club and player that gives control of a player's footballing services over to the club which can protect the contract through the regulations laid down by the governing bodies of the sport.

Furthermore, it could be argued that alternate treatments of transfer fees are equally dehumanising. An expense policy implies that the payment to acquire human resource services is consumed within the period and does not provide any future economic benefit.

Thus, it is argued that the accounting entity has a right to and control over the future economic benefits associated with a player registration. The club controls the services of the player and prevents other organisations from gaining access to the player's services. In addition, a player registration can generate future economic benefits for the accounting entity. Therefore, it is concluded that under UK GAAP, a player registration can be identified as an intangible asset.

b) Recognition

For an item to trigger the recognition process in financial reporting, it must satisfy evidence and measurement criteria. There must be sufficient evidence of a change in assets and liabilities; that is, a future cash inflows will occur. The item must also be measurable at a monetary amount with sufficient reliability [ASB, 1995b].

The purchase of a player registration enables the club to access the footballing services of a player. As discussed above, footballing ability contributes incrementally to team

success and hence, to the generation of revenue. Thus, in line with UK GAAP, purchasing a player registration provides evidence of an increase in revenue generating ability. It may also be useful to consider a hypothetical football organisation owning no player registrations: it would have no players and little revenue generating opportunities. A football club needs players to generate revenue. Attached to each player is a player registration that ensures that the revenue generating abilities of each player are for use solely by the football club holding the player registration.

The existence of a transfer market can be said to provide secondary evidence. The transfer market is where player registrations are bought and sold for monetary consideration in recognition of their revenue generating properties.

The future economic benefits provided by the ownership of a player registration is subject to uncertainty. There is potential volatility over the revenue generating abilities of a player through injury, loss of form or disciplinary offences. Injury, loss of form or disciplinary bans will result in a decline in footballing ability or prevent the organisation from accessing footballing services. This will result in a fall in the level of economic benefits flowing to the organisation.

Volatility over future economic benefits has been cited by many clubs as a reason for not recognising player registrations as assets. However, many clubs have insurance policies which cover potential revenue loss caused by injury to players. The existence of insurance cover reduces the volatility of future economic benefits associated with player registrations. Larger clubs often also have total insurance cover for the replacement of a player. Such policies are usually limited to the most valuable players. The practice of valuing players in financial reports at their insurance value has been used by several clubs. It can thus be seen

that the volatile nature of economic benefits associated with player registrations is overemphasised. Uncertainty over the existence and timing of future economic benefits is inherent in the recognition process of all assets.

The measurement criteria for recognition can be met if the intangible asset is capable of reliable monetary measurement. For purchased intangible assets, the purchase price provides acceptable reliability. The purchase price includes the transfer fee plus directly attributable costs such as agents fees. Hence, for player registrations that have been purchased on the transfer market, a purchase price exists and is verifiable.

For internally generated intangible assets, only valuations making reference to readily ascertainable market values provide sufficient reliability [ASB, 1997]. For player registrations not subject to a transaction, recognition requires the existence of a market where there are frequent transactions at arms length involving a homogeneous population of identical assets.

A transfer market transaction is argued to be negotiated at arms length in a reliable market. It is usual practice in the transfer market for the club being approached about the sale of a player registration to state an asking price. The buying club will then make a formal offer which is accepted or rejected by the holding club. Other clubs are open to bid for the registration. If several offers have been accepted, a player will decide which club to move to.

The transfer market cannot be described as a homogeneous population of identical assets. A continuing market for the initial issue of an asset is considered reliable under UK GAAP. However, this is not possible for player registrations as they are heterogeneous. Non-financial assets, are set represented by fixed monetary amounts and hence their revenue generating ability is not uniform. Alternatively, any reliable estimate of fair value may trigger

recognition where a natural ceiling exists. However, a natural ceiling is difficult to prove for player registrations. In sum, the transfer market does not meet the criteria for a reliable market from which the values of internally generated player registrations can be ascertained. Thus, it is unlikely that internally generated registrations can be recognised in financial reporting under UK GAAP.

However, prices in the transfer market are set through the interaction of buyers and sellers estimating the marginal revenue product of a registration to their organisation. The value of a player registration is based on footballing ability. Hence, the value of a player registration which has not been subject to a transaction will be similar to the price paid for a player possessing a similar level of footballing ability. Thus, an estimate of fair value can be made given the existence of an active market for the asset.

A model aimed at estimating the fair value of a player registration is described later in this chapter. It explores the possibility of obtaining a reliable estimate of the fair value of a player registration not subject to a purchase transaction. The valuation model is based on previous workings of the transfer market. Thus, it is suggested that a player registration can be measured with sufficient reliability to trigger the recognition process.

A distinction can be made between the strategies used by football clubs to increase team success. A 'youth development' club will employ younger, less talented players and develop them through youth systems and development academies until they have the footballing ability to contribute to team success⁴⁰. Alternatively, a 'purchasing' club will purchase players who already have the ability to contribute to team success. The distinction is

⁴⁰ This distinction is initially outlined in the youth development hypothesis in Chapter 6; 6.2(c)

similar in substance to a 'make or buy' decision. In practice, clubs use both strategies but in varying proportions.

Under present ASB regulations, the financial reports of a 'development' club will not be comparable with the financial reports of a 'purchasing' club. A 'purchasing' club will recognise the acquisition cost of its player registrations and amortise that cost over the length of their contract whereas a 'development' club will recognise no player registrations. However, this gives no indication of footballing ability which is the basis of intangible asset value and the club's revenue generating ability.

It is sometimes said that the lack of comparability arising from the differing treatment of purchased and non-purchased registrations is insignificant. This is because sophisticated users of accounting information will be able to interpret the information conveyed in financial reports regardless of which accounting policies are used. However, evidence on the association between accounting policy choice and economic variables suggests that management perceive that accounting policies affect the evaluation of financial reports⁴¹.

In recognising player registrations as intangible fixed assets, consideration needs to be given to the manner of recognition. The accounting entity must show the fair value of player registrations held, with opening and closing balances and the movements of player registrations during the period. Under UK GAAP, player registrations would also require amortisation over their useful economic life.

The useful economic life of a player registration is the length of the contract between the player and the club. At the end of the contract, a player can transfer freely to any club he

⁴¹ Refer to Chapter 6; 6.1(e)

desires⁴². Where a contract is renewable, the useful economic life will be the fixed term portion of the contract. A club owning a registration with a player at the end of his contract has no control over the player's services. As a result of the Bosman Ruling, a club cannot automatically demand a payment for the transfer of the registration. Thus, at the end of the contract, a player registration has a residual value of zero. Therefore, the useful economic life of a player registration can be accurately estimated.

The useful economic life of a registration will be less than twenty years due to the limited period in which fitness to play professional football can be sustained. The length of employment contracts between player and club are commonly around 1 to 8 years and are likely to increase as a result of the Bosman Ruling⁴³. However, it is very unlikely that a club would be able to contract with a player for a period of more than twenty years. The ASB require assets with an useful life of less than twenty years be subject to minor impairment tests and to be amortised over their useful life [ASB, 1997]. A minor impairment test considers whether any indications exist of a diminution in the carrying value of a player registration. The value of a registration may have been impaired by injury or other factors that lead to a decrease in playing ability.

In summary, it is argued that recognition accounting policies may be legitimate for transfer fee accounting. UK GAAP suggests that football player registrations may be capitalised as intangible fixed assets in the balance sheet and amortised over the length of the employment contract with the player. If purchased, a registration should be held at its depreciated acquisition cost. If a registration has not been subject to a purchase, measurement

⁴² Transfer regulations are outlined in further detail in Chapter 4; 4.1(b)

⁴³ Clubs will attempt to keep players under contract as long as possible to increase the likelihood of receiving a transfer fee upon departure

is problematic as no market value exists to verify valuation. However, this may be estimated using a valuation model.

9.2 The Measurement of Player Registrations

This section assesses the feasibility of valuing internally generated player registrations. In addition, the measurement independent of acquisition costs will allow a more accurate assessment of any diminution in value of purchased player registrations. It also looks at previous valuation models that have attempted to incorporate Human Resource Accounting methodologies.

a) A History of Player Registration Valuations

This part reviews previous attempts at valuing human resource assets in the context of the sporting industry. This will aid in assessing the feasibility of recognising and valuing player registration assets.

In the USA, the identification and recognition of player registrations as intangible assets is common in basketball, American football, baseball and ice hockey. A recognition policy was first adopted by the Milwaukee Braves Inc. in 1963. This baseball club that later became the Atlanta Braves, capitalised the cost of its players and amortised it over their expected tenure with the club [Flamholtz, 1985].

Sports organisations in the USA operate as franchises rather than individual clubs, as in the UK. Each franchise is a member of a professional league. Franchises are less tied to regions or cities. Thus changes in ownership and consequently location are common. After changes in ownership, a large part of the purchase price is traditionally assigned to player

contracts. Player registrations are assigned a fair value. Thus, purchased player contracts are capitalised as intangible assets and amortised over their length. This practice was initially developed as a tax shield. Large sums were attributed to player contracts resulting in high annual amortisation charges. This decreased taxable income and reduced taxation payable.

The practice of recognising player contracts as intangible fixed assets was given partial legality after a test case in 1975. The US Inland Revenue Service (IRS) challenged the owners of the Atlanta Falcons American football organisation after they had assigned a proportion of the acquisition price of the franchise to player contracts. Valuations were based on fair value estimates by franchise owners. They were based upon marginal revenue product: the contribution to team revenue from owning a player registration [Quirk and Fort, 1992]. The IRS claimed that player contracts were not separable and therefore ineligible for capitalisation and depreciable deduction. The court found that a sum could be assigned to player contracts upon acquisition of a franchise. This implied that player contracts are capable of separate recognition.

The valuation of football player registrations was undertaken in the UK in 1975. Human resource accounting techniques were used to estimate the value of player registrations held by Liverpool football club [Dobbins and Trussell, 1975]. The acquisition cost of the playing squad was £0.6M, the replacement cost was estimated at £3.2M and the discounted future wage payments were estimated at £7.2M. In discounting future wage payments, a time horizon of five years was used with a discount rate of 13%. An efficiency ratio was used based upon the performance of Liverpool compared to other premier league clubs in European and domestic competitions. However, this methodology is not thought to be sufficiently verifiable to satisfy financial reporting requirements.

An earnings multiplier valuation methodology is suggested by Morrow [1995, 1996].

The player's gross annual salary is multiplied by a coefficient factor that varies with age to produce an estimate of current cost. This method was used by UEFA before the Bosman ruling, to value out of contract players in transfer disputes. However, as with other wage based valuation methods, any estimate is dependent upon a high correlation between the marginal revenue product of labour and actual wages. This is unlikely due to imperfections in the labour market⁴⁴. This method also ignores the time value of money.

In the Netherlands, a model version of accounts laid down by the governing body, the KNVB, must be used by all professional clubs. Player registrations require valuation using a wage based valuation model [Brummans and Langendijk, 1996]. Gross annual salary is multiplied by a coefficient factor based upon age. Each value is multiplied by a prudence factor of 0.25. The value aims to represent the training costs of the selling football club.

