AN ANALYSIS OF THE DEGREE OF COMPETITIVE BALANCE IN THE ETHIOPIAN PREMIER LEAGUE [1992-2002 E.C]

BY

BEREKET AYELE

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULLFILMENT FOR THE REQUIREMENT OF THE DEGREE OF MASTERS OF SPORT SCIENCE IN FOOTBALL COACHING

ADDIS ABABA
June 2011

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

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Bereket Ayele

Approval of board examiners	signature	Date
_____	_____	_____
Chairman, dept. Graduate committee		
_____	_____	_____
Advisor		
_____	_____	_____
Examiner (internal)		
_____	_____	_____
Examiner (external)		

Acknowledgements

Above all, the successful completion of this thesis demands almighty God, without whom, none of what I have accomplished so far would have been impossible.

This thesis could not have also happened without the help of my advisor Wondimu Tadesse [Assist. Prof.]. His constant help, ideas, comments, and constructive criticism have all been vital in planning, and completing this work. Many of the ideas and comments that are set out here are the culmination of brainstorming sessions between the two of us, though I take full responsibility for any mistakes, errors or omissions!

My deepest gratitude is also goes to Addis Ababa university for its financial support and the Ethiopian football federation for supplying the necessary data used in the study.

Many thanks must also go to others. I am so be grateful to Gashaw Awlachew for giving me his time and opinions especially whose comments on the area of the study were vital in forming many of my initial ideas.

I would also like to thank my family, especially my brothers, for trying to stay as interested and as enthusiastic as possible, and my dad, for his notorious red pen!

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Abbreviations and Acronyms

C5 ratio	-	The five club concentration ratio
C5ICB	-	The five club index of competitive balance
CB	-	Competitive balance
E.C	-	Ethiopian calendar
EFF	-	Ethiopian Football Federation
EPL	-	Ethiopian premier league
EEPCO	-	Ethiopian Electric Power Corporation
FA	-	The English Football Association
FIFA	-	Federation International de Football Associations
HHI	-	Herfindahl- Hirschman index
HICB	-	The Herfindahl index of competitive balance
St. George	-	Saint George

Abstract

The concept of competitive balance is a central aspect in the literature of sports economics. A popular argumentation of sport functionaries is that dominance of one or a few teams could lead to unequal incomes for the clubs, restrictions in the clubs' ability to improve sporting performance and ultimately to a loss of attractiveness and loss of income for the league. With this in mind the purpose of this paper was to investigate the degree of competitive balance in the Ethiopian premier league held from 1992 to 2002 E.C. It was hypothesized that "there was a significant decline in the degree of competitive balance in the Ethiopian premier league". To test this hypothesis a descriptive research methodology was employed. Data for the study was collected from the competition and discipline section of the Ethiopian football federation. Then the data obtained from the federation were analyzed qualitatively using document analysis and quantitatively using different statistical models which are used to measure competitive balance. The result of the analysis show as there was a significant decline in the Ethiopian premier league in all aspects of competitive balance.

Key terms: Competitive balance, Ethiopian premier league, intra season uncertainty, Inter season uncertainty, Dynasty

CHAPTER ONE

THE PROBLEM AND ITS APPROACH

This part of the study is concerned with the problem and its approach. It deals with the background of the study, the statement of the problem, the hypothesis formulated, the purposes of the study, as well as the significance, delimitations, limitations Operational definitions and organization of the study .

1.1 Background of the study

Football is the most popular team sport, world-wide. According to the world's football governing body, Federation International de Football Associations (FIFA), there are more than 200 million active football players around the globe. In recent decades, it has also become a multi-billion dollar global industry. It has been generating substantial revenues for private individuals and clubs, as well as national and international organizations. The football industry generates about 3% of world trade [Szymanski, 2001]. Sports contests are interesting when there is not much difference in the quality of the contenders. As Quirk and Fort (1992), page 243, put it:

> *One of the key ingredients of the demand by fans for team sports is the excitement generated because of uncertainty of outcome of league games. . . In order to maintain fan interest, a sports league has to ensure that teams do not get too strong or too weak relative to one another so that uncertainty of outcome is preserved.'*

According to the view cited above, an important task for sport bodies like the Ethiopian Football Federation [EFF from now on] or individual clubs is to maintain balance in competition because it is needed to ensure long-term interest in the league.

Competitive balance (CB hence forth) is important because, other things being equal, uncertainty of outcome generates interest from supporters and increases demand for watching matches. A league that is not competitively balanced is therefore not maximizing potential income from spectators and viewers. (Borland & Mac Donald 2003) Maintaining and promoting CB is therefore important in order to maximize demand for a club's, and the league's, product. Competitive balance is also important to ensure league stability. Unbalanced leagues face increased risks of bankruptcy of lagging clubs and threats of league break-up from new or rival leagues [Michie & Ouhton 2004].

As Michie & Oughton (2004) pointed out, in a perfectly balanced league each team would have an equal chance of winning each match and each team would therefore have an equal chance of winning the league title. Moreover, in a perfectly balanced league it would be impossible to predict with any certainty which teams would be more likely than others to win the league title next year or the year after. Hence, Szymanski, [2001] distinguished three different aspects of CB: match uncertainty, seasonal uncertainty, and inter seasonal or long term uncertainty.

In Ethiopia, many football supporters feel that there has been a decline in competitive uncertainty and fan attendance particularly since the formation of the Ethiopian premier league (EPL in short) in1990 E.C. However, while there has been talk of a decline in CB and fan attendance, much of the evidence is anecdotal and there has been no statistical analysis of exactly what has happened to CB over time. Thus, this study tries to investigate the degree of CB of the EPL using various statistical models.

1.2 Statement of the problem

This research is entitled as "competitive balance": with reference to the EPL clubs competition. Football is organized in seasonal league championship competitions and uncertainty of outcome over who is going to win the championship is central. If championship and relegation battles are decided early in a season, remaining fixtures have less meaning and supporter/spectator interest tends to trail off [Michie & Oughton 2004]. And At the beginning of the season, football fans want their teams to obtain the best possible results. In the best scenario, they can hope for their teams to win all competitions in which they participate. Nevertheless, it is evident that not all fans see their dreams fulfilled. However, it is evident that in football competitions some clubs tend to be dominant over the others. For example, in Portugal, Porto, Sporting Lisbon, and Benefica have taken the title 75th time in the leagues 77 years of existence. In Spain, La Liga continues to be a two team race, Barcelona and Real Madrid. On the other hand, the hegemony of the so called the big four in England's premier league has been smashed by a crisis at Liverpool and the increasing influence of

such clubs as Manchester city and Tottenham Hotspur[Gomes & Tadeo, 2010].

Similarly, in a cursory look at to the competitive outcomes in the Ethiopian Premier League (EPL) one can observe that there may be a lack of CB. A simple indicator that most football supporters of the EPL clubs will be familiar with is 'domination', reflected in the fact that since the formation of the Premier League 11 years ago i.e. in 1992 E.C, the title has been won by one club (Saint George) in 8 out of 11 seasons and by just only three clubs (EEPCO, Saint George, and Hawassa Kenema). In addition to this, again since the formation of the premier league only 30 teams had participated in the league over a space of eleven years. This shows that the degree of mobility of teams through relegation and promotion is very low. In other words, most of the time the teams that are relegated from and promoted to the premier league are the same which is one indicator of competitive imbalance.

Hence, this study is, therefore, based on the assumption that the Ethiopian top flight football competition has experienced a decline in CB especially during its premier league days. To this end, the researcher, in this study, tries to investigate the degree of competitive imbalance in the EPL of the past 8 seasons using various statistical measures and models of CB.

1.3 Hypotheses

Based on the statement of the problem, the Null hypothesis developed was "there was no decline in competitive balance in the Ethiopian premier league." The alternate hypothesis formulated was "there was a significant decline in Competitive balance in the Ethiopian premier league was formulated as an alternate hypothesis."

1.4 Purpose of the study

The main purpose of this study was to investigate the degree of competitive balance of the Ethiopian clubs championship during its premier league seasons i.e. 1990-2002 E.C.

1.5 Significance of the study

To date as far as the knowledge of the researcher goes, there are no baseline data and work available that indicate the degree of competitive balance in the Ethiopian football clubs championship. Therefore, studying the prevalence of degree of CB in Ethiopia is hoped significant to:

- The results obtained may generate a body of knowledge about what is happening in Ethiopia regarding clubs championship with respect to CB.
- Provide valuable feedback for stalk holders- Sport Commission, EFF, clubs and respected football fans- about what is happening in Ethiopia with respect to competitive balance.
- Incorporate new results of the research findings into the system of club competition in the country.

- ☞ Suggest and recommend possible ways and procedures in which CB can be promoted and maintained in the top flight football competition in the country.
- ☞ Help as a spring board for discussions and serve as preliminary information to carry out other in-depth studies in the area.

1.6 Delimitation of the study

This study is delimited in its scope to the EPL i.e. the top flight football championship competition held in Ethiopia from 1992 to 2002 E.C. This is so because the researcher believes that it is during the premier league era that CB has been very poor. Hence, the result of this study will be applicable and can be generalized only to the premier league. In addition, the study focuses on seasonal and long term uncertainty outcomes.

1.7 limitations of the study

Any research activity requires varied, relevant, updated and accessible sources of data. However, the effort of the researcher was challenged by extreme shortage of these sources where bits of information were of great value to the writing of this thesis. In addition, the absence of adequate and comprehensive domestic research work in the area under study also counts against the attempt of a more substantial research work. Since the study did only focus on the EPL, the findings which would have been the basis for fair generalizations were not also free from limitations.

1.8 Operational definitions

Competitive balance: refers to the rational expectations of fans about who will be the winners.

Dynasty: a team that dominated a league for multiple seasons or years.

Ethiopian premier league: refers to the top flight football clubs championship held between 1992 to 2002.

