

Come On England!

*How Globalization is Transforming
Attendance Patterns in English Football*

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April 23, 2008

***Submitted to the Department of Economics of Amherst College
in Partial Fulfillment of the Requirements for Bachelor of Arts
with Honors***

Abstract

This thesis study suggests a relationship between the structural shift in the English economy of the late 1980's and the early 1990's and the demographic shift in attendees of English Premier League Football matches. This thesis' methodology employs Geographic Information Systems (GIS) technology to construct areas of fan support for each of the Premier League teams, building upon the research of Simmons (2006). This methodology offers an innovative way to calculate team support, using the most recent demographic data available. As a globalized economy redefines the football industry's role, white-collar professionals are shown to be crowding out blue-collar workers at football stadiums. A second-order relationship is found between socio-economic classification and attendance. Income, distributive, and regional effects are explored, and, in the end, English Football is classified as a normal good, which stands in contrast with prior studies.

Keywords: Sports Economics, English Football, Globalization, Attendance Patterns

Some well-deserved acknowledgments...

I would first and foremost like to thank my parents, who continually reminded me that I did not have to complete this endeavor and who would have been proud of me either way. I hope to grow into the man who will continue to make them proud. I would like to thank my brother, Alex, for his always-timely advice and support and for his help with the Calculus. I am very lucky to have such a nice, understanding, and talented brother. I am deeply indebted to Professor Erinc Yeldan. It is because of him that I developed a love of Turkish football *and* finished this thesis study. *Hasta Siempre La Fenerbahce!* I would like to thank Professors Jessica Reyes and Frank Westhoff, who played invaluable roles during the conception and execution of this study. Their insight was incredible, but it was their kindness, loyalty, and perspective that made this project so valuable to my growth as an academic and as a person. I wish to express my gratitude to Andy Anderson. It was only through his patience with me while I floundered through the GIS software that I was able to extract such original data for the study. I would also like to thank my friends and roommates who always lent an ear. Yes, I realize that you probably didn't actually listen to what I said. No, I did not honestly listen to what you said either. But during this lengthy and challenging project it was so important to have others around. Finally I would like to thank Jeanne Reinle. You made the sometimes-isolating experience of writing a thesis as painless as possible. I will miss your wit and humor.

A Short Prologue...

On February 6, 1958, as Manchester United was returning home from a victorious European League clash against Red Star Belgrade, its plane crashed during a failed take-off attempt at a Munich airstrip. Eight Manchester United players and 15 journalists were killed in the accident. Fifty years later, football fans from across England still mourn the loss of this iconic bunch of English footballers. This February, large memorials were unveiled at Old Trafford, Manchester United's home ground, and their arch-cross-town rivals, Manchester City, joined the team in commemorating those whose lives were lost before participating in a lively derby. The day was sobering yet celebratory: those assembled appeared satisfied with the modern club's commemoration of its fallen icons.

Yet just 10 miles to the north of the events at Old Trafford, FC United of Manchester was busy preparing at its ground, Gigg Lane, for its upcoming fixture against Skelmersdale United of the Northern Premier League. The impending game had important title implications for FC United, a club formed in the aftermath of the American Malcolm Glazier's 2006 hostile takeover of the original United. Some Manchester United fans had become, as they described it, "disaffected and disenfranchised¹" after the takeover and had thus started a club that embodied the traits that had attracted them to Manchester United in the first place. According to FC member Mark Cannon, "The general over-commercialization stole the soul of Manchester United, making it a very sterile [stadium]. You can't really go in and enjoy yourself anymore or

¹ According to the FC United of Manchester Official web site, <http://www.fc-utd.co.uk/manifesto.php/> January 11, 2008

enjoy football.² Cannon continues by arguing that FC United offers a chance to sterilize and decommercialize football by bringing it back to its roots.

Back in '58, Manchester United was a smaller, less prestigious club, and European football was a smaller, less profit-driven industry. There was no common stock available for an ageing Tampa businessman to purchase, and, if there had been, Glazier would have viewed such an acquisition as a poor investment. Football fans were blue-collared, and commercial ventures played negligible roles in investment decisions. Owners were traditionally lifelong supporters who had done well financially and wanted to give back to their community by supporting their team. Fans went to watch top-flight matches to support homegrown talent –those individuals whose skills on the ball kept them out of the same factories and mines their fans worked in. Fans were lively and boisterous. The atmospheres at stadiums across England were a far cry from the *funeral*³ experiences common today.