This valuation is still dependent upon the relationship between wages and human resource value. However, a standardised valuation system increases comparability, consistency, reliability and thus objectivity. Wage levels are verifiable. Thus, previous valuation attempts suggest an objective and accurate measurement of player registrations may be possible.

b) Financial Reporting Criteria

The value of a player registration is derived from the playing ability of the associated football player. A player generates cash flows for a team by playing ability. Playing ability makes an incremental contribution to team success. Team success leads to increased prize money, sponsorship, gate receipts, media rights and merchandising opportunities. Thus, any

⁴⁴ Wage Based Valuation methods as a measure of intangible asset value are discussed in Chapter 2; 2.3(f)

valuation must attempt to estimate, in monetary terms, the contribution of a player to team success.

The ASB propose that where the acquisition cost is unknown, an asset can be measured according to its 'value to the business'⁴⁵. It is argued that the value to the business of a player registration is its replacement cost. This is because ownership of player registrations is a necessary condition for the operation of a professional football club as a going concern. A club not owning any player registrations would be unable to generate revenue in the long term. It would be unable to compete in professional competitions, thereby reducing gate receipts, sponsorship, prize money and media rights. Player registrations are the basis of the revenues of a football club. A fixed stock of player registrations is required for a club to continue operations. Thus, a football club that is a going concern will need to continually replace its player registrations. Therefore, the value to the business will be the replacement cost of its asset.

The replacement cost of a registration is difficult to estimate because each registration will secure the services of a player whose cash flow generating abilities will vary greatly. In general, it is argued that the more heterogeneous the asset, the less objective will be an estimate of replacement cost. However, it is said that a difficult and imprecise estimate of reality is better than a precise estimate of fiction [Morrow, 1992].

Thus, a valuation model is proposed that seeks to estimate the replacement cost of player registrations through reference to previous market transactions. The most accurate

⁴⁵ Refer to Chapter 2; 2.1(b) for a description of value to the business.

source of information for estimating player registration values are transfer fees paid in an active, freely competitive market [Quirk and Fort, 1992]. Intangible assets are excluded from financial reports because they are incapable of reliable measurement. Thus, the model aims to explore the feasibility of valuing intangible assets for financial reporting purposes.

In order for a model to be operationally useful, the benefits from providing the additional information must outweigh the costs of collating that information. The model must also be understandable to users. Thus, simplicity may override accuracy.

9.3 Valuation Model for Player Registrations

This section discusses the validity of measuring player registrations at their replacement cost. Determinants of replacement cost are proposed and are converted to an operational model. The model is developed through Ordinary Least Squares regression analysis using historical data from the transfer market. Results are outlined and discussed. Finally, the predictive validity of the model is tested against subsequent transactions.

a) Determinants of Player Registration Value

The cost of replacing a registration will be determined by the footballing ability of the associated player. Players with greater footballing ability can generate more revenue for their club, and will thus be more expensive to replace. The footballing ability of a player is thus the basis of estimating the replacement cost of their registration. This section identifies the factors that are hypothesised to affect footballing ability. Footballing ability thus varies over time. Hence, current and expected footballing ability determine replacement cost.

Current footballing ability refers to the present revenue generating capacity of a player. It relates to the current influence by a player on the performance of the team. It is based upon the current skill level, fitness, and the standard at which an individual performs.

The current skill level of a player refers to the technical attributes presently being utilised by the player. It is commonly described in the football industry as 'form'. It has a direct impact on current footballing ability.

Fitness includes both physical and mental fitness levels. Fitness is necessary to apply current footballing skills. Fitness levels refer to physical attributes such as injury proneness, and mental attributes such as the ability to perform under pressure. Without a minimum fitness level, a player is less able to exercise their footballing ability.

The standard at which a player performs influences their current footballing ability via coaching and exposure to competition. Playing standards are generally greater in the higher divisions. Generally, the standard of coaching and training a player receives will be superior. The level of competition in matches in which a player participates is expected to be greater. Thus, where playing standards are greater, current footballing ability is expected to be higher.

Expected footballing ability is based upon the age and potential skill level of the player. Potential skill level refers to the possible future influence on footballing ability and its impact on future replacement cost. Expectations of whether revenue generating potential is likely to increase or decrease over time will affect the current replacement cost.

Age will affect the length of time a player can play professional football. As the length of a player's career is finite, revenue generating ability is limited by age. Age will also affect changes in footballing ability through its impact on fitness level.

The potential skill level can be viewed as the highest level of technical attributes that may be attainable at any time by a player. It recognises that footballing skill is likely to fluctuate over a player's career.

b) Model Design

The value computed using this model is designed to represent the amount a football club would have to pay for a player registration offering equivalent cash flows to the registration presently owned. In terms of Human Resource Accounting, the replacement cost is personal rather than positional⁴⁶.

The replacement cost of a registration currently held by a club can be estimated by the price paid to purchase a registration offering similar revenue generating abilities. The price paid for a registration, the transfer fee, will be based upon the present value of future expected cash flows earned by a club over the duration of a players contract plus any possible resale value. Thus, the basis of the transfer fee, it's revenue generating ability, will derive from the footballing ability of the player. Footballing ability can be broken down into different attributes. By examining the transfer fees paid for registrations offering differing levels of attribute, the replacement cost can be estimated for a given level of each attribute.

The model has been developed by assessing the player attributes that determine transfer fees. The determinants, outlined above, are hypothesised to effect footballing ability. Hence, they are expected to effect replacement costs and transfer fees. Where determinants are not objectively and directly observable, surrogates are used.

⁴⁶ Refer to Chapter 3; 3.3(b)

The division of footballing ability into different attributes is an arbitrary process undertaken for modelling purposes. Hence, it is recognised that the surrogate variables used do not necessarily isolate individual attributes.

The variables designed to estimate particular attributes of footballing ability are Current Skill Level (CSL), Fitness (FIT), Playing Standard (STD), Potential Skill Level (PSL) and AGE. Each variable is designed to mirror the determinants of replacement cost outlined above. The determinants of replacement cost and their associated variables are displayed in Table 9.1.

Table 9.1: Determinants (and associated variables) of the Replacement Cost of a Player Registration

Footballing Ability	Determinants	Variables
Current	Current Skill Level	CSL
Current	Fitness	FIT
Expected	Playing Standard	STD
Expected	Potential Skill Level	PSL
Expected	Age	AGE

The CSL variable measures the current footballing skill of a player. Current skill levels can be partially observed through goalscoring. Goals are the most important contribution to winning football games. The number of games won has a direct impact on the revenues generated by a club. Players who score goals have a desirable footballing skill. It is argued that registration values are, to some extent, goal fixated. Players in goalscoring positions are valued more highly. Thus, goalkeeping and defending positions will have much

lower CSL amounts and this is reflected in the lower transfer values attributed to players in these positions. Goals are expected to vary positively with current footballing skill.

The CSL variable is computed from the number of goals scored in the previous season at professional level. This includes goals scored in League, FA Cup and League Cup matches. It is hypothesised that CSL is positively related to replacement cost.

The FIT variable measures the fitness level of a player. The fitness of a player can be observed through the number of appearances made in competitive. The number of appearances is thought to vary positively with fitness. The more appearances made, the greater the physical and mental fitness that are needed to exercise footballing ability.

In computing FIT, league appearances in the season prior to transfer are weighted according to the division in which they were made. Appearances in the Premier League are given higher weighting than those in lower divisions. The weighting is undertaken in recognition of the greater fitness levels needed in the higher divisions. For example, appearances for a premier league team are thought to demonstrate greater fitness than appearances for a third division team as the game is faster and more physical. It is expected that FIT will be positively related to replacement cost.

The STD variable measures the playing standard in which the player participates. It is thought that the larger and more successful clubs will exercise better coaching and the standard of training will be higher, thus improving footballing ability.

The variable is computed from the final league position of the club holding the registration in the season prior to transfer. The league positions are ranked with 1 assigned to the club at the top of the Premier League and 92 to the club finishing at the bottom of

Division Three of the Football League. It is thought that players at successful clubs will have greater replacement costs because they are assumed to provide better training and coaching. They will also have more 'big-match' experience and higher profiles than identical players at less successful clubs. Hence, such players will be more marketable. It is hypothesised that replacement cost will be negatively related to the STD variable.

The PSL variable measures potential skill level. It is a dummy variable for youth and senior representative honours earned by the player. This recognises that players have and hence are capable of attaining a high skill level. Players selected to represent their country are perceived to have the greatest footballing ability from the available pool of players. It is hypothesised that the greater the number and quality of players in that pool, the greater the footballing ability of those chosen from the pool. A player with more representative honours will be more expensive to buy than one with fewer honours. Representative honours include selection on a national team at junior (under 21), 'B' and full international level.

PSL will be one for a player with any representative honours and zero for those without representative honours. It is hypothesised that PSL has a positive association with replacement cost.

The AGE variable refers to the age of the player at the date on which their registration is transferred. Younger players have greater potential in that their footballing ability is expected to increase. Their potential resale value will be higher as they are expected to produce revenue generating ability for a longer time period. Older players have more experience which is reflected in their current skill level. However, their expected ability will decline over time, decreasing their revenue generating ability from use or resale. Therefore,

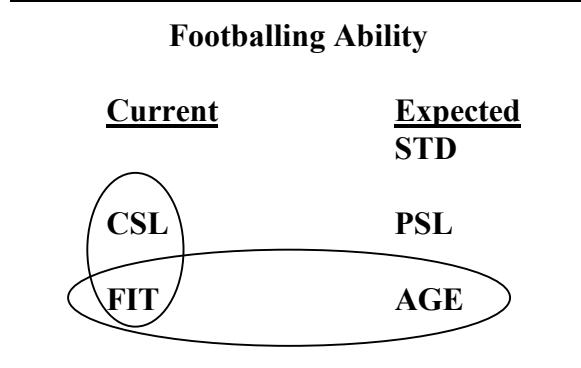
footballing ability is negatively related to age in terms of potential and positively related to age in terms of experience [Carmichael and Thomas, 1993]. Thus, the relationship between age and replacement cost can be said to be quadratic.

The AGE variable is constructed from the selection of a point where potential and experience are maximised simultaneously. It is assumed that this age is 23 years old. This selection is based upon court findings in the Bosman ruling and proposed UEFA guidelines. The guidelines propose that transfer fees should only be paid for players out of contract who are 23 years old or under. The Advocate General of the European Court of Justice suggested that such a policy would be desirable to protect clubs that have invested in youth policies [Morrow, 1996: Times, 28/7/97]. It states that under the age of 24, players are still under training and development. Thus, compensation must be paid to the selling club for general industry training. Thus, 23 has been agreed by the majority of football governing body's in Europe as a mark of when a player's training and development have been completed.

The AGE variable is constructed from the formula; $(Age - 23)^2$. It is predicted that this variable will have a negative relationship with replacement cost. Thus, *ceteris paribus*, very young and very old players will have lower replacement costs.

The jointness of surrogates is recognised in representing more than one determinant. Interactions are shown in Figure 9.1.