League size: the numbers of teams that constitute a league in any give season.

Match uncertainty: refers to the uncertainty of out comes over individual match.

Seasonal uncertainty: refers to the uncertainty of out come over who is going to win the championship.

Inter-season uncertainty: refers to the uncertainty of out come over who is going to win the championship in the coming seasons.

1.9 Organization of the study

This thesis is organized into five chapters. The first chapter deals with the problem and its approach. The second chapter is about the literature review. The research design and methodology is dealt in the third chapter. The fourth chapter is concerned with the data, used measures and results. Summary, conclusions, and recommendations are presented in the fifth chapter.

CHAPTER TWO

LITERATURE REVIEW

In this section of the study, an effort was made to bring the works of different scholars and researchers on the aspect of CB in sports. In so doing, the literature is divided into six parts: Historical background of football, background of football competition, overview of the development of football in Africa, the history of football in Ethiopia, the concept of CB, measures of CB, and the impact of competitive imbalance on the league.

2.1 Historical background of football

Though it is referred to by several different names, there is only one sport whose popularity far exceeds that of all the other games played by man, and because of this, can authentically be deemed the world's sport. If you live in Europe, you most likely know this sport as Association Football; if you live in the Middle East, Asia, Africa or the Latin American regions of the world, you know it simply as football; and if you live in North America, you know it as soccer. No matter the country you live in, the language you speak, or what you call this sport, the undeniable fact is that football is the most prevalent sport in the world, played by all races, ages, religions, and genders, and that to many of the six billion inhabitants of this planet, it is as natural a part of life as breathing [www'fifa.com].

2.1.1 The early forms of football

The contemporary history of the world's favorite game spans more than 100 years. It all began in 1863 in England, when rugby football and association football branched off on their different courses and the Football Association in England was formed - becoming the sport's first governing body [www'fifa.com].

Both codes stemmed from a common root and both have a long and intricately branched ancestral tree. A search down the centuries reveals at least half a dozen different games, varying to different degrees, and to which the historical development of football has been traced back. Whether this can be justified in some instances is disputable. Nevertheless, the fact remains that people have enjoyed kicking a ball about for thousands of years and there is absolutely no reason to consider it an aberration of the more 'natural' form of playing a ball with the hands [www.fifa.com].

On the contrary, apart from the need to employ the legs and feet in tough tussles for the ball, often without any laws for protection, it was recognized right at the outset that the art of controlling the ball with the feet was not easy and, as such, required no small measure of skill. The very earliest form of the game for which there is scientific evidence was an exercise from a military manual dating back to the second and third centuries BC in China [www.fifa.com]. This Han Dynasty forebear of football was called Tsu' Chu and it consisted of kicking a leather ball filled with feathers and hair through an opening, measuring only 30-40cm in width, into a small net fixed onto long bamboo canes. According to one variation of this exercise, the player

was not permitted to aim at his target unimpeded, but had to use his feet, chest, back and shoulders while trying to withstand the attacks of his opponents. Use of the hands was not permitted. Another form of the game, also originating from the Far East, was the Japanese Kemari, which began some 500-600 years later and is still played today. This is a sport lacking the competitive element of Tsu' Chu with no struggle for possession involved. Standing in a circle, the players had to pass the ball to each other, in a relatively small space, trying not to let it touch the ground [www.fifa.com].

The Greek 'Episkyros' - of which few concrete details survive - was much livelier, as was the Roman 'Harpastum'. The latter was played out with a smaller ball by two teams on a rectangular field marked by boundary lines and a centre line. The objective was to get the ball over the opposition's boundary lines and as players passed it between themselves, trickery was the order of the day. The game remained popular for 700-800 years, but, although the Romans took it to Britain with them, the use of feet was so small as to scarcely be of consequence [www.fifa.com].

2.1.2 Football during the middle ages

For all the evidence of early ball sports played elsewhere in the world, the evolution of football as we know it today took place in Britain. The game that flourished in the British Isles from the eighth to the 19th centuries featured a considerable variety of local and regional versions - which were subsequently smoothed down and smartened up to create the modern-day sports of association football, rugby football and, in Ireland, Gaelic football [www.football.com].

Primitive football was more disorganized, more violent, more spontaneous and usually played by an indefinite number of players. Frequently, games took the form of a heated contest between whole villages - through streets and squares, across fields, hedges, fences and streams. Kicking was allowed, as in fact was almost everything else. Sometimes kicking the ball was out of the question due to the size and weight of the sphere being used - in such cases, kicking was instead limited to taking out opponents [www.fifa.com].

Curiously, it was not until nine years after the rules of football had been first established in 1863 that the size and weight of the ball were finally standardized. Up to then, agreement on this point was usually reached by the parties concerned when they were arranging the match, as was the case for a game between London and Sheffield in 1866. This encounter was also the first where the duration was prearranged for 90 minutes [www.thefa.com].

Shrovetide football, as it was called, belonged in the 'mob football' category, where the number of players was unlimited and the rules were fairly vague. For instance, according to an ancient handbook from Workington in England, any means could be employed to get the ball to its target with the exception of murder and manslaughter [Magoun, Francis Peabody 1929].

One theory is that the game is Anglo-Saxon in origin. In both Kingston-on-Thames and Chester, local legend has it the game was played there for the first time with the severed head of a vanquished Danish prince.

In Derby, it is said to have originated in the third century during the victory celebrations that followed a battle against the Romans. Yet there is scant evidence of the sport having been played at this time, either in Saxon areas or on the continent. Indeed prior to the Norman conquest, the only trace found of any such ball game comes from a Celtic source [Magoun, Francis Peabody 1929].

Another theory regarding its origin is that when 'mob football' was being played in the British Isles in the early centuries AD, a similar game was thriving in France, particularly in the northern regions of Normandy and Brittany. So it is possible that the Normans brought this form of the game to England with them [Magoun, Francis Peabody 1929].

Scholars have also suggested that besides the natural impulse to demonstrate strength and skill, in many cases pagan customs, especially fertility rites, provided a source of motivation for these early 'footballers'. The ball symbolized the sun, which had to be conquered in order to secure a bountiful harvest. The ball had to be propelled around, or across, a field so that the crops would flourish and the attacks of the opponents had to be warded off [Magoun, Francis Peabody 1929].

A similar significance was attached to contests between married men and bachelors that prevailed for centuries in some parts of England, and, likewise, to the game between married and unmarried women in the Scottish town of Inveresk at the end of the 17th century which, perhaps by design, was regularly won by the married women. Women's

football is obviously not as new as some people think [Magoun, Francis Peabody 1929].

For all the conflicting views on the origins of the game, one thing is incontestable: football has flourished for over a thousand years in diverse rudimentary forms, in the very region which we describe as its home, Britain [Magoun, Francis Peabody 1929].

2.1.3 Opposition to the game

If early football generated tremendous enthusiasm among common folk in Britain, it also withstood repeated - and unsuccessful - interventions from the authorities who frowned on this often violent recreation. As long ago as 1314 the Lord Mayor of London saw fit to issue a proclamation forbidding football within the city due to the chaos it usually caused. Infringement of this law meant imprisonment. During the 100 Years' War between England and France from 1337 to 1453 the royal court was unfavourably disposed towards football. Kings Edward III, Richard II, Henry IV and Henry V all made the game punishable by law because it prevented their subjects from practicing more useful military disciplines, particularly archery. All the Scottish kings of the 15th century deemed it necessary to censure and even prohibit football. Particularly famous was the decree proclaimed by the parliament convened by James I in 1424, which read: "That na man play at the Fute-ball". None of these efforts had much effect. The popularity of the game among the people and their obvious delight in the rough and tumble for the ball went far too deep to be up-roote. [www.spartacus.schoolnet.com].

The passion for football was particularly exuberant in Elizabethan times. An influence that may have played a part in intensifying the native popularity for the game came from Renaissance Italy, notably from Florence although Venice and other cities also produced their own brand of the sport known as Calcio. This was more organized than the English equivalent and was played by teams dressed in colored livery at important gala events held on certain holidays in Florence [www.fifa.com].

In England the game was still as rough and lacking in refinement as ever, but it did at this time find a prominent supporter who commended if for other reasons. This supporter was Richard Mulcaster, the great pedagogue and head of the famous London schools of Merchant Taylors and St. Paul's. He pointed out that the game, if requiring a little refinement, had a positive educational value as it promoted health and strength. His belief was that it would benefit from introducing a limited number of participants per team and, more importantly, a stricter referee [www.spartacus.schoolnet.com].

Resentment of football up to this time had been focused on its capacity for public disturbance. For example, in Manchester in 1608, the game was banned because so many windows had been smashed. In the course of the 16th century a new type of attack was launched. With the spread of Puritanism, the cry went up against 'frivolous' amusements, and sport happened to be classified as such, football in particular. The main objection was that it supposedly constituted a violation of peace on the Sabbath. Similar attacks were made against the theatre, which strait-

laced Puritans regarded as a source of idleness and iniquity. This laid the foundations for the entertainment ban on Sundays - and from then on football on that day was taboo. This remained the case for some 300 years, until the ban was lifted once again, at first unofficially and ultimately with the formal consent of The Football Association, albeit on a rather small scale [www.fifa.com].

All told there was scarcely any progress at all in the development of football for hundreds of years. But, although the game was persistently forbidden for 500 years, it was never completely suppressed [www.fifa.com].

2.1.4 The modern game and its growth

A change did not come about until the beginning of the 19th century when school football became the custom, particularly in the famous public schools. This was the turning point. In this new environment, it was possible to make innovations and refinements to the game [www.fifa.com].