So when the memorials were unveiled at Old Trafford, even those preparing at Gigg Lane could appreciate the inherent meaning in the commemorative sculptures: they recalled lives lived in a simpler time when glory was defined by a team' on-field successes rather than by owners' riches. The sculptures also recalled a fan base that loved football at its most basic level: a working class that venerated its everyday champions, the very fan base currently marginalized by today's globalized football industry.

² Fan Mark Cannon during an interview on a segment entitled "FC United of Manchester on *FIFA Futbol Mundial*, broadcasted on GOLTV, February 17, 2008.

³ Manchester United longtime manager, Sir Alex Ferguson, used this term to describe the fans at Old Trafford during a January 1, 2008 match-up with Birmingham City. United nearly lost valuable points on the league leaders at the time, Arsenal, with a lethargic display. Ferguson's comments recalled those made about United's bourgeois fans by former captain Roy Keane in 2000. Responding to a reporter's question about fans' apparent disinterest during a match, Keane had called United's following the "Prawn Sandwich Brigade."

I. Introduction

Football is the pre-eminent entertainment industry in the world. Over 715 million individuals watched the 2006 World Cup final in Berlin, and millions more followed it through Internet, radio, and newspaper sources⁴. Over the past two decades the football industry has undergone numerous fundamental changes, both in the product it offers and the type of consumer it attracts. These changes are particularly apparent in England, where association football (soccer in the U.S.) was invented. Some of the best club teams in the world compete in England⁵, and the English Premier League, the nation's top division, has one of the most international followings of all football leagues.⁶ It is therefore no coincidence that the English Premier League has experienced many of the fundamental changes replete throughout the industry. England –a socially liberal society with a resurgent market-based economy –reverberated with the impacts of the reinvigorated liberalism of the late 80's and early 90's. The Cold War ended, Thatcherism reignited the English economy, and England experienced a large demographic influx of immigrants. The Premier League itself was conceived in the early 90s by the nation's leading clubs in order to profit from these changes. As such, the English football industry, and specifically the Premier League, serves as a case study of the effects of consumerism in a globalized society, where goods and individuals move freely across borders.

⁴ To place that number in context, the Super Bowl averages about 180 million viewers worldwide each year.

⁵ In 2007-2008, 3 of 4 semi-finalists in the pan-European Champions League tournament were English clubs.

⁶ The League recently passed a resolution to begin playing matches overseas beginning in 2012 to further consolidate its influence in lucrative foreign markets, including the U.S.

When Francis Fukuyama (1993) and Samuel Huntington (1989) penned their now famous, controversial, and competing essays on world political ideologies after the fall of the Berlin Wall, they were both reflecting on a new world order. Both argued, albeit in vastly different ways, that new, previously marginalized forces had replaced nationalistic sentiments in linking societies together. These forces had been repressed in the Cold War period, but were now beginning to impose themselves globally. One such force was an ever-expanding consumer culture, spawned from globalization⁷. Individuals started to define themselves by what they consumed and how their consumption mirrored or differed from their neighbors. With increased social and geographic mobility, individuals began to discover new ways to associate with and relate to others through their consumption patterns. This change was pervasive in English society. Englishmen from across the country began moving domestically to meet the structural challenges of a post-Fordist⁸, de-industrialized economy, and individuals from the rest of Europe and beyond started immigrating to the nation in search of better employment. Owners had started to regard their teams as substantial revenue generators and began to operate their clubs accordingly. The result was unambiguous: a richer and more socially disconnected society embraced a football industry rampant with new capital investitures and alluring social ties.

⁷ It is far beyond the scope of this paper to offer a proper explanation of globalization and its consequences. For the pulp economist, I would recommend *Globalization and its Discontents* by Joseph Stiglitz.

⁸ The Post-Fordist transformation of capital accumulation accompanied the rapid growth in technology and financial markets of the latter part of the 20th century. This system –the dominant in the world today – stands in contrast to the Fordist system populized by the eponymous auto baron. Fordist economies traditionally grew by paying wage earners a salary that allowed them to participate in market. (Idealized by Ford’s intention to allow all of his assembly line employees to afford the car that they were producing.) Today, more workers earn only sustenance wages as global capital markets facilitate investment in areas that return the highest corporate profits. For a more detailed and complex look at post-Fordism, see Amin, Ash (1994). *Post-fordism: A Reader*. Blackwell Publishing.