Figure 9.1: Interaction Between Variables Representing the Replacement Cost of a Player Registration



The FIT variable is related to the current skill level. FIT, as measured by appearances, depends on being selected to play. Selection will be based on current skill level in addition to fitness. Fitness is required to utilise current skill level. The number of appearances is therefore expected to vary positively with current skill level. This gives further justification for the divisional weighting of appearances; selection for a premier league team demonstrates a high fitness level and a high current skill level.

The AGE variable influences current skill level and fitness. Older players will have gained experience that will increase current skill level. Age is negatively related to fitness. Ceteris paribus, older players are less fit than younger players. Thus, the AGE will represent current skill level in terms of experience and via the fitness variable.

The estimation of replacement cost is based on transfer fees paid. The transfer fee paid for a player today will be higher than that paid for an identical player one year ago due to changing price levels in the football transfer market. To compensate for this, an inflation

factor, INF, is included in the model. It represents the change in prices in the transfer market from the period in which the model was developed to the date at which an estimation is made.

INF is based on the level of total transfer payments within the English professional leagues. This excludes registrations to Scottish and other foreign clubs. It does not isolate the price effect of the transfer market because the total number of transfers will vary season by season. However, it can be said to highlight trends in transfer market prices. In addition, it is the only aggregate transfer market data available. INF is computed from the conversion of total transfer payments into index numbers. The statistic for the 1994-5 season is treated as the reference number. The model was developed with reference to prices in this period⁴⁷. The transfer payment data were provided by the Football Trust [1998]. Transfer statistics and index number information are shown in Table 9.2.

Table 9.2: Inflation Factor Used in Valuation Model

Period	1992-3	1993-4	1994-5	1995-6
Total Transfer Payments £M.	73.213	91.785	109.900	139.6
Index Number	66.62	83.52	100.00	127
INF	0.666	0.835	1.000	1.27

Source: The Football Trust [1998]

The valuation model estimates the replacement cost of player registration values using the variables outlined above. It takes the form;

$$\text{Replacement Cost}_i = (a_1 + b_1 \cdot \text{CSL}_i + b_2 \cdot \text{FIT}_i + b_3 \cdot \text{STD}_i + b_4 \cdot \text{PSL}_i + b_5 \cdot \text{AGE}_i) * \text{INF}$$

A summary of the variables and their predicted signs are displayed in Table 9.3.

⁴⁷ The 1994-5 season covers the period, 22nd May 1994 to 21st May 1995.

Table 9.3: Summary of Model Variables

Explanatory Variable	Label	Predicted Sign
CSL	current skill level	+
FIT	fitness	+
STD	playing standard	-
PSL	potential skill level	+
AGE	age	-
INF	transfer market inflation	+

c) Model Methodology

The model is based upon the proposition that an examination of the transfer fees paid for registrations relating to differing levels of the attributes will allow the replacement cost to be estimated for a given level of each attribute.

This methodology derives, in part, from micro-economic wage determination studies such as Scully [1974] and Carmichael and Thomas [1993]. These studies have used player, club, league and demographic variables in regressions to estimate marginal revenue products of professional sportspeople.

The regression of the attributes on transfer fees will yield coefficients that can be used to estimate the hypothetical transfer fee for a player. This hypothetical transfer fee, adjusted over time, will be the estimated replacement cost.

The regression on transfer fees is undertaken using Ordinary Least Squares estimation. This method creates unbiased estimators of the coefficients if its assumptions are not violated. The variance of the error terms must be constant, independent, normally

distributed random variables with a mean of zero. These assumptions will be tested in 9.3(f).

The regression was undertaken using SPSS for Windows 6.1.3.

The dependent variable used in the regressions is the natural log of the transfer fee (LOGFEE). This is used because the relationship between fee and the explanatory variables is thought to be non-linear. The reason for this is that the registrations of 'star' players have few substitutes. Hence, the holding club has more bargaining power in negotiating the transfer of registrations. Thus, the transfer fees payable for such players will be very high. As positive, individual player attributes increase, the transfer fee will increase at a consistently increasing rate. This is indicative of a logarithmic relationship. The log transformation linearises a non-linear relationship. It also ensures that no negative transfer fees are computed. Thus, the regression equation becomes;

$$\text{LOGFEE}_i = a_i + b_1 \cdot \text{CSL}_i + b_2 \cdot \text{FIT}_i + b_3 \cdot \text{STD}_i + b_4 \cdot \text{PSL}_i + b_5 \cdot \text{AGE}_i + e_i$$

d) Sample Selection

The regression equation was computed from a sample of all players whose registrations were transferred from English league clubs between 1 June 1994 and 30 May 1995. This period was chosen to cover a whole football season, thereby reducing the effect of seasonal influences on the transfer market. Transfer fee data were provided by the Professional Footballers Association.

No free transfers are included. This is because they refer to registrations transferred out of contract. In this situation the club is assumed to have no property rights. There were 59 free transfers during the sample period. No transfers that involve exchanges/combinations of registrations are included as no transfer value can be attributed to a single player.

No transfers from outside the English Premier League and Football League are included as data for each variable could not be obtained. The number of such transfers is low; it amounted to 16 in the period covered by the sample. Registrations sold twice in the season prior to the sample are excluded because data cannot be obtained (4 cases). Where player registrations were sold twice during the period (5 cases), only the initial sale is included in the sample. Exclusion of invalid cases may create a 'survival bias' where only cases conforming to particular attributes will be used to test the hypothesised relationship.

The usable sample size was 253. For each valid case, data for each explanatory variable were obtained from the Football Association [1995] and the Rothmans Football Yearbooks [Rollin, 1994-6].

e) Parameter Estimation

Descriptive statistics for all variables in the regression are shown in Table 9.4.

Table 9.4: Descriptive Statistics; Model Variables

Variable	Mean	Mode	Median	Min	Max	Std Dev	Skewness
LOGFEE	11.719	11.513	11.513	8.517	15.648	1.614	0.079
CSL	2.224	0	1	0	41	4.058	5.205
FIT	11.853	0	9.333	0	42	10.460	1.204
STD	37.925	10	34	1	92	24.923	0.479
PSL	0.217	0	0	0	1	0.413	1.379
AGE	20.368	1	9	0	169	28.804	2.261

The descriptive statistics show the distribution of the response variable, LOGFEE, to be well balanced. The mean, mode and median are all within close proximity of each other

and little skewness is evident. This demonstrates the appropriateness of a log transformation to transfer fees.

All explanatory variables are skewed to the left. The playing standard variable, STD, is well balanced with a slight leftward skew. Thus, players of different standards are represented in the model. The age variable, AGE, is skewed towards the left. This shows that most players in the sample were within the age range 23-26. The potential skill level variable, PSL, is skewed towards the left. It shows that most players in the sample have not represented their country at international level. The fitness variable, FIT, is widely dispersed and skewed slightly towards the left. The current skill level variable, CSL, is skewed heavily towards the left. This demonstrates that the majority of players have a low current skill level. This is because the supply of the most talented footballers is small. Hence, the number of players with high current footballing ability is low.

Model fit statistics from Ordinary Least Squares regression are displayed in Table 9.5.

Table 9.5: Model Fit Statistics

Test	Value
Adjusted R ²	0.58166
Standard Error	1.04405
model F test	71.075
model F p-value	0.0000

The adjusted coefficient of determination (adjusted R^2) measures the variation in the response variable attributable to the explanatory variables in a linear relationship. Thus, approximately 58% of the variation in LOGFEE was explained by the explanatory variables.

The standard error of the regression is a summary measure of the size of the errors from predicting LOGFEE using the explanatory variables. The standard error, or average residual, is just over 1.

The F test is an overall measure for goodness of fit. The F statistic tests the null hypothesis that the regression line is a better predictor of LOGFEE than the mean average of LOGFEE. Alternatively, it tests the hypothesis that the multiple correlation between LOGFEE and the explanatory variables is zero in the population from which the sample was taken. Hence, there is a probability of 0.0000 that all estimated coefficients are all zero. It is concluded that LOGFEE and at least one of the explanatory variables are related and that a linear relationship explains a significant amount of that variability.

The regression coefficients are displayed in Table 9.6. A t-statistic tests the null hypothesis that the related regression coefficient is zero. The Beta statistic is the standardised coefficient. It measures the expected change in LOGFEE from a one unit change in the associated explanatory variable with all other variables held constant.

Table 9.6: Parameter Estimates

Variable Measure	Estimate	Std Error	t-test statistic	t-test p-value	Stdised Estimate
Intercept	11.9228	0.1718	69.396	0.0000	-
CSL	0.0601	0.0186	3.235	0.0014	0.1510
FIT	0.0525	0.0078	6.746	0.0000	0.3401
STD	-0.0194	0.0030	-6.492	0.0000	-0.2992
PSL	0.7684	0.1952	3.936	0.0001	0.1967
AGE	-0.0192	0.0023	-8.201	0.0000	-0.3434

All the parameter estimates are statistically significant from zero. The variables with the most influence in predicting transfer fees are AGE, FIT and STD. Sensitivity analysis permitting, the coefficients can be considered statistically robust and efficient.

These parameters form an equation that can be converted to an estimate of transfer fees by taking the explanatory variables to the power of the natural number (e), 2.718.

$$\text{Transfer Fee}_i = e(11.9228 + 0.0601.\text{CSL}_i + 0.0525.\text{FIT}_i - 0.0194.\text{STD}_i + 0.7684.\text{PSL}_i - 0.0192.\text{AGE}_i + e_i)$$

This equation is converted to replacement cost by including the inflation factor, INF. Thus, the model takes the form;

$$\text{Replacement cost} = \{ e(11.9228 + 0.0601.\text{CSL}_i + 0.0525.\text{FIT}_i - 0.0194.\text{STD}_i + 0.7684.\text{PSL}_i - 0.0192.\text{AGE}_i) \} * (\text{INF})$$

f) Sensitivity Analysis

This section seeks to evaluate the reliability of the model. The statistical tests will be assessed with respect to multicollinearity, model assumptions, and omitted variables.

High correlation between explanatory variables can lead to inefficient estimation of the parameters. To check for any multicollinearity, bivariate Spearmans rank correlation coefficients were computed between all the explanatory variables. The results are shown in Table A7.1 in Appendix 7. Further analysis was undertaken where each explanatory variable was regressed upon all other explanatory variables [Daley and Vigeland, 1983]. The results are shown in Table A7.2 in Appendix 7. High correlation coefficients, interpreted as greater than 0.40, were found between FIT and CSL, and STD and PSL.

The correlation coefficient between FIT and CSL is 0.57. This coefficient is significantly different from zero at the 1% level. This can be interpreted as players with more appearances in a season will score more goals. This is not surprising as the FIT variable is related to the current skill level⁴⁸. A player regularly picked in the first team will have the ability to contribute more goals.

The correlation coefficient between STD and PSL is -0.45. This coefficient is significantly different from zero at the 1% level. Players at clubs that finished in lower league positions were less likely to represent their country at international level. Again, this is unsurprising; players with higher potential skill levels will be more likely to play for better clubs. This is because player registrations offering a higher potential skill level will be purchased by clubs in the higher divisions.