The rules were still relatively free and easy, with no standard form of the game. Each school in fact developed its own adaptation and, at times, these varied considerably. The traditional aspects of the game remained but innovations depended for the most part on the playing ground available. If use had to be made of a paved school playground, surrounded by a brick wall, then there was simply not enough space for the old hurly-burly 'mob football'[www.fifa.com]. Circumstances such as these prompted schools like Charterhouse, Westminster, Eton and Harrow to favour a game more dependent on the players' dribbling

virtuosity than the robust energy required in a scrum. On the other hand, schools such as Cheltenham and Rugby were more inclined towards the more rugged game in which the ball could be touched with the hands or even carried[www.thefa.com; www.fifa.com].

As the 19th century progressed, a new attitude developed towards football. The education authorities observed how well the sport served to encourage such fine qualities as loyalty, selflessness, cooperation, subordination and deference to the team spirit. Games became an integral part of the school curriculum and participation in football compulsory. Dr Thomas Arnold, the head of Rugby School, made further advances in this direction, when in 1846 in Rugby the first truly standardized rules for an organized game were laid down[www.thefa.com; www.fifa.com].

These were in any event quite rough enough: for example, they permitted kicking an opponent's legs below the knees, with the reserve that he should not be held still while his shins were being worked on. Handling the ball was also allowed - and had been ever since the historic occasion in 1823 when William Webb Ellis, to the amazement of his own team and his opponents, made a run with the ball tucked under his arm. Many schools followed suit and adopted the rules laid down in Rugby; others, such as Eton, Harrow and Winchester, rejected this form of football, and gave preference to kicking the ball. Charterhouse and Westminster were also against handling the ball. However, they did not isolate their style as some schools did - instead they formed a nucleus from which this style of game began to spread[www.thefa.com; www.fifa.com].

Finally, in 1863, developments reached a climax. At Cambridge University, where in 1848 attempts had already been made by former pupils from the various schools to find a common denominator for all the different adaptations of the game, a fresh initiative began to establish some uniform standards and rules that would be accepted by everyone [www.thefa.com; www.fifa.com].

It was at this point that the majority spoke out against such rough customs as tripping, shin-kicking and so on. As it happened, the majority also expressed disapproval at carrying the ball. It was this that caused the Rugby group to withdraw. They would probably have agreed to refrain from shin-kicking, which was in fact later banned in the Rugby regulations, but they were reluctant to relinquish carrying the ball [www.thefa.com; www.fifa.com].

This Cambridge action was an endeavor to sort out the utter confusion surrounding the rules. The decisive meeting, however, came on 26 October 1863, when 11 eleven London clubs and schools sent their representatives to the Freemason's Tavern. These representatives were intent on clarifying the muddle by establishing a set of fundamental rules, acceptable to all parties, to govern the matches played among them. This meeting marked the birth of The Football Association. The eternal dispute concerning shin-kicking, tripping and carrying the ball was discussed thoroughly at this and consecutive meetings until eventually on 8 December the die-hard exponents of the Rugby style - led by Black heath - took their final leave. A stage had been reached where the ideals were no longer compatible. On 8 December 1863, football and rugby finally split. Their separation became totally

irreconcilable six years hence when a provision was included in the football rules forbidding any handling of the ball (not only carrying it) [www.thefa.com; www.fifa.com]. From there progress was lightning-quick. Only eight years after its foundation, The Football Association already had 50 member clubs. The first football competition in the world, the FA Cup, was established in 1872. By 1888 the first league championship was under way.

International matches were being staged in Great Britain before football had hardly been heard of in Europe. The first was played in 1872 and was contested by England and Scotland. This sudden boom of organized football accompanied by staggering crowds of spectators brought with it certain problems with which other countries did not face until much later on.

Professionalism was one of them. The first moves in this direction came in 1879, when Darwin, a small Lancashire club, twice managed to draw against the supposedly invincible Old Etonians in the FA Cup, before the famous team of London amateurs finally scraped through to win at the third attempt. Two Darwin players, the Scots John Love and Fergus Suter, are reported as being the first players ever to receive remuneration for their football talent. This practice grew rapidly and the FA found itself obliged to legalise professionalism as early as 1885. This development predated the formation of any national association outside of Great Britain (namely, in the Netherlands and Denmark) by exactly four years [the fa.com; www.fifa.com].

After the English FA, the next oldest are the Scottish FA (1873), the FA of Wales (1875) and the Irish FA (1880). Strictly speaking, at the time of the first international match, England had no other partner association against which to play. When Scotland played England in Glasgow on 30 November 1872, the Scottish FA did not even exist - it was not founded for another three months. The team England played that day was actually the oldest Scottish club team, Queen's Park, but as today the Scottish side wore blue shirts and England white (albeit with shorts and socks in the colours of their public schools). Both teams employed what might today be considered rather attacking formations - Scotland (2-2-6), England (1-1-8) - but back then the game still retained many of the mob-football characteristics of kicking and rushing and, in tactics at least, probably more closely resembled modern-day rugby than football [www.fifa.com].

The spread of football outside of Great Britain, mainly due to the British influence abroad, started slowly, but it soon gathered momentum and rapidly reached all parts of the world [www.fifa.com; thefa.com]. The next countries to form football associations after the Netherlands and Denmark in 1889 were New Zealand (1891), Argentina (1893), Chile (1895), Switzerland, Belgium (1895), Italy (1898), Germany, Uruguay (both in 1900), Hungary (1901) and Finland (1907) [www.fifa.com].

When FIFA was founded in Paris in May 1904 it had seven founder members: France, Belgium, Denmark, the Netherlands, Spain (represented by Madrid FC), Sweden and Switzerland. The German Football Federation cabled its intention to join on the same day [www.fifa.com].

This international football community grew steadily, although it sometimes met with obstacles and setbacks. In 1912, 21 national associations were already affiliated to the *Fédération Internationale de Football Association* (FIFA). By 1925, the number had increased to 36, while in 1930 - the year of the first World Cup - it was 41[www.fifa.com].

Between 1937 and 1938, the modern-day Laws of the Game were set out by future FIFA President Stanley Rous. He took the original Laws, written in 1886 and subject subsequently to piecemeal alterations, and drafted them in a rational order. (They would be revised a second time in 1997.)

By the late 1930s there were 51 FIFA members; in 1950, after the interval caused by the Second World War, that number had reached 73. Over the next half-century, football's popularity continued to attract new devotees and at the end of the 2007 FIFA Congress, FIFA had 208 members in every part of the world [www.fifa.com].

2.2 Background of football competition

2.2.1 Foundations of competition

The laws of the game agreed on by the FA members in 1863 stipulated a maximum length and breadth for the pitch, the procedure for kicking off, and definition of terms, including goal, throw in, offside. Passing the ball by hand was still permitted provided the ball was caught "*fairly or on the first bounce*". Despite the specifications of footwear having no "*tough nails, iron plates and gutta percha*" there were no specific rule on number of players, penalties, foul play or the shape of the ball, captains of the participating teams were expected to agree on these things prior to the match. [www.thefa.com]

These laws laid down by the FA [English football association] had an immediate effect, with Sheffield and Nottingham (now Notts County) playing an annual fixture on the FA code among others. Over the next two years Chesterfield and Stoke joined the code, which meant that the codified form was no longer an exclusive sport of public schools. By this time teams had settled into 11 players each, and the game was played with round balls. It previously stated that all players in front of the ball were offside, eliminating passing of the ball forwards, much like in rugby today. The rule was relaxed. A Sheffield against London game in 1866 had allowed the FA to observe how the rules were affecting the game; subsequently handling of the ball was abolished except for one player on each team, the goalkeeper. A red tape was added between the two goalposts to indicate the top of the goal, and a national competition was proposed. 1867 saw the introduction of the first competition and oldest existing trophy in football, the Youdan Cup [www.thefa.com].

2.2.2 The first cup competition

On 20 July 1871, C. W. Alcock, a gentleman from Sunderland and a former pupil of Harrow School proposed that "*a Challenge Cup should be established in connection with the [Football] Association*", the idea that gave birth to the competition. At the first FA Cup in 1872, Wanderers and Royal Engineers met in the final in front of 2,000 paying spectators. Despite the Royal Engineers being the heavy favourites, one of their players sustained a broken collar bone early on and since substitutions had not yet been introduced, the Engineers played a man down for the rest of the match which they eventually lost 1-0. The FA Cup is the first and oldest cup competition in the world [www.thefa.com].

2.2.3 The emergence of league competition

The English football league competition is the oldest league competition in the world. In 1888, William McGregor a gentleman from Perth shire and a director of Aston Villa F.C was the main force between meetings held in London and Manchester involving 12 football clubs, with an eye to a league competition. These 12 clubs would later become the Football League's 12 founder members. The meetings were held in London, the main concern was that an early exit in the knockout format of the FA cup could leave clubs with no matches for almost a year, not only could they suffer heavy financial losses, but fans didn't often stick around for that long without a game, when other teams were playing. Matters were finalized on the 17 April in Manchester [www.thefa.com].

McGregor had voted against the name The Football League, as he was concerned that it would be associated with the Irish Land League.[2] But this name still won by a majority vote and was selected. The competition guaranteed fixtures and members for all of its member clubs. The clubs were split equally among North and Midlands teams. It excluded Southern teams, who were still strictly amateur [www.thefa.com].

A rival English league called the Football Alliance operated from 1889 to 1892. In 1892 it was decided to formally merge the two leagues, and so the Football League Second Division was formed, consisting mostly of Football Alliance clubs. The existing League clubs, plus three of the strongest Alliance clubs, comprised the Football League First Division [www.thefa.com].

2.3 Over view of the development of football in Africa

Football has been an important part of African culture for many years. Football was introduced to Africa in about 1850 by British settlers and missionaries [pitchinvasion.net]. The first match ever noted was held in Cape Town in 1862. After the match was played, the sport spread quickly across the continent. The sport was enjoyed in the British colonies and in the indigenous tribes across the continent [Encyclopedia Britannica, 2009].