So what is Globalization anyway?

Many economists, political scientists, sociologists, and philosophers have offered contradictory definitions of the term. Globalization commonly refers to a contraction of markets and the deconstruction of the traditional role of the polity in overseeing trade of goods, capital, and culture. Technological progress and pro-liberalization policies are usually considered pre-requisites of a period of globalization.

The football industry therefore served as the new social capital that Robert Putnam describes as being so important in *Bowling Alone* (1995). As the explanation owns, individuals with higher disposable income were able to combat the dismantling of their social classes through consumption of more prestigious “social” goods. Faced with the threat of losing one’s identity and the quest for identifying new roles in a rapidly changing environment, individuals chose from various social activities to reconnect themselves with their environment. One of the more appealing choices was to attend football matches. Support for a team provided a natural sense of “community” for 90 minutes, longer if one joined a supporter’s club, frequented team pubs, or wore team merchandise. Thus, the football communities in and around stadia across England became sources of extending new communal ties, new kinships, and a new sense of “commonness.” But attaining this sense of community came at a price: ticket prices for Premiership matches accelerated exponentially in the early 1990’s, and this trend continues today.

This was not the first time that football culture had acted as a unifying force in English society or provided valuable social capital. The children of the “Greatest Generation” lacked a way to justify their worth in a manner commiserate to their parents. Enter football and specifically football hooliganism. The act of joining a “firm” or football gang gave these children a vibrant community that engendered a sense of

belonging and thus offered the chance to display their bravado. Hence, in the '50's, '60's, and '70's, football was the proving ground for the disenfranchised⁹.

But the social capital provided by the football industry today differs greatly from that supplied in the post-War era. Today, ironically, it is the economically successful who find themselves isolated. These individuals are either native Englishmen who have relocated in search of better job opportunities or immigrants who have settled in England for economic reasons. They work longer hours than prior generations in jobs that separate them from their neighbors. They face tougher competition in the market place and face disproportionate higher job insecurity and threat of being laid off. As the football industry, similar to any industry that provides social capital, experienced this demographic shift, it found itself facing a dramatically new demand function, one that, for the first time, posited a positive relationship between social standing and demand.

This thesis examines the changes to the football industry that have occurred since the mid 1980's. While a small number of fans have attempted to combat fundamental changes in their sport (like those of FC United of Manchester), most have found themselves impotent to act against the strong financial interests that have invaded English football and, more importantly, have begun to perceive football as providing valuable social capital in a world where globalization and technology have consolidated markets yet isolated individuals. This study hopes to demonstrate how two articles of legislation, from England and beyond, fundamentally changed the product provided by English

⁹ Some critics argue that this conception of the hooligan culture is far too abstract and philosophical. They claim the working class majority involved in hooliganism was just a *prima facie* result of football being a working-class game, and that "more importantly, very few [fans], if any, were searching for anything other than a good time" (Brimson 2001). However, such an argument only attempts to disguise the same sociological concept: an opportunity to find common ground for social interaction in a defined society. Either viewpoint, participation as a sociological result of post-War factors or as a good time with the mates, suggests a non-replicable and powerful in-group out-group relationship that strengthened community ties.

Football. The two key articles examined herein are the Taylor Report (1990), which revolutionized the fan experience, and the Bosman Ruling (1998) –or more precisely series of rulings –which revolutionized the product on the field. This thesis study argues that these two legislations resulted from the pressures of globalization and reinforced the changing role that the football industry was beginning to play in English society. As football is one of the pre-eminent entertainment industries, this thesis contends that as the role of the entertainment industry changed, so had the demand for football changed. Technically speaking, it has gone from being an industry offering an *inferior good* geared towards local supporters to one offering a *normal good* of the highest quality football to the global market. It is an industry that has gained a new, white-collar fan base at the expense of its former blue-collar fan base. Finally, it is an industry that has a fan base that prefers winning to nationalistic sentiments.

The thesis proceeds in the following manner. In the next section, the history of the two legislations and their impact is discussed. Then, I review previous economic literature on demand for football as an economic good. Fourth, I introduce an econometric model and discuss its methodology and the identified variables. Fifth, I discuss the results of this model and propose alternative models for further investigation. Sixth, I offer an interpretation of the results and give specific attention to how the results impact those disenfranchised by the football industry.