⁴⁸ Refer to Figure 9.1

To assess the impact of multicollinearity on the coefficients, each of the 4 correlated variables was dropped in turn. With the STD variable dropped, the PSL coefficient increased. It is thought that the STD accounts for some of the potential skill level. With the FIT variable dropped, the CSL coefficient increased. Thus, as hypothesised, the FIT variable accounts for some of the current skill level. There is no change to the direction of the associations as a result of multicollinearity. Only the strength of association is affected due to some overlap between variables measuring similar attributes. Hence, any multicollinearity inherent in the model is not considered to affect the reliability of the model's coefficients.

The validity of the coefficients is subject to the assumptions upon which OLS multiple regression is based being upheld. The variance of errors (or residuals) are assumed to be homoscedastic. The errors are assumed to be normally distributed random variables with a mean of zero. Finally, the errors are assumed to be independent of each other.

A scatterplot of the regression standardised residuals can indicate non-constant variance and non-independent errors. A scatterplot of the standardised residuals for each observation is shown in Chart A7.1 of Appendix 7. No strong relationships are apparent from the scatterplot. Its random nature suggests that these assumptions have not been violated.

A Normal probability plot of the regression standardised residuals is shown in Appendix 7. The placement of residuals in Chart A7.2 is close to a 45° line. This suggests that the errors are normally distributed. A histogram of the regression standardised residuals is shown in Chart A7.3 of Appendix 7. A histogram displaying bell-shaped Normal distribution characteristics is indicative of the errors belonging to such a distribution. Both diagrams suggest that the assumption that errors be normally distributed has not been violated.

The Durbin-Watson statistic measures the association between adjacent residuals. A value of 2 indicates that there is no autocorrelation between the variables. The value for the above regression is 2.14. This suggests that there is no significant autocorrelation. Thus, it is assumed that the errors are independent of one another.

The existence of outliers was investigated by inspecting the standardised residuals. However, all residuals were found to be within 3 standard deviations of the mean residual. It is concluded that no were no significant outliers in the sample.

In the regression analysis, it was shown that 58% of the deviation in transfer fees was attributable to the explanatory variables. Unexplained deviation may be attributable to omitted variables. Transfer market prices are not based solely upon the revenue generating ability of players. As the model is based upon transfer market transactions, features of the market may be identified which are thought to make up the error term.

A factor that can affect transfer fees and thus the replacement cost computed in the model is the time remaining on a player's contract. The more time remaining on the contract between a player and the selling club, the greater the transfer fee. A fee is demanded by the selling club to compensate for the loss of footballing services of the player. The longer the time remaining on a contract, the greater the loss of potential services. For example, a player reaching the end of his contract will have a lower transfer fee than a player with two years remaining on his contract even though their footballing ability is identical. The selling club will have greater bargaining power if they have the right to a player's services for a further two years; a club holding a player reaching the end of his contract will have less bargaining power as the player will be free to move with no transfer fee payable if the negotiating parties hold out until the end of the contract. Letters were written to several football clubs requesting

the disclosure of data on the length of player contracts. However, these requests were declined due to the confidential nature of this information.

The selection of the surrogate variables was not undertaken solely on a priori grounds. The variables were chosen after experimentation with useable data. Data tested but excluded from the model includes the tactical position of the player. This did not contribute to the model's explanatory power and was highly correlated with CSL. It is thought that the effect of position on replacement cost is dealt with by CSL (goals scored). Attendance's and turnover statistics were tested for STD; both were inferior to league position. The PSL variable was restricted to a dummy variable due to difficulties in obtaining data on representative honours for the whole sample. It is thought that a variable based on the number and type of representative honours would have greater explanatory power.

9.4 Conclusions

This section assesses the usefulness and feasibility of the player registration valuation model. Conclusions are expressed with reference to the role of intangible asset accounting in financial reporting.

To assess the predictive ability of the model, transfer fees from a holdout sample will be compared to a replacement cost estimate derived from the model. The holdout sample consists of transfer fee transactions from 19 May 1996 until 17 February 1997⁴⁹. Relevant transactions were selected on the same criteria as the initial sample. The holdout sample size is 40.

The predictions are compared with actual transfer fees paid. The Pearson's correlation coefficient is 0.94. It is significantly different from zero at the 1% level. This

⁴⁹ This data was provided by the Professional Footballers Association

indicates a high degree of similarity between predictions of player registration value and actual transfer fees paid. A Paired Sample t-test was conducted on the model predictions and the transfer fees actually paid. The results are shown in Table A7.3 in Appendix 7. The hypothesis that both samples come from a population with the same mean is statistically significant at the 5% level. This provides further support for the predictive ability of the valuation model.

During this study, similar transfer fee regressions have been undertaken by Dobson and Gerrard [1997a; 1997b]. Their research used similar methodology to determine transfer fees from an economic rather than an accounting perspective. They investigated the existence of rent-sharing. Hence, their model uses buying and selling club characteristics to explain transfer fees. It would be impossible to use buying club characteristics in trying to estimate hypothetical transfer fees. This model seeks to predict the value of player registrations for financial reporting purposes rather than explain past player registration values. Player registrations are computed independently of whether a club wishes to buy a registration. Thus, buying club characteristics are irrelevant. However, their studies do suggest that the transfer market is systematic and efficient in assigning values based on levels of particular attributes. It also indicates that regression analysis can be used to isolate these attributes.

The model gives support to the assertion that player registrations are capable of reliable measurement. It is argued that reliable measurement will facilitate their recognition as intangible assets. This has implications for intangible asset accounting.

Non-purchased intangible items that are viewed and used as assets are not recognised because they are said to be incapable of reliable measurement. They frequently meet the

criteria to be identified as assets but are not the subject of a purchase transaction.

Measurement criterion is biased in favour of items that have been the subject of a transaction.

However, this increasingly omits sizeable intangible assets, which are by nature, non-monetary. This leads to a lack of relevance and comparability in financial reporting.

Intangible items that generate future economic benefits controlled by the entity are excluded from financial reports due to measurement criteria. It is argued that the number of intangible 'assets' in industry is increasing. This follows the move from a manufacturing base towards a knowledge base in the developed economies of the world. By seeking to measure intangible assets in a reliable manner concordant with the ASB's move towards more current values, financial statements may become more relevant and comparable.

The model aimed to demonstrate the feasibility of reliably measuring intangible 'assets'. This would allow recognition to become independent from the existence of a market. Player registration valuations may also be possible through other means. For example, asset valuation standards could be laid down by an industry regulator. In the Netherlands, a model version of financial reports is prescribed by the governing body, the KNVB [Brummans and Langendijk, 1996]. It includes model accounts, principles of valuation and accounting policies. It requires player registrations to be recognised and gives a consistent valuation methodology. Similarities exist with other 'governing' bodies who prescribe consistent valuation techniques. For example, the Royal Chartered Surveyors, which measure land and buildings at their current cost. As highlighted by the football club questionnaire, when asked what changes were needed to football industry financial reporting, one third of respondents suggested industry standardisation was required⁵⁰.

⁵⁰ Refer to Chapter 7; Table 7.16

The development of reliable measurement systems will facilitate the recognition of intangible assets. This will lead to recognition policies for intangible assets being legitimate and acceptable. As shown in the previous chapter, the selection of accounting policies is affected by which are perceived as legitimate.

Summary

Having found that the selection of accounting policies may be based upon perceptions of legitimacy, this chapter sought to determine whether recognition transfer fee policies are legitimate.

It was demonstrated that player registrations meet the ASB's proposed criteria for identification as intangible assets. In identifying player registrations as intangible assets, future economic benefits were shown to derive from playing ability. Rights to such future economic benefits are governed by regulations within the football industry which restrict the revenue generating ability of each player to the club that holds their registration. Registrations subject to a purchase transaction can be recognised at their acquisition cost. The useful economic life a player registration is finite and limited to the length of the employment contract with the associated player. This is unlikely to be greater than 20 years and has no residual value. Amortisation thus presents few problems. This chapter has shown that in addition, internally generated registrations may also be capable of reliable measurement given the existence of a well developed transfer market. The market for player registrations provides a basis for measurement. The valuation model demonstrates the feasibility of measuring intangible fixed assets where a market exists. Hence, it may be possible to reliably measure non-purchased intangibles, thereby facilitating their recognition in financial statements.

CONCLUSIONS

This chapter begins by briefly summarising the main contents of the thesis. It then provides conclusions on the use of Human Resource Accounting, the selection of accounting policies and intangible asset accounting. Finally, it highlights areas for future research and suggests implications for accounting policy making.

Chapter 1 examined the nature and accounting treatment of intangible assets. Intangible assets are becoming of greater importance due to the changing focus of industry and commerce. Due to modernisation and globalisation, economic enterprises are becoming larger and derive a greater share of their revenues from specialist knowledge or 'intellectual capital'. In addition, in larger organisations, fewer assets are subject to market transactions. Increasingly, intangible assets based around specialist knowledge are the major source of revenue generation.

The recognition of intangible assets in financial reporting is largely incompatible with the traditional historical cost framework of measurement upon which UK GAAP is based. UK GAAP requires asset values be verifiable through reference to an active market. The existing measurement framework is subject to change due to the gradual introduction of current values and alternative accounting measures. Thus, there is greater scope for the recognition of intangible assets in financial reporting, especially if capable of reliable measurement. However, a bias still exists towards those items that are tangible and subject to a market transaction.

The measurement of intangible assets was examined in Chapter 2. Many attempts have been made to produce reliable measurements of intangible assets. However, measures

considered acceptable for financial reporting have to be derived from market transactions.

Asset valuation is thus entwined with the existence of an active market. As the ultimate recognition of intangible assets is based upon their reliable measurement, the absence of a market becomes a significant barrier in constraining intangible asset accounting.

As discussed in Chapter 3, early research into intangible asset accounting took the form of Human Resource Accounting. This sought to identify and measure the value of human resource assets to the organisation. The relevance of Human Resource Accounting to financial reporting is thus well established. However, the recognition of human resource assets is generally considered too unreliable for financial reporting due to a lack of control over future economic benefits and the absence of reliable measurement techniques.

Chapter 4 argued that control over future economic benefits and an active market exist in the football industry with regard to player transfer fees. Human resource assets are subject to control through the existence of labour market restrictions that are designed to promote the competitiveness of the industry. Access to human resource services is gained by holding a player registration. Player registrations are freely bought and sold on the transfer market. The football industry is of considerable social importance in the UK; its social influence is disproportionate to its size. It is also currently undergoing a period of rapid growth and commercialisation.

Chapter 5 investigated which accounting policies are used by football clubs with respect to human resource transactions; namely, transfer fees and signing-on fees. Accounting policies were also examined for certain other material transactions: namely, stadium depreciation and capital grants. The findings of a survey of financial statements in the English and Scottish leagues were reported. It found that significantly different policies were used for

each of these transactions. This led to some possible explanations of why particular accounting policies are used in the football industry.