The first championship in Africa was played in 1919. The championship consisted of a team from Morocco, Tunisia, and Algeria. The teams played for the North African Cup, which was established in 1930. In other countries such as Kenya and Uganda, the teams played for other

championships. These championships stretched across the continent and involved teams from countries across the continent as well [Encyclopedia Britannica, 2009].

Football in Africa began to expand after World War II. Modernization allowed Africa to build new facilities. Along with the building of new facilities, Africa was able to hold many new competitions. One of these competitions was the French West Africa Cup which was held in 1947. Soccer continued to grow in Africa throughout the 1900's [www.briranica com].

African football began to get recognition in the 1960's and 1970's. The players earned a reputation for being skilled. Their style of play was also every recognized during this time period. The style involved creativeness, hard work, and flexible strategies. This gained the attention of some of the countries in Europe [Encyclopedia Britannica, 2009).

In the late 1970's, many African football players began to play for European countries overseas. Although many Africans began to play soccer overseas, the style of play from the African players quickly became disliked by the European teams. In the 1980's and 1990's, African soccer made its way into the global spotlight. After a few wins at the Olympics, FIFA gave Africa its global recognition by giving five of the continents best teams a place in the 1998 World Cup [Encyclopedia Britannica, 2009].

2.4 The development of football in Ethiopia

The game of football is believed to be first introduced to Ethiopia in 1924 G.C by foreigners residing in the capital, Addis Ababa. The introduction of football in Ethiopia has close relations with the establishment of modern schools. Football as one of the modern sports was observed as early as 1924 soon after the opening of Menelik II School when the British expatriate teachers played with other foreign communities. Repeated occurrence of such competitions among different foreign communities residing in the capital led to the foundation of community clubs. Such clubs includes British military mission, Fotitudo of Italian community club, Ararat of Armenian, and Olympiacos of Greece community. However, during that time, there was no responsible body for organizing competition. Hence, competitions were being organized by the communities themselves. Such competitions were carefully observed by students and the local communities. Soon, the local communities particularly students began to practice the new sport and start to enjoy the game. [www.stgeorgefc.com; www.de.wikipedia.org].

In 1935, although not listed as an official international game, the first soccer match between an Ethiopian side and a foreign team took place in the capital when an Addis Ababa selection team defeated a French Navy side from Djibouti 3-1 in a ground which is prepared at 'Jan meda'. Yervant Abraham, an Armenian student, scored all three goals. His two brothers, Haigaz and Torkom, also featured in the line-up for the Addis selection [www.de.wikipedia.org].

When the popularity of the game among the student community grew, it became necessary to establish a local club so that they can compete with the already existing and more experienced sides of foreign community clubs. In December 1935, a group of youngsters, who lived around the Saint George Church in the capital, founded the "Saint George Football Association", the oldest and most successful team in Ethiopia along with Ayele Atnash and George Dukas. Soon, it began to compete with the foreign community clubs, and made its first 'un official' international match with British military mission. Following the foot step of Kidus giorgis [St.george], a number of local clubs flourished in the Addis Ababa. Such clubs include the 'sidist kilo' local club, the 'Kababna' area team, the 'Gullele' locality team, and the 'Entoto' area club [www.stgeorgefc.com; www.de.wikipedia.org].

During the fascist Italian invasion [1936-1941], the Ethiopian clubs were banned from playing with the foreign community clubs. Especially by 1937, the Italians were the decision makers in the city of Addis Ababa. Their racist decisions affected every little thing concerning the life of the city dwellers including where and when the young men could play their football. Decision came to segregate the Ethiopian football clubs into one area and established the "sport office" for the local clubs headquartered at an open field currently occupied by the St. Paul Hospital far from the general population [www.stgeorgefc.com; www.de.wikipedia.org].

To make matters worse the Italians unilaterally renamed the Ethiopian teams to fit their colonization were St. George was named Litoria Woubee sefer, Kebena became Villa Italiano, Sidest Kilo was named Piassa Roma and Gullele Consulato [www.stgeorgefc.com; www.de.wikipedia.org].

This was not well for in the progress of football in the country. The Italian invasion required the man power of the young and old alike and as such its development was drugged out of national interest to protect the country from the enemy. As a result, the newly introduced football game was temporarily terminated. Once the issue of national question raised by the foreign invasion settled, the game was resumed by a friendly match between St. George and Sidest Kilo teams in Addis Ababa at a ground in Dejazmach Nessibu sefer [www.stgeargefc.com].

The first Ethiopian versus foreign expatriate team game after the expulsion of the fascist Italia invaders was held in the capital between Saint George and Fortitudo of the Italian community in 1942, with the Saints winning 4-1. It is quite amazing that sport can bring the two bitter enemies together, just a year after a very brutal 5-year occupation by the Italians. The Ethiopian Sports Office, which would lay the foundation for the creation of the Ethiopian Football Federation, was also established that same year. [www.stgeorge.com; www.de.wikipedia.org].

The sport office which was officially launched by the effort of Mr. Yidnekachew Tessema in 1942 became the Ethiopian Football Federation [EFF] by 1943. Its first task was to draft the regulations for the national football championship. Accordingly, in 1944, the first

Ethiopian clubs championship tournament was held between five clubs. These clubs include St. George, British military mission, fortitude, Ararat, and Olympiacos. In this first encounter BMM were crowned the first Ethiopian champion in addition to the clubs championship, the federation also launched the Ethiopian cup [cup winners cup] in 1945. [www.stgeorge.com; www.de.wikipedia.org].

In 1953, the federation changed the championship format and launched the Inter-province national championship which was decided with play-offs held in Addis Ababa. As a result, teams from Harerghe and Eritrea (an Italian colony for 60 years prior to its unification with Ethiopia with federation in 1952) were allowed to compete in both the national championship and the Ethiopian cup [www.de.wikipedia.org].

In1957, Ethiopia together with Egypt and Sudan founded the Federation Africaine de Football [CAF] and participated in the first ever African cup of nations held in that same year in Sudan, and hosted and won the 3rd African cup of nations in 1962 [Levinson & Christensen 1996; www.de.wikipedia.org].

In 1965, the military and police teams were expelled from all competitions, after several disturbances and fist fights in their matches with civilian teams. It would be another ten years before these teams were re-admitted in league competitions after a military regime took power of the country a year earlier. In that same year, Cotton FC of Dire Dawa represented Ethiopia in the first African Clubs Championships [www.de.wikipedia.org].

In 1967, the EFF followed a new national championship format which requires each team to play home and away. This is because the federation felt that the previous format which was used from 1953-1966 did not reflect a true quality of a champion. Hence, best eight teams, Shoa (3), Eritrea (3), and Harerghe (2) participated in this new format [www.de.wikipedia.org].

In 1979, all existing teams were disbanded by the military ruling and a new league, made up of teams representing the armed forces, the universities, the workers unions and urban dwellers associations, was established. Ethiopia clubs also withdrew from all African clubs competitions for the next five years (1980-1984). After the fall of the Derg regime, the EFF introduced the super league in 1993, the national league in 1997, and the premier league clubs competition format, the EPL being the top flight football championship at present.

2.5 The meaning and concept of competitive balance in sport

Every sport and sports league has had to confront the fundamental issue of relative strengths between competitors. There has not been a uniform, one-size fits-all approach or set of rules to resolve this problem [Sanderson & Siegfried, 2003]. The beauty of the world's game of football lies in the dynamic balance of symbiotic competition [Vrooman, 2007]. With this in mind, in this section an attempt is made to provide the meaning of CB.

The meaning of competitive balance is quite confusing because different researchers and authors define the concept in different words. For example, Miche & Ougton [2004] define CB as the balance between the sporting capabilities of teams. Dorian Owen, et al., [2007] refers CB as the degree of equality of the playing strengths of the teams. For [Liam J. A. Lenten 2009] (CB) is simply the degree of evenness in sports leagues. Whatever the meaning of CB, The beauty of the world's game of football lies in the dynamic balance of symbiotic competition [Vrooman, 2007].

The theoretical developments concerning competitive balance all follow from Rottenberg (1956) and El-Hodiri and Quirk (1971, 1974). The reader is referred to Fort and Quirk (1995) for a review of the early theory [Fort & Maxcy 2003]. Although not a direct contribution to the sports-economics literature, concepts in Ronald Coase's (1960) "The Problem of Social Cost" have been applied to reserve clauses, reverse-order draft systems, and player free agency as they affect or fail to influence playing strengths and the reallocation of player resources (e.g., Hylan, Lage,&Treglia, 1996; Neale,4 Journal of sports economics / XXX XXX 1964; Siegfried, 1995). Since that time, economists have contributed rigorous theoretical and empirical work on various aspects of competitive balance (Daly & Moore, 1981; Dobson & Goddard, 2001; Fort & Quirk, 1995; Quirk & Fort, 1992, 1999; Scully, 1989, 1995; Zimbalist, 1992a) including formal measures of balance within a league (such as the dispersion of won-lost percentages and the concentration of championships); momentum (or serial correlation); league rules with regard free agency, restricting entry, and expansion; cross-

subsidization schemes such as reserve and draft systems, caps, and revenue sharing; and the connection between payroll and performance.

Szymanski (2001) has shown that the growing financial disparity between clubs has had no impact on imbalance. How closely payroll and market size correlate with winning—including, of course, the determination of the causal relationship—is arguably one of the most important questions about competitive balance. It is also essential to evaluate the relationship between market size and team payroll, which is often inaccurately assumed to be tight.

The empirical literature on competitive balance is easily characterized along two distinct lines. First, there is the analysis of competitive balance (ACB) literature itself. The ACB literature focuses on what has happened to competitive balance over time or as a result of changes in the business practices of sports leagues. The second line of literature on competitive balance analyzes its effect on fans. This line of literature tests the longstanding uncertainty of outcome hypothesis (UOH) literature, measured during the season and relative to team chances in the play offs [Fort & Maxcy 2003].