II. Historical Evidence

In the minutes before their 3:00PM kick-off on April 15, 1989, Liverpool Football Club and Wolverhampton Wolves Football Club were preparing for their Football Association (FA) Cup semi-final match at Hillsborough Stadium in Sheffield. As the game was set to begin, Liverpool fans, still unable to enter the stadium in a timely fashion because of an insufficient number of ticket turnstiles available for their use, created a bottleneck outside the Ground. The supervising police decided haphazardly to open a side gate typically reserved for exiting fans in order to alleviate the congestion. Fans sped through the freshly opened gate without displaying their tickets and rushed into the stands. The Liverpool section quickly became overcrowded, and fans at the base of the stand were crushed between the throng of the arriving crowd and the iron fences that surrounded the pitch. Ninety-six individuals were trampled or suffocated to death in what would become known as the Hillsborough Disaster.

A national outcry after the incident compelled Parliament to demand a formal inquest into the events at Hillsborough with the intent to uncover what allowed such a tremendous loss of life to occur. The Report by Lord Chief Justice Peter Taylor, released in January 1990, was the consequence of this inquest. The report found many causes for the fateful events of the previous April, and, more importantly, suggested that these causes could be found at most stadiums across the country. The report singled out old, un-refurbished stadia, poor facilities, and a poor leadership concerned more with preventing another incident of fan encroachment on the pitch than fan safety.¹⁰ The

¹⁰ While never directly referenced in the final Report, the repercussions of the 1985 Heysel Stadium Disaster at the European Cup Final in Brussels are evident in Taylor's document. Taylor makes multiple references to a football leadership, from the FA down to the club-level, which was more concerned with pitch invasion than anything else. The 1985 tragedy also involved Liverpool fans and resulted in the deaths

report called for, among other structural changes, the replacement of the standing terraces¹¹ with all-seated bleachers at each of the 92 professional stadiums by 1993.

The publication of the Taylor Report was not the first time that a panel had reviewed crowd safety and control at English football stadia. Eight separate inquests had been made previously on the topic, the first one in 1924. The most recent report had been issued only four years before Taylor submitted his findings in 1990. Justice Taylor himself noted in the report that his conclusions were not original. “I appreciate how easy it is to criticize with hindsight and that a new situation can always arise in human affairs which has not previously been envisaged. But many of the deficiencies at Hillsborough *had been envisaged*” (Taylor 1990).

The Taylor Report proved to be pivotal in motivating the FA and its member clubs to react and redefine the attendance experience. There are many reasons why this time it was different. Justice Taylor’s report was well written, and it offered concrete, implementable recommendations. The FA feared that anything less than a full-flung response to the Hillsborough tragedy would put it at further odds with UEFA. Also, a booming economy allowed individual clubs to regard the changes as an ideal way to capture a different, more profitable type of audience than they had had traditionally attracted. As Anthony King argues in *The End of the Terraces*, English football needed to “establish a relationship with its fans which was typical of other businesses; football fans had to become ‘customers,’ while football clubs became leisure services which had

of 39 spectators, mostly supporters of the opposing Juventus of Italy club. The tragic events unfolded after the Liverpoolians had broken down a retaining fence. The Heysel disaster resulted in England being banned from all European competitions for five years, and English Football, at all levels, hoped to prevent any similar incident from further upsetting UEFA.

¹¹ In 1985, terraces were part and parcel of the match day experience. These standing-room only stands permitted fans free movement and encouraged voicerous, rowdy crowds. The most famous terrace was Liverpool’s Spion KOP, named for a pivotal hill taken by the English in South Africa during the Boer War. In its day, Spion KOP could hold over 25,000 spectators.

to compete for these customers' patronage like any other business" (King 1998). The Taylor Report offered them a morally grounded way to restructure their business models. Further, this moment coincided with the leading clubs' attempt to start the super-league Premiership. Thus, these clubs found themselves confronted with a significant opportunity to capture a larger market share and ensure the success of their new endeavor. However, none of these arguments, especially those changes propelled by the improving economy, offer meaningful conclusions as to why the fan base so quickly changed as a result of these changes. Put another way, these arguments are supply-sided. They offer answers neither to why the demand for top-level football in England changed, both in quantity demanded and the socio-economic distribution of match attendees, nor to how a club's long-term demand expectations were redefined with the advent of the Taylor Report.