Chapter 6 developed a framework for understanding the selection of accounting policies. It proposed that the main theories which suggest different reasons for the association between economic-organisational variables and accounting policy choices are not necessarily mutually exclusive. Opposing theories use different language and different explanations of causality to predict similar outcomes but these frequently contain essentially the same independent variables. Thus, this chapter combined several theories to produce an eclectic theoretical framework from which six hypotheses were developed. These hypotheses related to underwriter pressure, debt contracting costs, youth development policy, ownership structure, normative accounting influence and political 'agency' costs.

The methodology used to collect and analyse data for testing these hypotheses was explained in Chapter 7. One postal questionnaire was sent to the bankers of football clubs, and another was sent to football clubs. This information, in conjunction with financial report data, was used to construct the variables that were used to measure each hypothesis.

Chapter 8 analysed and assessed the findings of the statistical tests and related them to the specified hypotheses. The underwriter pressure variables were found to be significant influents of accounting policy choice. This supports the theory that societal and institutional norms and expectations can influence the choice of accounting policies. It also casts doubt on traditional positive accounting theory explanations as no direct agency costs are associated with underwriter pressure. The debt contracting cost and the political cost hypotheses were not found to be relevant in the football industry. Although the variable measures were imperfect, they have been associated with accounting policy selection in other industries. It is thought that a size effect may temper the effects of the debt contracting cost hypothesis. The

ownership structure hypothesis was found to be inappropriate in the football industry. No significant results were identified in respect of the youth development or normative influence hypotheses.

Having found that institutional pressure through perceptions of legitimacy was influential in the selection of transfer fee accounting policies, Chapter 9 further investigated its impact on intangible asset accounting. The legitimacy of treating transfer fees as intangible assets was explored. The recognition of player registrations and ultimately the use of intangible asset policies necessitates reliable measurement. Reliable measurement is dependent upon asset valuations being linked to an active market, and usually these must have been the subject of a transaction. There is thus an inconsistency between the treatment of purchased and non-purchased registrations. The lack of reliable measures of intangible assets not derived from a market is a major obstacle to the development of intangible asset accounting. Hence, a model to value player registrations in a manner reliable enough to facilitate their recognition in financial statements was developed. The reliability of the valuation model derives from its use of past transfer market data to obtain coefficients for determining player registration values. It was argued that such a model would legitimise the use of intangible asset policies in transfer fee accounting.

In conclusion, the feasibility of using Human Resource Accounting in financial reporting at present is dependent on control being exercised over the services of an individual and the existence of an active market for the purchase and sale of those services. Under existing guidelines, professional sports industries may represent the only area where human resource assets may currently be recognised in financial reporting

A need exists for consistency and comparability in the financial reports of the football industry particularly in view of its growing social and commercial importance. Football clubs have a material effect on, and hence are accountable to, the communities in which they operate. The diversity of football club's accounting policies for significant financial items highlights a lack of financial regulation. Growth in the industry has resulted in football clubs becoming more akin to traditional commercial organisations. They are coming under increasing regulatory scrutiny. For example, there is a growing demand for the regulation of finances and broadcasting rights. It can be argued that football clubs should not be exempt from financial regulation due to their traditional pseudo-commercial status.

A similar pattern may emerge in other professional sports such as rugby union, cricket, rugby league and basketball. They are becoming more commercialised, being driven by a significant growth in funds from broadcasting rights. Furthermore, similar labour market restrictions exist in basketball and rugby league. This may necessitate a need for greater accountability and regulation in the future. In particular, explicit accounting pronouncements for the sports industry would put the UK in line with practice in the Netherlands and the US.

The inconsistency of accounting policies limits the usefulness of the financial reports of football clubs. This thesis has argued that there is a need for a standard accounting policy for transfer fee accounting; the capitalisation of purchased registrations as intangible assets and amortisation over the length of the contract to a zero residual value.

However, it is debatable whether the prescription of standard accounting policies leads to more useful financial reports. The selection of accounting policies is a political process based on compromises between vested interest groups. Because accounting standards have explicit legal backing in the UK, standards are formed on the basis of what is acceptable to the industry and the auditing profession. Thus, UK GAAP does not necessarily represent

the most theoretically sound accounting standards. In a similar manner, the selection of accounting policies is influenced by factors other than which policy gives the most accurate representation of the organisation's position. Hence, the transfer fee policy advocated above may not be acceptable to all interest groups. Explaining accounting policy choice may help identify which policies are chosen as suitable by vested interest groups. It may also help to understand the development of GAAP.

This study found an association between capital market flotation and accounting policy choice. It suggests that the selection of transfer fee accounting policies is affected by, other amongst other things, societal and institutional pressure. It is argued that many of those officers of companies who are involved in the selection of accounting policies believe their choice can influence the cash flows of the organisation. The findings of this study suggest that the selection of those accounting policies which are perceived as legitimate and credible will aid transition into the capital markets. Whether this actually affects cash flows is unknown. What is crucial is that such a choice is perceived to influence cash flows. This distinguishes the proposition in this thesis from traditional positive accounting theory.

Further research into this explanation for accounting policy choice can be suggested. An association between tax preferred accounting policies and profitability in the football industry could be tested. It was stated that football clubs select transfer fee policies which maximise tax relief. That is, clubs with a high taxable income would, ceteris paribus, be more likely to adopt asset/income decreasing accounting policies. The applicability of the underwriter pressure hypothesis to other industries could also be tested. The hypothesis may also be extended to include other agents, such as auditors, who are affected by flotation. This would reveal whether a link between capital market flotation and accounting policy choice

exists outside the football industry. Such finding may be useful in helping to refine theories of accounting policy choice. More general tests could seek to isolate factors that are thought to influence accounting policy choice, but which do not directly affect cash flows. For example, it is proposed that accounting policies employed by competitors and industry norms may also affect accounting policy choice.

It would also be preferable to collect accounting policy data over several periods. This would enable an assessment to be made of the timing of accounting policy changes and their association with economic variables.

Finally, further tests could be undertaken to examine the applicability of traditional positive accounting theory across industries. It is suggested that the use of gearing ratios in testing the debt contracting cost hypothesis is not efficient in smaller industries. Further research would be useful to test whether the hypothesis is applicable in smaller organisations with more efficient measures of proximity to financial distress. This could test the limitations of that theory in purporting to offer a full explanation for the selection of accounting policies.

In undertaking further research in the football industry, problems of data collection must be highlighted. Uniform data on economic variables is difficult to collect in an industry where many organisations are still privately structured and sensitive to publicity. Thus, uniform data could perhaps be gathered from industry bodies such as the Football Association, Football League or Football Trust. However, the quality of data may be quite shallow. Hence, a small scale study on the accounting policy choices of a few permissible clubs over several accounting policies may help produce hypotheses that can be tested on an industry basis.

If perceived legitimacy affects which accounting policies are selected, then GAAP influences which accounting policies are perceived as legitimate. GAAP currently requires intangible assets to be recognised only if measured in relation to an active market. In this way, the valuation techniques used for intangible asset accounting influence norms of legitimacy. Without reliable measurement techniques, intangible asset accounting, is not fully supported by GAAP and is not seen as legitimate by interest groups in industry and society. Furthermore, greater importance is placed on the market orientation of accounting. However, it can be argued that in the future, more items will fail to meet market criteria. Due to the trends in the globalisation of capital and moves towards a knowledge-based industrial base, more intangible factors of revenue generating ability will exist. Unless measurement criteria move away from a market orientated approach, financial reporting will continue to exclude more and more factors crucial to the prosperity of a business and thus become less and less useful.

Hence, further research into exploring the reliable measurement of intangible assets will provide credibility for intangible asset accounting. This will increase the relevance of financial reporting. Further investigation of the relationship between perceived economic changes from different accounting policies will help understand why different policies are chosen. This can aid in future standard setting by helping to understand the motivation behind vested interest groups supporting particular accounting policies.

APPENDIX 1

A1.1 Bank Questionnaire Cover Letter

«bank_name»
«street»
«town»
«city» «post_code»

Dear Sir/Madam,

We would like to invite your bank to participate in a research study of football industry finance, which is funded by the University of Birmingham.

The aim of the study is to establish a basis for improving financial reporting in the football industry. We have approached your bank because of your experience in funding football club companies.

As part of the study, we require a member of staff who interacts with football club companies to complete the short questionnaire enclosed. This questionnaire, which takes around **twenty** minutes to complete, concerns the type of financial information a bank such as yours would require when transacting with football club companies. All information you provide will be treated confidentially and will be published **only** in summary, statistical form.

We are grateful for your support in completing the questionnaire. Please do not hesitate to contact us if you have any concerns or require more information.

Yours faithfully,

N. Rowbottom

A1.2 Bank Questionnaire

Enclosed are a short questionnaire and a reply envelope. The questions concern the type of financial information used in transacting with football club companies.

Please complete the questionnaire by answering all questions to the best of your ability. Most questions provide proposed answers in bold; please circle the answer that you feel is most relevant. When you have **completed** the questionnaire, please send the questionnaire in the enclosed **reply** envelope.

1. Please describe your position in the bank.

2. Please describe the role you perform in transacting with football club companies.

3. Does the bank enter into lending agreements with football club companies?

YES

NO

N/A

4. Are loans made to football club companies secured?

UNSECURED

SECURED

N/A

If SECURED, please specify the nature of security

5. What financial information do you use in estimating the credit risk of a football club company?

6. Do you use estimates of player registration values in measuring the credit risk of a football club company?

YES

NO

N/A

7. Do you use estimates of player registration values in measuring the value of a football club company?

YES

NO

N/A

8. As part of lending arrangements with football clubs, do you enter into debt covenants or similar arrangements that constrain company activities?

YES

NO

N/A

If YES, please expand;

9. Are accounting numbers used in debt covenants made with football clubs?

YES

NO

N/A

If YES, please specify;

10. Do agreements made in debt covenants include any estimates of player registration value?

YES

NO

N/A

If YES, please specify;

11. Additional comments (please continue on separate sheet if necessary)

Thank you for your time. Your effort is much appreciated. If you have any enquiries, please contact

N. Rowbottom
Dept. of Accounting and Finance
Birmingham Business School
University of Birmingham B15 2TT
[email]

APPENDIX 2

A2.1 Club Questionnaire Cover Letter

Mr. «Contact»
Company Secretary
«Company_Name»
«Street»
«Town»
«County»
«City»
«Post_Code»

Dear Mr. «Contact»,

We would like to invite your football club to participate in a research study into the accounting practices of the football industry. This is funded by the University of Birmingham.

The aim of the study is to examine some of the financial reporting practices which are unique to the football industry in the light of recent expansion and change. This questionnaire has been sent to each member of the English Premier League, English Football League and the Scottish Premier Division.

As part of the study, we ask that you complete the questionnaire enclosed. This questionnaire, which takes around **twenty** minutes to complete, concerns the financial reporting requirements of football club companies. This questionnaire is not club-specific. All information you provide will be treated confidentially and published **only** in summary, statistical form.

We are grateful for your support in completing the questionnaire. Please do not hesitate to contact us if you have any concerns or require more information.