2.5.1 Alternate terms and forms of CB used in literatures

Most authors who do research in the field of the economics of team sports use include the idea of competitive balance and its importance but use different terms for it [Goosens, 2006]. In this part, some of the alternative terms used by different researchers for competitive balance are presented.

According to the founder of the sport economics research, Rottemberg, (1956), "The nature of the sport industry is such that competitors must be of approximately equal 'size' if any are to be successful". Neale talks about the "league standing effect" to underline the importance of differences in the standings of the teams over several years. The "Importance of competitive equality" was mentioned by Jones (1969). El-Hodiri & Quirk (1971) discuss "Equalization of competitive playing strengths" as an important objective for a sport league. The importance of "Sporting equality was stressed by Janssen & Kesenne (1996). " Uncertainty of outcome" was included in the research of Quirk & Fort (1997). The term "Symmetry among teams is used by Palomino & Rigotti (2001).

Different Sport economics researchers have identified various forms of competitive balance. Cairns et al. [1986] distinguished four temporal forms of uncertainty of outcomes (UO). First, they identified short-run UO where the emphasis is on the outcome of a particular game; secondly, medium-term UO where the identity of the season's winners is unknown; thirdly, within-season UO where several teams are "in contention."Finally, they recognized long-term UO (competitive

balance), which is concerned with persistent domination that may damage the whole league. Vrooman [1996] points out that there are actually three possible interpretations of competitive balance, all connected to each other. First there was the interpretation of closeness of league competition within seasons. Secondly, the absence of dominance of a large market club can be indicated. Last, competitive balance can also mean continuity of performance from season to season. Szymanski [2001] provided the clearest division. He emphasized that there are three kinds of uncertainty. These are:

- **Match uncertainty**: uncertainty over individual matches.
- **Seasonal uncertainty**: uncertainty over who is going to finish at the top of a league table.
- **Championship uncertainty**: the dominance of few teams over seasons.

2.5.2 Measures of competitive balance

As Zimbalist (2002) connotes in his seminal article *Competitive Balance in Sports Leagues* "there are almost as many ways to measure competitive balance as there are to quantify the money supply." Different measures have different advantages and shortcomings (Eckard 1998, 2001a, 2001b, 2003; Fort and Maxcy, 2003; Utt & Fort, 2002). There are several methods used in measuring competitive balance. The most appropriate of these methods often depends on what the researcher is attempting to specifically measure [Humphreys, 2002].

Broadly speaking, there are two types of measures; intra and inter-season. Intra-season balance refers to the Any-Given-Sunday idea, that within a season each team stands a reasonable chance to beat any other team. Contrary inter season measures try to assess the relative quality of the franchises over time [Westphal, 2008].

2.5.2.1 Intra–season measures of Competitive Balance

Intra - season CB is related to the distribution of sporting quality among the teams that constitute a league [Gerrard, 2004]. This can be measured using different ways. Some of the statistical models used to measure with in season CB are presented as follows.

Win or point percentage: For the win percentage, the number of wins in one season are counted and divided by the total number of games played by the team [Goosens, 2006].

Range: the range is one of the easiest measures for CB. It is the difference between the highest and lowest win percentages. The bigger the range, the more the best and worst team differ and hence the bigger the imbalance. The biggest disadvantage of using this measure is that it only takes two teams into account [Goosens, 2006].

Standard deviation of winning percentage: the standard deviation [SD from now on] is a commonly used measure of CB. It has been used extensively by Scully (1989), Quirk & Fort (1997), and others to assess the performance of teams in sport leagues [Humphreys, 2002]. Formally, this measure of CB uses the standard deviation of winning

percentages (WPCT), defined as the ratio wins to total games played, as a measure of CB. The SD as a measure dispersion has the disadvantage of the necessity of a scale when comparing over countries or across seasons: it depends on the average. [Humphreys, 2002; Goosens, 2006]. The formula for computing the standard deviation of winning percentage is given as follows.

$$\sigma = \sqrt{\frac{\sum_{t=1}^{T} (WPCT_t - 0{,}500)^2}{T}}$$

The Gini Coefficient: the Gini- coefficient is originally developed to measure income inequalities by Gini Corrado. Schmidt (2001), Schmidt & Berri (2001) use it to measure the inequality of the distribution of win percentages. It was already applied to measure another dimension of CB, namely the championship variation [Goosens, 2006]. The cumulative percentage of teams is placed on the horizontal axis, and on the vertical axis, the cumulative percentage of winning can be found. The 45 degree line represents equal winning percentages. The Gini coefficient is then calculated by the area between the 45 degree line and the actual line determined by the data divided by the total area below that equal winning line [Goosens, 2006].

The five club concentration ratio [C5] and the C5 index [C5ICB]: in a standard industry, the five firm concentration ratio measures the extent to which an industry is dominated by the five largest companies. When applied to football, the five club concentration ratio measures inequality between the top five clubs and the rest of the league and may be calculated using the following formula [Michie & Oughton, 2004]:

$$C5ratio = \frac{TPWFC}{TPWAC}$$

Where, TPWFC is the total points won by the top five clubs and TPWAC is the total points won by all clubs.

The C5 ratio is a function of the number of firms or clubs in an industry or league and the degree of inequality between the top 5 clubs and the rest where increases in the index reflect a reduction in competitive balance and increased domination by the top five clubs (see Davies, 1979 and Hart, 1975 for a discussion of the impact of inequality and the number of firms (clubs)). In a standard industry, with no restrictions on the number of companies or the market share of each company, the index would lie between 0 (reflecting pure competition with an infinite number of companies) and 1 (pure monopoly). However, in football, the fact that the number of clubs is fixed and that it is impossible (given the points scoring system) for the top 5 clubs to win all the points, the bounds of the index lie between 5/N (where N is the number of clubs) and M/(M + T) where M is the maximum number of points attainable by the top 5 clubs and T is the absolute minimum number of points that the remainder teams could end up with: since they have to play each other, they must gain some; if it were possible for them to gain none then the upper bound would of course be 1, with the number of points won by all clubs being the same as the number of points won by just the top five clubs. For a 20 team league the C5 ratio lies between 0.25 and 0.55 [Michie & Oughton, 2004].

A major advantage of this index is that it is intuitively easy to understand - if the allocation of points in the league were equal between clubs, for a league with 20 clubs the index would equal 0.25: anything greater than this would indicate a degree of imbalance between the top 5 and the rest [Michie & Oughton, 2004]. The disadvantage of this measure is that it only looks at inequalities or imbalance between the top 5 clubs and the rest. However, it does not capture changes in imbalance *within* the top 5, or within the bottom 15 clubs (or 17, in a 22-team league).

A more sophisticated way of taking account of changes in league size is to compare the C5 ratio to an ideal figure that would be attained in a perfectly balanced league as is the case in the standard deviation of win percentage measure of competitive balance which is normally deflated by the standard deviation that would be attained in a perfectly balanced league. This adjustment gives us the C5 Index of CB (C5ICB) as shown below:

$$C5ICB = \left[\frac{C5}{5/N} \right] * 100$$

Where N is the number of teams in the league. Thus, the C5 Index of CB is adjusted to correct for changes in the size of the league. For a perfectly balanced league of any size the index takes the value of 100. Reductions in competitive balance are reflected by an increase in the ratio. For example, if there were a 25 per cent decline in competitive balance the index would take the value of 125 [Michie & Oughton, 2004]

The Herfindahl-Hirschman index: the Herfindahl index. (named after the economist who developed it) looks at inequalities between all the firms in an industry. When applied to football it captures inequalities between all the clubs that make up a league. In an industry context the index is based on a calculation of the market share of every firm. These shares are then summed into a weighted average index for the industry using each firm's market share as its weight. We can translate this into an indicator of competitive balance for the football industry by looking at each club's share of points in a season and aggregating these into an index using each club's share of points as weights, to give:

$$HHI = \sum_{i=1}^{N} s_i^2$$

Where *si* is club i's share of points in a season, and i = 1, 2, ……N, where N is the number of clubs in the league. Like the five-club concentration ratio, the H-index is a function of the number of clubs that make up the league and the inequalities between those clubs in terms of winning power.15 The H index reflects the degree of competitive balance between teams. A rise in the index signifies an increase in inequality and therefore a decline in competitive balance. In a standard industry context, the Herfindahl index lies between 0 (with an infinite number of firms) and 1 (pure monopoly): however, in football, restrictions on the number of teams in a league and constraints imposed by the points scoring system mean the index lies well within this range. In a 20-team league, the lower bound of the H-index would be 0.05 (the value attained in a perfectly balanced league) and the upper bound would be 0.07 (the value attained in a perfectly

unbalanced league with the most unequal distribution of points attainable).

The Herfindahl Index of competitive balance (HICB): like the C5 ratio, the Herfindahl index is sensitive to changes in the number of teams. This can be corrected for by dividing the index by the value of H that would be attained in a perfectly balanced league to give the H Index of CB(HICB) as shown below:

$$HICB = \left(\frac{HHI}{(1/N)} \right) * 100$$

where H = si and $1/N$ = Σ pi where pi equals the share of points attained by club i in a perfectly balanced league. In a perfectly balanced league of any size the Herfindahl index of competitive balance would take the value of 100. A decline in CB is reflected by an increase in the index.

2.5.2.2 Inter-season [championship uncertainty] measures

Championship uncertainty measure is used to investigate whether there is dominance or not. To measure dominance of teams only a few measures have been used before [Goossens, 2006]. These measures are discussed as follows:

Number of championship won: Rottemberg (1956) was the first to suggest that the quality of a distribution of player ability, which is the theoretical counterpart of CB, can be easily measured by just counting the number of championship won per team. He found that in the American base ball league the Yankees dominated for eighteen years over the period from 1920s to 1951. In the national league, the St.

Louis cardinals won nine times in that same period. He concluded that there was a very unequal distribution of championship in the American base ball leagues. The ideal situation for Rottemberg is when every team in the league wins an equal number of times. This measure is very simple but it says only something about the champions. Hence, including more teams can give important extra information [Goossens, 2006].