Yours faithfully,

N. Rowbottom

A2.2 Football Club Questionnaire

Questionnaire

University of Birmingham

Enclosed are a questionnaire and reply envelope. Most questions relate to the clubs accounting policies. The others are of a general nature regarding the clubs activities.

Where a range of answers are suggested, please **circle the number** that corresponds to your answer. Only one answer should be selected. If you feel unable to answer a particular question, please move to the next question. When you have **completed** the questionnaire, please return it in the enclosed **reply** envelope.

1. Please state your occupational title and give a brief description of your duties, if appropriate.

2. Do any members of the Management Board hold one of the following professional accountancy qualifications?

	YES	NO	No. of directors holding qualification
ICAEW	1.	2.	_____
CIMA	1.	2.	_____
ACCA	1.	2.	_____
CIPFA	1.	2.	_____
ICAS	1.	2.	_____
ICAI	1.	2.	_____

3. How frequently does your club produce internal profit reports?

Annually	1.
Half Yearly	2.
Quarterly	3.
Monthly	4.
Weekly	5.

4. What are your current accounting policies with respect to;

A. Signing-On fees

B. Transfer Fees (non-contingent)

C. Capital Grants (e.g. Football Trust)

D. Depreciation of Stadium

5. To what extent is accounting information used as a means of planning, implementing corporate policy, co-ordinating and controlling activities?

- | | |
|----------------------|----|
| Not Used | 1. |
| Little | 2. |
| Moderate Use | 3. |
| High | 4. |
| Exclusive Use | 5. |

6. To what extent do you regard your organisation's published accounts as a means of communicating information about managerial efficiency and the quality of financial control?

- | | |
|----------------------|----|
| Not Used | 1. |
| Little | 2. |
| Moderate Use | 3. |
| High | 4. |
| Exclusive Use | 5. |

7. To what extent are the clubs annual report and accounts used as a means of communicating information about the company's impact on the community?

- | | |
|----------------------|----|
| Not Used | 1. |
| Little | 2. |
| Moderate Use | 3. |
| High | 4. |
| Exclusive Use | 5. |

8. What is the largest source of funding for the company's activities?

- | | |
|-----------------------------------|----|
| Bank Loans | 1. |
| Shareholder Investment | 2. |
| Director Loans | 3. |
| Other Loans | 4. |
| Supporter Bonds/Debentures | 5. |
| Other | 6. |
-
-

9. Has your club announced an intention to raise finance through a listing on the Stock Exchange in the foreseeable future?

- | | |
|-----------------------|----|
| Yes | 1. |
| No | 2. |
| Already Listed | 3. |
| Other | 4. |

If the ANSWER is **1 or 3**, where are the shares traded/to be traded;

- | | |
|--------------------------------------|----|
| London Stock Exchange (full) | 1. |
| Alternative Investment Market | 2. |
| OFEX | 3. |
| Other | 4. |
-

10. Which of the following best describes your clubs main objective.

- | | |
|--|----|
| Footballing success subject to financial solvency | 1. |
| Commercial success subject to satisfactory football performance | 2. |
-
-

11. Which employees of the company are involved in the selection of accounting policies for financial reporting

12. Do you consider football club company financial reports a useful indicator of a club's performance and financial position?

13. Do you perceive a need for change to financial reporting in the football industry? If so, please indicate the major areas and form of that change, if appropriate.

14.

A. Does the club have a youth development scheme in operation?

Yes 1.

No 2.

Other 3.

Briefly describe the clubs main youth development policies

B. How would you rate the extent of its activities?

Very Active 1.

Moderately Active 2.

Not Very Active 3.

15. Has the Bosman Ruling by the European Court of Justice affected your youth development policy? If so, in what way?

16. We would be grateful for an indication of any major issues or areas of concern that you may have affecting the accounting and finance functions of football clubs.

Thank you for your time and co-operation. Your effort is much appreciated. If you have any enquiries, please contact;

N. Rowbottom
Dept. of Accounting and Finance
Birmingham Business School
University of Birmingham B15 2TT
[email]

APPENDIX 3

Table A3.1: Derivation of STRATEGY variable

Transfer Fees	Signing-On Fees	Capital Grants	Stadia Depreciation	Number of clubs	Score	STRATEGY
0	0	0	0	11	0	0
1	0	0	0	0	1	0
0	1	0	0	23	1	0
0	0	1	0	1	1	0
0	0	0	1	0	1	0
2	0	0	0	0	2	1
0	2	0	0	0	2	1
0	0	2	0	4	2	1
0	0	0	2	1	2	1
1	1	0	0	0	2	1
1	0	1	0	0	2	1
1	0	0	1	0	2	1
0	1	1	0	9	2	1
0	1	0	1	5	2	1
0	0	1	1	0	2	1
2	1	0	0	5	3	1
2	0	1	0	0	3	1
2	0	0	1	0	3	1
1	2	0	0	0	3	1
0	2	1	0	0	3	1
0	2	0	1	0	3	1
1	0	2	0	0	3	1
0	1	2	0	4	3	1
0	0	2	1	0	3	1
1	0	0	2	0	3	1
0	1	0	2	7	3	1

Transfer Fees	Signing-On Fees	Capital Grants	Stadia Depreciation	Number of clubs	Score	STRATEGY
0	0	1	2	1	3	1
1	1	1	0	0	3	1
1	1	0	1	0	3	1
1	0	1	1	0	3	1
0	1	1	1	5	3	1
1	1	1	1	0	4	2
2	2	0	0	2	4	2
2	0	2	0	0	4	2
2	0	0	2	0	4	2
0	2	2	0	0	4	2
0	2	0	2	0	4	2
0	0	2	2	0	4	2
2	1	1	0	0	4	2
2	1	0	1	1	4	2
2	0	1	1	1	4	2
0	2	1	1	0	4	2
1	2	0	1	0	4	2
1	2	1	0	0	4	2
1	1	2	0	0	4	2
1	0	2	1	0	4	2
0	1	2	1	2	4	2
1	1	0	2	0	4	2
1	0	1	2	0	4	2
0	1	1	2	5	4	2
2	2	1	0	0	5	2
2	2	0	1	0	5	2
2	1	2	0	0	5	2
2	1	0	2	1	5	2
2	0	1	2	0	5	2

Transfer Fees	Signing-On Fees	Capital Grants	Stadia Depreciation	Number of clubs	Score	STRATEGY
2	0	2	1	0	5	2
1	2	2	0	0	5	2
1	2	0	2	0	5	2
1	0	2	2	0	5	2
0	2	2	1	0	5	2
0	1	2	2	8	5	2
0	2	1	2	0	5	2
2	1	1	1	1	5	2
1	2	1	1	0	5	2
1	1	2	1	0	5	2
1	1	1	2	0	5	2
2	2	2	0	0	6	3
2	2	0	2	2	6	3
2	0	2	2	0	6	3
0	2	2	2	0	6	3
2	2	1	1	0	6	3
2	1	2	1	0	6	3
1	2	2	1	0	6	3
2	1	1	2	1	6	3
1	2	1	2	0	6	3
1	1	2	2	0	6	3
2	2	2	1	0	7	3
2	2	1	2	0	7	3
2	1	2	2	0	7	3
1	2	2	2	0	7	3
2	2	2	2	2	8	4

Table A3.2: Key to Table A3.3

Transaction	Policy	Symbol
Transfer Fee (TF)	capitalisation	1
	operating expense	2
	exceptional expense	3
	recognition; fixed assets	4
	recognition; write off fees	5
	recognition; current assets	6
	dangling debit	7
Signing-On Fee (SO)	omission	0
	immediate write off	1
	cash method	2
	accruals method	3
	contract method	4
	prepayments method	5
	not applicable	10
Capital Grants (CG)	SSAP 4	1
	deduction	2
	reserves	3
	not applicable	10
Stadia Depreciation (SD)	not applicable	1
	>0-2% straight line depreciation	2
	>2-5 straight line depreciation	3
	>5% straight line depreciation	4
	>0-2% reducing balance depreciation	5
	>2-5 reducing balance depreciation	6
	>5% reducing balance depreciation	7
	no depreciation	9

Table A3.3: Classification of Accounting Policies by Club

Club	TF	SO	CG	SD	TF Class	SO Class	CG Class	SD Class	Score	Strategy
Aberdeen	1	4	1	3	2	1	0	0	3	1
Arsenal	3	4	2	9	0	1	2	2	5	2
Aston Villa	3	1	1	3	0	0	0	0	0	0
Barnet	2	2	10	4	0	1	1	0	2	1
Barnsley	2	2	1	2	0	1	0	0	1	0
Birmingham City	3	10	1	2	0	1	0	0	1	0
Blackburn Rovers	2	4	1	9	0	1	0	2	3	1
Blackpool	2	10	10	1	0	1	1	1	3	1
Bolton Wanderers	2	0	1	9	0	1	0	2	3	1
Bournemouth and Boscombe	6	5	2	9	2	2	2	2	8	4
Bradford City	2	10	2	9	0	1	2	2	5	2
Brentford	3	10	10	9	0	1	1	2	4	2
Brighton and Hove Albion	2	4	2	9	0	1	2	2	5	2
Bristol City	3	3	2	3	0	0	2	0	2	1
Bristol Rovers	5	3	10	1	2	0	1	1	4	2
Burnley	2	1	1	2	0	0	0	0	0	0
Bury	2	10	1	2	0	1	0	0	1	0
Cambridge United	2	4	2	2	0	1	2	0	3	1
Cardiff City	2	1	2	3	0	0	2	0	2	1
Carlisle United	3	10	1	9	0	1	0	2	3	1
Celtic	1	5	2	9	2	2	2	2	8	4
Charlton Athletic	3	4	1	3	0	1	0	0	1	0
Chelsea	3	2	3	9	0	1	1	2	4	2
Chester City	2	10	10	1	0	1	1	1	3	1

Club	TF	SO	CG	SD	TF Class	SO Class	CG Class	SD Class	Score	Strategy
Chesterfield	2	2	2	9	0	1	2	2	5	2
Colchester United	2	10		1	0	1	0	1	2	1
Coventry City	3	2		2	0	1	1	2	4	2
Crewe Alexandra	2	0	10	3	0	1	1	0	2	1
Crystal Palace	3	2	1	2	0	1	0	0	1	0
Darlington	4	2	10	1	2	1	1	1	5	2
Derby County	1	2	1	6	2	1	0	0	3	1
Doncaster Rovers	2	2	1	2	0	1	0	0	1	0
Dundee United	2	10	1	2	0	1	0	0	1	0
Everton	3	4	2	9	0	1	2	2	5	2
Exeter City	2	2	10	9	0	1	1	2	4	2
Falkirk	3	2	1	5	0	1	0	0	1	0
Fulham	3	4	10	1	0	1	1	1	3	1
Gillingham	3	10	1	3	0	1	0	0	1	0
Grimsby Town	3	2	10	9	0	1	1	2	4	2
Hartlepool United	2	10	1	1	0	1	0	1	2	1
Heart of Midlothian	1	4	1	2	2	1	0	0	3	1
Hereford United	2	2	1	1	0	1	0	1	2	1
Hibernian	3	4	1	1	0	1	0	1	2	1
Huddersfield Town	2	4	10	1	0	1	1	1	3	1
Hull City	3	2	2	3	0	1	2	0	3	1
Ipswich Town	2	1	1	2	0	0	0	0	0	0
Kilmarnock	3	2	1	9	0	1	0	2	3	1
Leeds United	3	4	1	6	0	1	0	0	1	0
Leicester City	3	4	2	9	0	1	2	2	5	2
Leyton Orient	2	4	2	1	0	1	2	1	4	2

Club	TF	SO	CG	SD	TF Class	SO Class	CG Class	SD Class	Score	Strategy
Lincoln City	2	1	2	2	0	0	2	0	2	1
Liverpool	3	1	1	4	0	0	0	0	0	0
Luton Town	2	1	1	4	0	0	0	0	0	0
Manchester City	2	2		2	0	1	0	0	1	0
Manchester United	3	1	1	9	0	0	0	2	2	1
Mansfield Town	2	10	2	1	0	1	2	1	4	2
Middlesborough	3	4	1	2	0	1	0	0	1	0
Millwall	3	4	1	2	0	1	0	0	1	0
Motherwell	2	4	2	2	0	1	2	0	3	1
Newcastle United	3	1	1	3	0	0	0	0	0	0
Northampton Town	1	4	1	1	2	1	0	1	4	2
Norwich City	3	1	3	9	0	0	1	2	3	1
Nottingham Forest	3	3	1	3	0	0	0	0	0	0
Notts County	3	2	3	3	0	1	1	0	2	1
Oldham Athletic	3	1	1	2	0	0	0	0	0	0
Oxford United	2	2	2	9	0	1	2	2	5	2
Partick Thistle	2	2	1	9	0	1	0	2	3	1
Peterborough United	2	1	1	2	0	0	0	0	0	0
Plymouth Argyle	2	10	1	7	0	1	0	0	1	0
Port Vale	3	2	10	7	0	1	1	0	2	1
Portsmouth	4	4	1	9	2	1	0	2	5	2
Preston North End	1	5	1	9	2	2	0	2	6	3
Queens Park Rangers	3	4	2	9	0	1	2	2	5	2
Rangers	1	5	1	2	2	2	0	0	4	2
Reading	3	2	2	2	0	1	2	0	3	1

Club	TF	SO	CG	SD	TF Class	SO Class	CG Class	SD Class	Score	Strategy
Rochdale	3	2	1	1	0	1	0	1	2	1
Rotherham United	2	2	1	2	0	1	0	0	1	0
Scarborough	2	2	3	2	0	1	1	0	2	1
Scunthorpe United	3	10	1	2	0	1	0	0	1	0
Sheffield United	4	4	3	9	2	1	1	2	6	3
Sheffield Wednesday	3	2	1	9	0	1	0	2	3	1
Shrewsbury Town	3	1		9	0	0	2	0	2	1
Southampton	2	1	1	4	0	0	0	0	0	0
Southend United	2	4	1	2	0	1	0	0	1	0
Stockport County	2	2	1	2	0	1	0	0	1	0
Stoke City	3	4	3	2	0	1	1	0	2	1
Sunderland	4	5	1	9	2	2	0	2	6	3
Swansea City	6	5	1	2	2	2	0	0	4	2
Swindon Town	7	3	1	4	0	0	0	0	0	0
Torquay United	3	2	1	2	0	1	0	0	1	0
Tottenham Hotspur	1	4	1	2	2	1	0	0	3	1
Tranmere Rovers	3	2	3	2	0	1	1	0	2	1
Walsall	2	4	1	2	0	1	0	0	1	0
Watford	2	2	3	3	0	1	1	0	2	1
West Bromwich Albion	4	4	1	2	2	1	0	0	3	1
West Ham United	2	4	1	2	0	1	0	0	1	0
Wigan	2	10	1	2	0	1	0	0	1	0
Wimbledon	2	0	10	1	0	1	1	1	3	1
Wolverhampton Wanderers	2	2	1	4	0	1	0	0	1	0
Wrexham	2	10	10	3	0	1	1	0	2	1
Wycombe Wanderers	3	2	1	9	0	1	0	2	3	1
York City	3	1	3	6	0	0	1	0	1	0

APPENDIX 4

Table A4.1: Appropriateness of Alternative Link Function for STRATEGY tests

Equation	Link Function	Test Statistic	Degrees of Freedom	p-value
1	Logit	92.1169	24	0.0001
1	Complementary log log	39.8489	24	0.0222
2	Logit	132.9813	22	0.0001
2	Complementary log log	29.6669	22	0.1268

Table A4.2: Model Fit Statistics for Alternative Link Functions

Equation	1	1	2	2	3	3	4	4
Link Function	Logit	c.l.l.	Logit	c.l.l.	Logit	c.l.l.	Logit	c.l.l.
Log Likelihood	246.953	243.409	56.457	57.259	72.922	72.676	14.164	13.354
Akaike Information Criterion	270.953	267.409	84.457	85.259	90.922	90.676	38.164	37.354
Schwartz Criterion	302.453	298.909	105.409	106.210	114.547	114.301	56.122	55.312
model χ^2 statistic	5.920	9.464	24.351	23.550	15.702	15.948	24.509	25.319
model χ^2 p-value	0.6562	0.3047	0.0113	0.0148	0.0469	0.0431	0.0108	0.0082
'c' Rank Correlation	0.613	0.607	0.839	0.841	0.760	0.780	0.963	0.972

APPENDIX 5

Table A5.1: Spearmans Correlation Coefficients; Explanatory Variables

	undcon	undrum	debt	youthf	youth-qbos	youth-qex	owner	norm-qual	normip	norm-quse	norm-qeff	polatt
undlist	-0.0868 (0.386) n=102	-0.0459 (0.647) n=102	-0.0841 (0.401) n=102	0.0638 (0.524) n=102	0.0313 (0.863) n=33	0.0917 (0.612) n=33	0.2755 (0.005) n=102	0.1068 (0.285) n=102	0.0829 (0.647) n=33	-0.2854 (0.107) n=33	-0.2302 (0.198) n=33	0.2275 (0.022) n=102
undcon		-0.0772 (0.441) n=102	-0.0609 (0.543) n=102	-0.0375 (0.709) n=102	0.0747 (0.680) n=33	-0.1942 (0.279) n=33	0.1039 (0.299) n=102	0.0095 (0.924) n=102	0.0000 (1.0000) n=33	0.2373 (0.184) n=33	0.2153 (0.229) n=33	0.3789 (0.000) n=102
undrum			-0.1390 (0.164) n=102	-0.0111 (0.912) n=102	0.0559 (0.757) n=33	0.1641 (0.362) n=33	-0.0067 (0.008) n=102	0.2622 (0.410) n=102	0.1482 (0.323) n=33	0.1776 (0.013) n=33	0.4297 (0.373) n=102	0.0892
debt				-0.1537 (0.123) n=102	0.1580 (0.380) n=33	-0.0117 (0.949) n=33	-0.2340 (0.018) n=102	-0.0806 (0.421) n=102	-0.2882 (0.104) n=33	0.0761 (0.674) n=33	-0.3063 (0.083) n=33	-0.1838 (0.064) n=102
youthf					0.1336 (0.459) n=33	-0.2241 (0.210) n=33	0.0791 (0.429) n=102	-0.0196 (0.845) n=102	0.0591 (0.744) n=33	0.1150 (0.5240) n=33	0.0499 (0.783) n=33	-0.2074 (0.036) n=102
youth-qbos						-0.0917 (0.612) n=33	-0.2681 (0.131) n=33	-0.1083 (0.549) n=33	-0.0829 (0.647) n=33	-0.0993 (0.583) n=33	-0.2402 (0.178) n=33	-0.2970 (0.093) n=33
youth-qex							-0.1417 (0.431) n=33	-0.1513 (0.401) n=33	0.1332 (0.460) n=33	0.0729 (0.687) n=33	-0.0546 (0.763) n=33	0.2725 (0.125) n=33
owner								0.2271 (0.022) n=102	-0.0258 (0.887) n=33	-0.0602 (0.739) n=33	0.1829 (0.308) n=33	0.3128
norm-qual									-0.1276 (0.479) n=33	0.2866 (0.106) n=33	0.3082 (0.081) n=33	0.1736
normip										0.1439 (0.424) n=33	0.0292 (0.872) n=33	0.2700 (0.129) n=33
norm-quse											0.3604 (0.039) n=33	0.1622 (0.367) n=33
norm-qeff												0.0065 (0.971) n=33

APPENDIX 6

Table A6.1: Model Fit Statistics; Equations 2 and 4 - with NORMQEFFECT omitted

Test	Equation 2; NORMQEFFECT omitted	Equation 2; Existing	Equation 4; NORMQEFFECT omitted	Equation 4; Existing
Log Likelihood	58.562	58.242	15.758	13.939
Akaike Information Criterion	84.562	86.424	37.758	37.939
Schwartz Criterion	91.298	107.376	54.220	55.897
model χ^2 statistic	22.247	22.384	22.915	24.734
model χ^2 p-value	0.0139	0.0216	0.0111	0.0100
'c' Rank Correlation	0.838	0.836	0.940	0.972

Table A6.2: Parameter Estimates; Equation 2 with NORMQEFFECT omitted

Variable Measure	Parameter Estimate with NORMQEFFECT omitted	Wald χ^2 p-value with NORMQEFFECT omitted	Existing Estimate	Existing Wald χ^2 p-value
Intercept 1	-4.3026	0.0646	-3.8288	0.1491
Intercept 2	-2.6773	0.2350	-2.2018	0.3958
Intercept 3	-1.2208	0.5866	-0.7547	0.7713
UNDLIST	-7.3372	0.9897	-7.4099	0.9896
UNDCON	-1.7701	0.0096	-1.6888	0.0187
UNDRUM	-1.6236	0.0389	-1.4864	0.0879
DEBT	-0.5711	0.0175	-0.5831	0.0165
YOUTHQEX	-0.2738	0.6439	-0.2610	0.6615
YOUTHQBOS	2.4403	0.1008	2.2429	0.1539
OWNER	-0.2861	0.5899	-0.2336	0.6737
NORMIP	-0.3915	0.2623	-0.3884	0.2642
NORMQUSE	1.0869	0.0100	1.1054	0.0092
POLATT	0.00000146	0.9647	-0.00000163	0.9618

Table A6.3: Parameter Estimates; Equation 4 with NORMQEFFECT omitted

Variable Measure	Parameter Estimate with NORMQEFFECT omitted	Wald χ^2 p-value with NORMQEFFECT omitted	Existing Estimate	Existing Wald χ^2 p-value
Intercept	-11.6121	0.9777	-23.0655	0.9558
UNDLIST	-7.1908	0.9862	-6.6619	0.9872
UNDCON	-5.1357	0.0419	-7.9343	0.1333
UNDRUM	-5.4359	0.0909	-9.4393	0.1755
DEBT	-3.3496	0.1132	-4.2015	0.2505
YOUTHQEX	2.5090	0.2517	2.1555	0.3044
YOUTHQBOS	9.2510	0.9823	13.4157	0.9743
OWNER	1.8717	0.2842	0.5122	0.7948
NORMIP	-0.8643	0.4117	-0.5678	0.6052
NORMQUSE	3.1133	0.1260	4.0826	0.2136
POLATT	-0.00011	0.4001	-0.00007	0.5694