Top K ranking: top k ranking can be used as a complement for the above measure to look at the dynamic imbalance. Here, the number of different teams that ended in the top k is counted. When more teams end in the top k over a certain period of time than in the previous period of the same length, competition has become less dominated [Goossens, 2006].

Gini coefficient and Lorenz curve: the Lorenz curve or Gini coefficient can be used to measure the variation s in championship. A version of Lorenz curve has been used by Quirk and Fort (1992, 1997) based on the share of championships won by each team in various US leagues over the period 1901-1990. This provides a measure of long-term domination. Szymanski and Kuypers (1999) have made a similar calculation for a number of European soccer leagues over the period 1946/7-1997/8 [Goossens, 2006; Miche & Oughton, 2004]. Quirk & Fort plot the cumulative percentage of the league championship on the vertical axis and on the horizontal axis the cumulative percentages of team years in the league. The most successful teams (those who have the highest titles/ year ratio) are started with the left corner. To calculate the Gini-coefficient the area between the Lorenz -curve and

the 45 degree line is calculated and devided by the area above that line. The 45 degree line represents the case in which each team has the same frequency of league championship per year in the league. The larger the bulge, the more championship are won be only a few teams [Goossens, 2006].

2.6 The impact of competitive imbalance on the league

It is known that sports leagues need a certain degree of competitive balance in order to survive and flourish. Without uncertainty over the outcome of individual matches and the league championship, sports leagues can become predictable and boring. Lack of competitive balance means that the number of spectators, both match going fans and those watching televised matches, is not maximized and that the league runs the risk of losing spectators in the long term. Unbalanced leagues also result in other risks, such as, the bankruptcy, or threat of bankruptcy, of lagging clubs, the threat of rival leagues being formed by top clubs that seek competitive balance in a new or rival league – suggestions of a European Super League provide example of the possible threat to league stability from new and rival leagues; and the creation of large income gaps within and between leagues that result in huge financial gains from making it into the continental Champions League or the Premier League. These gaps increase business risk by producing a financial incentive structure that encourages clubs to gamble on success [Miche & Oughton, 2004].

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This part of the research deals with the research design and methods that are used to scrutinize the problem, the sources of data, the data gathering tools, and the methods of data analysis.

3.1 Research methodology

The main purpose of this study is to analyze the degree of CB during the past 11 seasons of the Ethiopian top flight football competition. Hence, a descriptive research method was used.

3.2 Sources of data

The study is a descriptive one and primary data obtained from the valid documents of the EFF were used to analyze the degree of CB of the EPL. In addition, the data used in this study is base on the end ranking of the league. Hence, a data set of 9 in some cases 8 seasons i.e. 1992-2002 were used as a source of data in this study.

3.3 Data gathering instruments

One approach of collecting valid date employed is triangulating information of key items using various means. According to Hagan (2003: 277-78), triangulation assumes use of multiple methods to measure the same phenomenon. The purpose of triangulation "using different methods and/or techniques" (questionnaires, interviews, experiment, observation, and/or documentary analysis is to ascertain the validity of data findings. Triangulation methods assume that it is

relatively hopeless to attempt to demonstrate the validity or reliability of data using only one method. In the same vein, it is proposed that the study be conducted within the quantitative and the qualitative paradigms or approaches. To this end, document analysis, observation, and Statistical analysis were used as the main sources of data gathering instruments.

3.4 Methods of data analysis

The information gained from the EFF was analyzed both qualitatively through document analysis and quantitatively using various statistical measures of competitive balance like the five clubs concentration ratio C5, the five club index of competitive balance [C5ICB], the Herfindahl-Hirscman index [HHI], the Herfindahe index of competitive balance [HICB], and the top k ranking.

CHAPTER FOUR

DATA, USED MEASURES AND RESULTS

The study is a descriptive one and primary data obtained from the valid documents of the EFF were used to analyze the degree of CB of the EPL. In addition, the data used in this study is base on the end ranking of the league. Hence, a data set of 8 seasons i.e. 1992-2002[excluding the 1995 season where the researcher had faced problem of finding the relevant data, the 1999 season where championship was abandoned in June after 12 clubs including all 7 from the capital Addis Ababa boycotted the tournament, and the 2000 season where championship was organized by the federation between 25 premier league and national league teams to clear the mess created in the previous season (which is out of the premier league format)] were used to determine the degree of both seasonal and championship uncertainties.

4.1 Measures used

As indicated in the literature review, there are three forms of CB. These are; match uncertainty, seasonal uncertainty, and championship uncertainty. However, this study is more concerned with comparing and contrasting the experiences of 'within-season' or seasonal uncertainty and 'between-season' or championship uncertainty in the EPL. There are several methods used in measuring competitive balance. The most appropriate of these methods often depends on what the researcher is attempting to specifically measure (Humphreys, 2002). Among the more popular measures, the researcher in this study decided to use measures that are commonly used and relatively easy to

compute for both of these dimensions of CB. Generally, the five clubs concentration ratio [C5], the C5 index of CB and the Herfindahl-Hirschman index of CB [HICB] were used to measure the seasonal competitive balance of the league. For the championship uncertainty, the number of championship won and the top k ranking were used.

4.1.1 Measures of seasonal competitive balance

Seasonal uncertainty refers to the uncertainty over which team is going to win the championship at a particular season. As it can be recalled from the literature review, there are several useful models which can be used to measure this particular form of CB. However, in this study the researcher opts to use the five club concentration ratio [C5] and the C5 index, the standard deviation of win percentages, and the Herfindahl-Hirschman index measures of CB.

4.1.1.1 The five club concentration ratio [C5]

The C5 ratio is a function of the number of clubs in a league and the degree of in equality between the top 5 clubs and the rest of the teams that constitute the league. It measures the inequality between the top five clubs and the rest of the league and can be computed using the following formula [Michie & Ougton, 2004]].

$$C5ratio = \frac{TPWFC}{TPWAC}$$

Where, TPWFC is the total points won by the top five clubs and TPWAC is the total points won by all clubs.

Results

Using the above formula the C5 ratio i.e. the inequality of the top five clubs and the rest of the league teams in the EPL is calculated and summarized in the following table.

Table: 4:1 dominance of the top 5 clubs percentage share of points held by top 5, C5 (%)

Season	Number of teams	C5 ratio	Lower & upper
1992	12	0.52	[0.42-0.65]
1993	14	0.46	[0.36-0.59]
1994	14	0.43	[0.36-0.59]
1995	14	-	
1996	14	0.45	[0.36-0.59]
1997	14	0.47	[0.36-0.59]
1998	15	0.45	[0.33-0.56]
1999	-	-	
2000	-	-	
2001	16	0.35	[0.31-0.64]
2002	18	0.37	[0.28-0.56]

Source: researcher calculations according to formula in text from data

Discussion

In the above table, the lower bound reflect perfect competition & the upper bound indicate perfect imbalance respectively [for calculating lower and upper bound see page37].Any number greater than the lower bound reflect the degree of competitive imbalance between the top five

clubs and the rest of the league teams. As it can be revealed from the above table, in all of the 8 years period studied, the C5 ratio was greater than the lower bound [a value which can be attained in a perfectly balanced league]. This shows as there had been Competitive imbalance between the top 5 clubs and the rest.

It can also be noted that in the above table, the C5 ratio decreases as the league size increases. This clearly indicates as changes in the number of teams that make up the league affects the competitiveness of the league. However it is also instructive to abstract from this changes. One of the straightforward ways to abstract from changes in a league size so as to focus on changes in inequality is to compare seasons with equal number of teams [Michie & Oughton, 2004]. Using this comparison reveals that between 1993 and 1997, where the league size was 14, a significant decrease in competitive imbalance between the top 5 and the rest was observed in 1997 with a C5 ratio of 0.47. In that same year the range [the difference between the highest point and the lowest point] were 57. And in relative terms, the 1993 season was more balanced with a C5 ratio of 0.43 and a range of only 24 points.

4.1.1.2 The C5 index of competitive balance [C5ICB] of the EPL

Another way of dealing with changes in the league size is to compare the C5 ratio to an ideal figure that would be attained in a perfectly balanced league. This adjustment gives as the C5 index of competitive balance [C5ICB]. The formula for computing the C5ICB is shown below.

$$C5ICB = \left[\frac{C5}{5/N}\right] * 100$$ where N is the number of teams in the league

Thus, the C5ICB is adjusted to correct for changes in the size of the league. For a perfectly balanced league of any size the index takes the value of 100. Reductions in CB are reflected by an increase in the ratio. For example, if there is a 25 percent decline in CB the index would take a value of 125 [Michie & Oughton, 2004]. Data for the C5ICB is presented in the following table.

Table: 4:2 the C5 index of competitive balance: Ethiopian premier league [1992-2002 E.C]

Season	Number of teams	C5 ratio	C5ICB
1992	12	0.52	114
1993	14	0.46	128
1994	14	0.43	119
1995	14	-	-
1996	14	0.45	125
1997	14	0.47	130
1998	15	0.45	136
1999	-	-	-
2000	-	-	-
2001	16	0.35	113
2002	18	0.37	132

Source: researcher calculations according to formula in text from data.

Discussion

The above table clearly shows that there was a significant decline in CB between the top five and the rest of the teams that make up the league. For example, in 1992 [the year the premier league started] there was only a 14% reduction in CB between the top 5 and the rest. The highest decrease in CB between the top and bottom was observed

in 1998 with a 36% decline in CB. Further analysis shows that in that same year the top 5 clubs collected 253 points [70.3%] out of the possible 360. On the other hand, the lowest reduction in CB was observed in 2001 with only a 13% decline. In that same year the top five obtained 244 points [62.5%] out of the possible 390. In general, there was a 27% average decline in competitiveness between the top 5 clubs and the rest of the league clubs in the eight year period studied in the Ethiopian premier league.