Table A6.4: Model Fit Statistics; Equations 2 and 4 - with UNDRUM omitted

Test	Equation 2; UNDRUM omitted	Equation 2; Existing	Equation 4; UNDRUM omitted	Equation 4; Existing
Log Likelihood	61.429	58.242	21.642	13.939
Akaike Information Criterion	87.429	86.424	43.642	37.939
Schwartz Criterion	106.884	107.376	60.104	55.897
model χ^2 statistic	19.379	22.384	17.031	24.734
model χ^2 p-value	0.0357	0.0216	0.0737	0.0100
'c' Rank Correlation	0.822	0.836	0.882	0.972

Table A6.5: Parameter Estimates; Equation 2 with UNDRUM omitted

Variable Measure	Parameter Estimate with UNDRUM omitted	Wald χ^2 p-value with UNDRUM omitted	Existing Estimate	Existing Wald χ^2 p-value
Intercept 1	-2.3266	0.3450	-3.8288	0.1491
Intercept 2	-0.8160	0.7375	-2.2018	0.3958
Intercept 3	0.5843	0.8107	-0.7547	0.7713
UNDLIST	-7.3106	0.9898	-7.4099	0.9896
UNDCON	-1.1376	0.0486	-1.6888	0.0187
DEBT	-0.4944	0.0351	-0.5831	0.0165
YOUTHQEX	-0.3883	0.5098	-0.2610	0.6615
YOUTHQBOS	1.7817	0.2457	2.2429	0.1539
OWNER	-0.0431	0.9360	-0.2336	0.6737
NORMIP	-0.4013	0.2282	-0.3884	0.2642
NORMQUSE	0.9698	0.0175	1.1054	0.0092
NORMQEFP	-0.3643	0.2129	-0.1198	0.7085
POLATT	0.0000005	0.9881	-0.00000163	0.9618

Table A6.6: Parameter Estimates; Equation 4 with UNDRUM omitted

Variable Measure	Parameter Estimate with UNDRUM omitted	Wald χ^2 p-value with UNDRUM omitted	Existing Estimate	Existing Wald χ^2 p-value
Intercept	-7.3126	0.9860	-23.0655	0.9558
UNDLIST	-6.0534	0.9884	-6.6619	0.9872
UNDCON	-2.1697	0.0299	-7.9343	0.1333
DEBT	-0.8327	0.1165	-4.2015	0.2505
YOUTHQEX	0.1148	0.8883	2.1555	0.3044
YOUTHQBOS	7.7622	0.9851	13.4157	0.9743
OWNER	0.3935	0.6388	0.5122	0.7948
NORMIP	-0.1464	0.7615	-0.5678	0.6052
NORMQUSE	0.5935	0.2950	4.0826	0.2136
NORMQEFP	-0.0993	0.8339	1.7119	0.3154
POLATT	0.000019	0.7772	-0.00007	0.5694

APPENDIX 7

A7.1 Multicollinearity

Table A7.1: Spearmans Correlation Coefficients; Explanatory Variables

	FIT	STD	PSL	AGE
CSL	0.5660 (0.000)	-0.0201 (0.750)	0.2448 (0.000)	0.1064 (0.091)
FIT	-	-0.1825 (0.004)	0.3591 (0.000)	0.1346 (0.032)
STD	-	-	-0.4548 (0.000)	0.0531 (0.400)
PSL	-	-	-	0.0835 (0.186)

Table A7.2: Multivariate Correlations; Regress 1 Explanatory Variable Upon All Other Explanatory Variables

Response Variable	CSL	FIT	STD	PSL	AGE
Adjusted R ²	0.226	0.336	0.206	0.325	0.038

A7.2 Model Assumptions

Chart A7.1: Scatterplot of the Regression Standardised Residuals

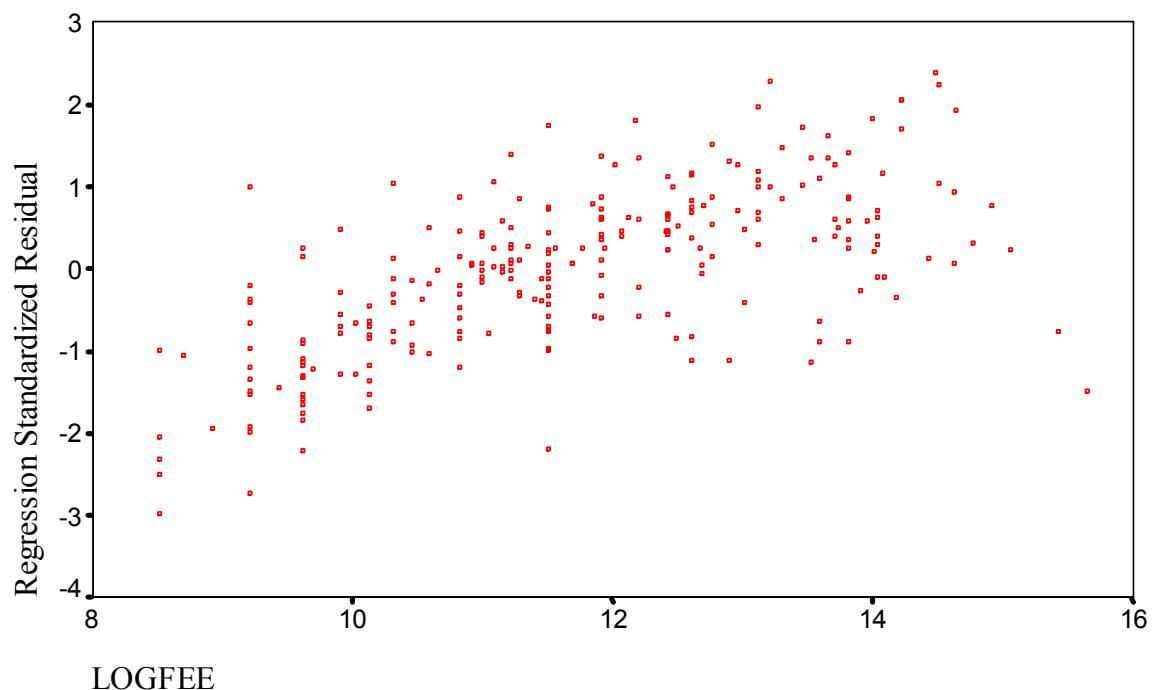


Chart A7.2: Normal Probability Plot of Regression Standardised Residuals

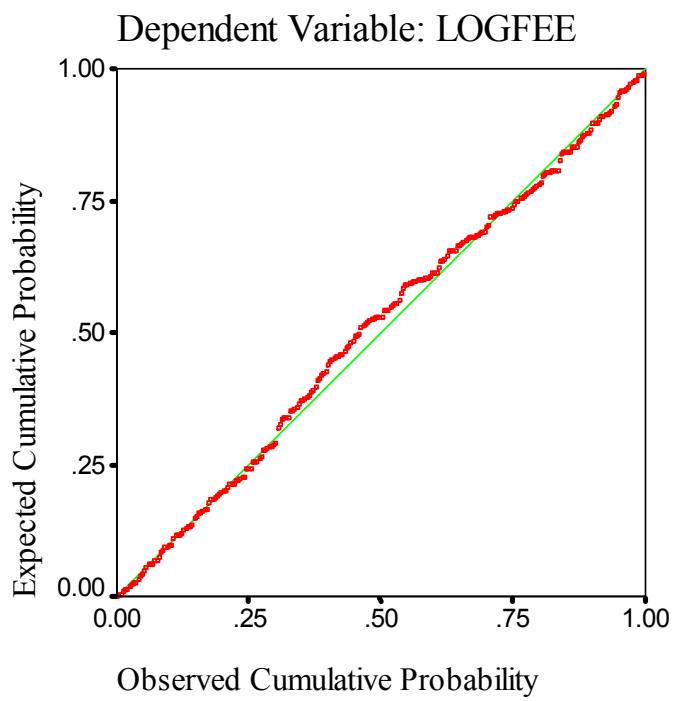
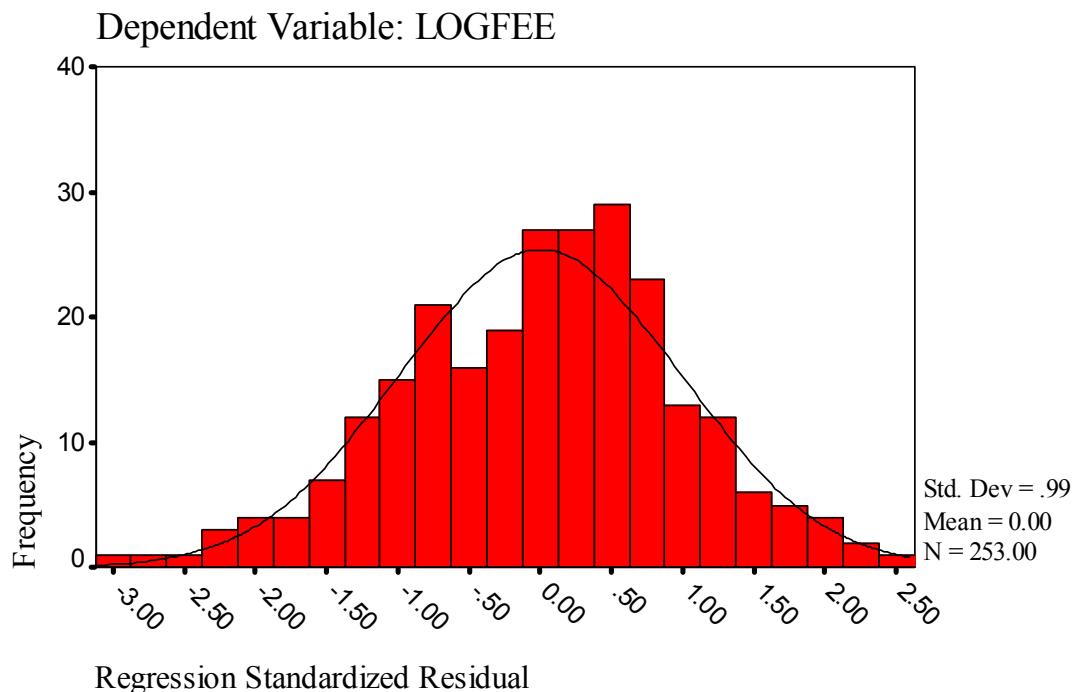


Chart A7.3: Histogram



A7.3 Holdout Sample

Table A7.3: Paired Sample t-test; Transfer Fees Paid and Model Predictions

Number of Pairs	Correlation Coefficient	t-value	Degrees of Freedom	p-value
40	0.939	3.41	39	0.002

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