4.1.1.3 Herfindahl-Hirschman Index and the Herfindahl Index of Competitive Balance (HICB) of the EPL

The five clubs concentration ratio looks at inequalities or imbalance between the top five and the rest. How ever, it does not capture changes in imbalance with in the top 5, or with in the bottom. Hence, to capture parities between all the clubs that makes up the league the Herfindahl-Hirschman index [HHI] is used [Michie & Oughton, 2004]. The following formula can be used to compute the HHI.

$$HHI = \sum_{i=1}^{N} s_i^2$$

Where *si* is club i's share of points in a season, and i = 1, 2 …N, where N is the number of clubs in the league.

The HHI is a function of the number of clubs that make up the league and the inequalities between those clubs in terms of winning power [Michie & Oughton, 2004]. How ever, like the C5 ratio the HHI is sensitive to changes in the league size. This can be corrected for by dividing the index by the value of HHI that would be attained in a

perfectly balanced league to give the Herfindahl index of competitive balance [HICB] as shown below.

$$HICB = \left(\frac{HHI}{(1/N)} \right) * 100$$ Where N is the number of teams in the League.

In a perfectly balanced league of any size the HICB would take the value of 100. A decline in CB is reflected by an increase in the index. Data for the HICB of the EPL is presented in the following table.

Table: 4:3 the HICB of the Ethiopian premier league.

Season	Number of teams	HHI	HICB
1992	12	0.09	113
1993	14	0.08	114
1994	14	0.1	143
1995	14	-	-
1996	14	0.076	107
1997	14	0.076	107
1998	15	0.09	126
1999	-	-	-
2000	-	-	-
2001	16	0.08	133
2002	18	0.077	140

Source: researcher calculations according to formula in text from data

Discussion

The above table reveals that, the presence of competitive imbalance in the eight year period studied in the EPL. Degree of competitive imbalance was more pronounced in 1994 with a 43% decrease in CB

and 2002 where a 40 % decrease in competitive balance was observed. A more balanced league competition was observed in 1996 and1997 seasons where there was only a 7% decrease in CB in both seasons. Further analysis from the above table uncovers that CB was most suffered in seasons where St. George were champions. On average there was a 27% decline in CB in the seasons where St. George was champion, where as there was only a 10 % average reduction in CB in the years where championship was won by clubs other clubs. Generally, on average a 23% decline in competitive balance is observed in the whole of the premier league seasons studied.

4.1.2. Measures of championship uncertainty]

Championship uncertainty refers to the absence of long term domination of a league by a team or a few numbers of teams. To measure the dominance of a team in the EPL, numbers of championship won, the top k ranking were used in this study.

4.1.2.1The Number of Championships Won

Rottemberg [1956] was the first to suggest that CB across seasons can be easily measured by just counting the number of championship won per team. The ideal situation for Rottemberg is when every team in the league wins an equal number of times. The main advantage of this measure is that it shows in a fast and easy way whether some teams win significantly more than the others. The following table summarizes the champions and runners-up of the EPL in the past 11 seasons.

Table: 4:4 Winners and runners up in the Ethiopian premier league.

Season	Champion	Runners-up	Third place
1992	St. George	EEPCO	Eth. Coffee
1993	EEPCO	St. George	Eth. Coffee
1994	St. George	Eth. Coffee	EEPCO
1995	St. George	A/M Textile	
1996	Hawassa Kenema	Eth. Coffee	Trans Eth.
1997	St. George	Trans Eth.	Hawassa K.
1998	St. George	Eth. Coffee	EEPCO
1999	-	-	
2000	-	-	
2001	St. George	Eth. Coffee	Defense
2002	St. George	Dedebit	Eth. Coffee

Source: Ethiopia Football Federation

Discussion

As it can be counted in the above table, one team [St.George] has won the championship in seven out of nine [77.77%] premier league seasons included in this study [only Hawassa city and EEPCO interrupted the hegemony of St. George]. In addition to this, only three clubs [10%] out of 30 clubs that participate in the EPL since 1992[St. George, EEPCO, and Hawassa city] have come to assume the premiership title. This clearly indicates that there was a very un-equal distribution of championship in the EPL with St. George being crowned as a dynasty.

4.1.2. 2 The Top K Ranking

The top k ranking measures the dynamic imbalance by counting the number of different teams. When more teams end up in the top k over a certain period of time than in a previous period of the same length, the competition has become less dominated. The choice of the top k and the number of years is arbitrary. Hence, the researcher in this study chooses the top 3 because in the EPL, these are the teams that will be awarded with gold, silver, and bronze medals.

Results and discussion

As displayed in table 4:4, only eight [26.66%] cubs [out of a total 30 teams that participate in the EPL since 1992E.C] have finished in the top 3 in the past nine seasons considered in this study. In addition, in 8 out of the nine seasons [88.88% of the time] one club, [St George] has finished in the top two. Moreover, of the 20 regional teams that participate in the EPL, only three teams (15%) i.e. Hawassa city, Trans Ethiopia, and Arbaminch Textile] have finished in the top two. This shows as there was competition imbalance in the Ethiopian premier league especially between clubs from the capital and those of regional clubs. Furthermore, since 1992, ten teams represent the capital city [Addis Ababa]. Of these, only 5 teams [50%] i.e. St. George, Ethiopia coffee, Dedebit EEPCO and Defense have come to finish in the top 3.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this section of the study, the summary of the major findings of the research, the conclusions drawn based on the findings, and recommendations based on the conclusions drawn were presented

5.1 Summary

The main purpose of the study was to analyze the degree of CB in the EPL [1992-2002 E.C]. To meet this purpose, it was hypothesized that "There was a significant decrease in CB during the premier league seasons of the Ethiopian top flight football competition". To test this hypothesis, the necessary data were collected from the EFF. The data was analyzed using various statistical measures of competitive balance. Based on the results of the analysis of the data, the following major findings were obtained:

1. A 27% average decline in CB between the top five clubs and the rest was found in the eight seasons studied. This shows as there was a significant decrease in CB.

2. An average 23% decrease in CB was found using the HICB which shows a significant imbalance between clubs in the eight seasons included in this study.

3. In 77.77% of the time [seven out of the nine years] studied St. George has been champions and in 88.88% of the time St.George has finished in the top two. This shows that St. George has been a dynasty in the Ethiopian premier league.

5.2 Conclusions

Information obtained from the Ethiopian Football Federation had suggested that one reason that led to the formation of the premier league was to achieve greater competitive balance among teams from different parts of the country through a system of home and away match. With this in mind, the purpose of this study was to investigate the degree of competitive balance in the EPL. The data for this study was obtained from the EFF. The data was subjected to various statistical analyses to determine the degree of competitive balance. Using the C5 ratio, the five clubs index for competitive balance [C5ICB], and the Herfindahl-Hirscman index [HHI] to measure seasonal imbalance, and the number of championship won and the top k ranking to measure championship uncertainty, it was concluded that each of the above measures indicated a significant decrease in competitive balance and the league has been dominated by one club [St. George] which appears to be a dynasty in the Ethiopian premier league days of the top flight football championship in the country. Therefore, the alternate hypothesis formulated at the beginning of the research was accepted and that of the null hypothesis was rejected.

5.3 Recommendations

It is widely accepted that CB is essential to maintain league stability and keep the interest of the fans. Based on the major findings obtained and the conclusion drawn, the following recommendations were suggested.

- ⇨ As it is known, one of the factors that led to a difference in the sporting strength between clubs is the income gap that usually exists between clubs. Financially strong clubs like St. George can obtain best talents from the market easily. To close the financial gap, clubs should try to generate as more money as they can using various mechanisms as in fund raising for example.
- ⇨ To promote and maintain competitive balance in the Ethiopian top flight football the federation should adopt competitive balance targeted measures such as those used in America like the payroll caps, luxury taxes, salary caps. These measures make financially strong clubs to hire less talent than they would in the absence of these constraints.
- ⇨ The federation should revise its income (gate) redistribution mechanisms. All clubs in the league should enjoy equal shares of gate revenue. This will reduce the financial incentives of financially strong clubs to acquire more talent.
- ⇨ To maximize the impact of the above measures it is also equally important that it is accompanied by measures to improve the business and financial management of clubs. With out this, there

is a danger that the income will be used to subsidize poor management practices rather than to build for the basis for stronger financial and sporting performance.

- ⇨ It is also recommended that there must be a limitation on the number of professional players that some clubs acquire. Because in some cases it is observed that the difference in competitive balance between clubs is associated with the presence and absence of professional players.

Finally it should be emphasized that this study was a very small scratch on the iceberg of the concept of competitive balance in sports in general and football in particular. Hence, a need for continued and rigorous research on the degree of CB, the impact of competitive imbalance, and in the area of the relationship between CB and fan attendance is unquestionable. Therefore, those concerned institutions [sport commission, EFF, clubs, Medias, higher institutions and others] and individuals [scholars, coaches, journalists, students and others] who are big fans of domestic football are called up on to create a united front to engage in timely research endeavor on competitive imbalance in the Ethiopian top flight football.

TEAMS THAT PARTICIPATE IN THE ETHIOPIAN PREMIER LEAGUE [2000-2010]

s/n	Name of the team	Region	Seasons participated
1	St. George	Addis Ababa	All
2	Ethiopia coffee	Addis Ababa	All
3	EEPCO	Addis Ababa	All
4	Ethiopia Banks	Addis Ababa	All
5	Defense	Addis Ababa	1997-2002
6	Nyala	Addis Ababa	1994,1995,1996,1998,1999,2001
7	Ethiopia Insurance	Addis Ababa	1992,1993,1994,1995,1996,1999,2001,2002
8	Dedebit	Addis Ababa	2002
9	Birhanina Selam	Addis Ababa	1995
10	Air force	Addis Ababa	1998,1999
11	Hawassa city	South	All
12	South police	South	2001,2002
13	Sidama Coffee	South	2002
14	Arbaminch textile	South	1994 -1997
15	Metahara Sugar	Oromia	1997- 2002
16	Wonji sugar	Oromia	1993,1994,1996,1997,1998
17	Muger Cement	Oromia	All
18	Sebeta city	Oromia	2001,2002
19	Meta Abo Beer	Oromia	2002
20	Adama city	Oromia	All
21	Shasemene city	Oromia	1999
22	Dire dawa Textile	Harari	1992
23	Midir Babur	Harari	1992-1995
24	Harar city	Harari	1993
25	Harar Beer	Harari	1995 - 2002
26	Dire Dawa city	Harari	2001,2002
27	Guna Trading	Tigray	1992,1993,1994,1996,1997,1998
28	Trans Ethiopia	Tigray	1993 -2002
29	Tikur Abay	Amhara	1999
30	Kombolcha Textile	Amhara	1993

Note: *The above table excludes the midrok millennium Ethiopian championship held between 25*

Source: Ethiopia Football Federation

APPENDIX 1

ETHIOPIAN PREMIER LEAGUE 1992 FINAL RANKING TABLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	St. George	22	15	1	6	39	19	20	46
2	EEPCO	22	11	6	5	40	22	18	39
3	Ethiopia coffee	22	10	8	4	40	24	16	38
4	Ethiopia Banks	22	8	8	6	38	27	11	32
5	Midir Babur	22	9	5	8	26	35	-9	32
6	Hawassa city	22	7	10	5	34	33	1	28
7	Muger Cement	22	8	4	10	30	25	5	28
8	Guna Trading	22	6	9	7	18	27	-9	27
9	Trans Ethiopia	22	7	5	10	24	34	-10	26
10	Ethiopia insurance	22	7	4	11	39	44	-5	25
11	Adama city	22	5	8	9	30	41	-11	23
12	Dire Dawa Textile	22	4	2	16	28	53	-25	14

Source: Ethiopia Football Federation

APPENDIX 2

ETHIOPIAN PREMIER LEAGUE 1993FINAL RANKING TABLE

ETHIOPIAN PREMIER LEAGUE 1993 FINAL RANKING TABLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	EEPCO	26	19	2	5	53	19	34	59
2	St. George	26	14	7	5	47	24	23	49
3	Ethiopia coffee	26	14	6	6	50	34	16	48
4	Ethiopia Banks	26	12	3	11	46	39	7	39
5	Guna Trading	26	10	9	7	24	19	5	39
6	Hawassa city	26	11	6	9	34	30	4	39
7	Adama city	26	11	5	10	36	33	3	38
8	Trans Ethiopia	26	10	7	9	29	31	-2	37
9	Midir Babur	26	9	7	10	49	42	7	34
10	Muger Cement	26	8	6	12	30	41	-11	30
11	Ethiopia insurance	26	6	9	11	31	39	-8	27
12	Wonji Sugar	26	7	6	13	30	43	-13	27
13	Kombolcha Textile	26	5	8	13	24	52	-28	23
14	Harar city	26	3	5	18	24	61	-37	14

APPENDIX 3

ETHIOPIAN PREMIER LEAGUE 1994 FINAL RANKING TABLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	St. George	26	19	4	3	52	20	30	61
2	Ethiopia coffee	26	15	5	6	42	27	15	50
3	EEPCO	26	13	6	7	49	33	16	45
4	Ethiopia Banks	26	9	9	8	36	41	-5	36
5	Muger Cement	26	10	5	11	37	40	-3	35
6	Midir Babur	26	9	6	11	44	44	0	33
7	Arbaminch Textile	26	9	6	11	33	38	-5	33
8	Adama city	26	8	8	10	27	32	-5	32
9	Midir Babur	26	9	5	12	37	43	-6	32
10	Trans Ethiopia	26	8	7	11	27	32	-5	31
11	Ethiopia insurance	26	8	7	11	29	36	-7	31
12	Hawassa city	26	9	4	13	21	31	-10	31
13	Guna Trading	26	6	12	8	22	24	-2	30
14	Wonji Sugar	26	5	6	15	19	35	-16	21

Source: Ethiopia Football Federation

APPENDIX 4

ETHIOPIAN PREMIER LEAGUE 1996 FINAL RANKING TABLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	Hawassa city	26	13	9	4	36	27	9	48
2	Ethiopia coffee	26	13	7	6	37	22	15	46
3	Trans Ethiopia	26	13	6	7	35	25	10	45
4	St. George	26	12	6	8	33	21	12	42
5	EEPCO	26	10	11	5	33	22	11	41
6	Muger Cement	26	10	9	7	29	23	6	39
7	Arbaminch Textile	26	9	8	9	27	26	7	35
8	Ethiopia Banks	26	11	2	13	35	44	-9	35
9	Wonji Sugar	26	9	6	11	32	32	0	33
10	Harar Beer	26	8	7	11	41	42	-1	31
11	Guna Trading	26	7	10	9	17	23	-6	31
12	Adama city	26	8	5	13	24	31	-7	29
13	Nyala	26	7	7	12	35	45	-10	28
14	Ethiopia insurance	26	2	7	17	22	53	-31	13

Source: Ethiopia Football Federation

APPENDIX 5

ETHIOPIAN PREMIER LEAGUE 1996 FINAL RANKING TABLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	St. George	26	20	4	2	56	16	40	64
2	Trans Ethiopia	26	13	7	6	46	25	13	46
3	Hawassa city	26	13	5	8	32	24	8	44
4	Ethiopia Banks	26	11	7	7	38	19	19	41
5	Defense	26	11	7	8	25	20	5	40
6	Ethiopia coffee	26	11	4	11	36	28	8	37
7	Muger Cement	26	9	9	8	27	23	4	36
8	Harar Beer	26	9	9	8	22	27	-5	36
9	Metahara Sugar	26	9	7	10	27	29	-2	34
10	Wonji Sugar	26	9	7	9	34	40	-6	34
11	Adama city	26	8	8	10	29	42	-13	32
12	EEPCO	26	7	10	9	24	27	-3	31
13	Adama city	26	4	5	17	18	48	-30	17
14	Arbaminch textile	26	1	4	21	10	58	-48	7

Source: Ethiopia Football Federation

APPENDIX 6

ETHIOPIAN PREMIER LEAGUE 1998 FINAL RANKING TABLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	St. George	26	18	7	3	50	11	39	61
2	Ethiopia coffee	26	17	6	5	45	29	16	57
3	EEPCO	26	14	8	6	42	26	16	50
4	Hawassa city	26	11	10	7	30	22	8	43
5	Defense	26	11	9	8	31	26	5	42
6	Trans Ethiopia	26	10	9	9	33	29	4	39
7	Metahara Sugar	26	10	9	9	29	26	3	39
8	Ethiopia Banks	26	10	8	10	41	38	3	38
9	Harar Beer	26	9	11	8	30	31	-1	38
10	Muger Cement	26	7	10	11	25	33	-8	31
11	Adama city	26	7	10	11	24	32	-8	31
12	Nyala	26	6	11	11	22	37	-15	29
13	Air Force	26	7	6	15	19	34	-15	27
14	Wonji Sugar	26	7	5	16	21	39	-18	26
15	Guna Trading	26	3	7	18	16	45	-29	16

Source: Ethiopia Football Federation

Source: Ethiopia Football Federation

APPENDIX 7

ETHIOPIAN PREMIER LEAGUE 2001 FINAL RANKING TABLLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	St. George	30	26	6	2	63	17	22	57
2	Ethiopia coffee	30	17	9	8	49	30	15	49
3	Defense	30	16	8	10	51	31	11	49
4	Ethiopia Banks	30	13	13	8	36	31	8	45
5	Hawassa city	30	13	10	11	40	36	4	44
6	Muger Cement	30	13	9	12	48	44	3	42
7	Harar Beer	30	10	17	7	30	25	2	41
8	South Police	30	11	14	9	30	26	7	38
9	Ethiopia insurance	30	11	13	10	24	31	3	38
10	Dire Dawa city	30	12	8	14	29	32	-2	37
11	Adama city	30	11	9	14	49	53	1	36
12	Sebeta city	30	10	12	12	30	42	-9	35
13	EEPCO	30	9	13	11	26	23	2	34
14	Metahara Sugar	30	10	10	14	39	46	-10	33
15	Trans Ethiopia	30	11	7	16	38	45	-28	30
16	Nyala	30	9	8	17	19	40	-29	22

Source: Ethiopia Football Federation

APPENDIX 8

ETHIOPIAN PREMIER LEAGUE 2002 FINAL RANKING TABLE

Pos	Team	P	W	D	L	F	A	GD	Pts
1	St. George	34	26	6	2	63	17	46	84
2	Dedebit	34	17	9	8	49	30	19	60
3	Ethiopia coffee	34	16	8	10	51	31	20	56
4	Hawassa city	34	13	13	8	36	31	5	52
5	Adama city	34	13	10	11	40	36	4	49
6	Defense	34	13	9	12	48	44	4	48
7	Harar Beer	34	10	17	7	30	25	5	47
8	Muger Cement	34	11	14	9	30	26	4	47
9	Sidama Coffee	34	11	13	10	24	31	-7	46
10	Sebeta City	34	12	8	14	29	32	-3	44
11	Ethiopia Banks	34	11	9	14	49	53	-4	42
12	Dire Dawa city	34	10	12	12	30	42	-12	42
13	Trans Ethiopia	34	9	13	11	26	23	-9	41
14	EEPCO	34	10	10	14	39	46	-7	40
15	Ethiopia insurance	34	11	7	16	38	45	-7	40
16	South Police	34	9	8	17	19	40	-21	35
17	Metahara Sugar	34	8	10	16	38	49	-11	34
18	Meta Beer	34	5	5	24	30	56	-26	20