It would have seemed likely that removal of the terraces would have only affected those with a strong aversion to the idea of all-seated stadia, those fans who obtained significant less utility from sitting than standing. For at its most basic level, all-seated stadiums are just a form of crowd control. They provide an easy method of quantifying the exact number of fans that are allowed to enter a bleacher. Fans can still stand at their place (and many still do).

The reality, however, is that this change played a far more significant role in changing the demand for English football. Sociologist Carlton Brick offers a plausible solution to the question when he contends that, post-Hillsborough, the police, the FA, and the clubs took it upon themselves to "discipline, regulate, and criminalize particular expressions of the match-day carnivalesque" (Brick 1999). He states that the instauration

of all-seated stadia became “the key symbol of this criminalization” (Brick 1999). Under this logic, the all-seated stadia acted as a signaling mechanism. It pushed fans to change their expectations about the match-day experience at a far more primitive level than just whether or not they wanted an assigned seat. The passive feelings of discomfort engendered by the stadium changes were reinforced by active antipathy by the club owners and the authorities towards the traditional fan base. Since the post-war period, attendance at matches had been diminishing; club owners saw the Hillsborough recommendations as an opportunity to counteract the trend. The message was clear: the fan fashioned in the classic model was *persona non-gratis*. This complex relationship exacerbated the effect of the physical changes of the stadiums and other supply-side changes by having precisely the type of fan that was not wanted by the clubs fans self-select to stop consuming football. Starting in the 1990’s, white-collar fans and families would attend while blue-collar supporters would begin distancing themselves from the match-going culture. In other words, dedicated fans started being replaced by wealthier spectators at matches; and traditional fans were substituted out by consumer-spectators.

Many of these white-collar fans lacked the same strong ties to their local top-flight team. In some instances, they had transplanted themselves and their families from their hometowns to other parts of England. Others were recent immigrants who had come to England to pursue job opportunities. Thus, the idea of “local” players developing into first-team regulars was far less appealing to these new football consumers than their predecessors. These consumers had no specific affinity for local talent; they preferred to watch the highest quality football available, irrespective of its origin.

Player Migration

The Bosman Ruling in 1998 extended the effects of the Taylor Report by allowing fans to watch higher quality football in England while further distancing the blue-collar fan base that had historically supported the clubs. Jean-Marc Bosman was a Belgian footballer that started his career with the Belgium 1st division club RFC de Liege. After a fall-out with the club, he attempted to transfer to various 2nd division French clubs in order to continue playing. However, Liege would not allow him to play in France without receiving an exorbitant transfer fee, which the club contested would defray the costs of his years of training in the club's farm system. This large fee ostensibly prevented Bosman from playing competitive football outside of Belgium. Bosman challenged his team's legal authority to make such claims, and the European Court of Justice eventually heard his case. After multiple lengthy proceedings, the Court found in favor of Bosman and, more importantly to the general football community, decided that players were entitled to free movement within the European Community¹².

The Bosman Ruling redefined the concept of the local team. After Bosman, teams fielded sides with numerous international stars.¹³ With fan bases that came from all over England and the rest of the globe, teams began to account for and become representative of their diverse audiences. Every international star signed by a club would not only improve on-field performance but also increase support from football fans of the star's particular nationality. Teams like Arsenal and Manchester United became representative of new "areas." They no longer restricted their view of their fan base to

¹² The ruling found that football players were not exempted from Article 48 of the EEC Treaty. Previously, national football leagues were able to limit the number of foreign players on a domestic club.

¹³ Chelsea Football Club started the first team completely composed of non-English born players in 2000.

North London or East Lancastershire but to the world at large. This new “glocalization” became a major component of English Football post-1998 (Robinson 1992). Teams began embarking on lengthy off-season tours to capture fan markets in Asia, Australia, and North America.

Football geographies simultaneously lost their old identities and gained new ones. Stadiums like Old Trafford and Anfield became symbolic homes to both the nationwide and worldwide following, *and* lost their original context in their home neighborhoods. In a nutshell, this thesis study attempts to explain the new football geography as a product of an evolving fan demographic by evaluating the effects of stadium changes and player displacement on fan support, which it measures by match attendance.

III. Literature Review

Historical Findings and their Limitations

As King (1998) writes in his book “The End of Terraces,” quantitative research in English football has been bogged down by assumptions that date from a prior time. King notes that while hooligan culture has given way to a business culture, social scientists have been rather slow to embrace this change in the game’s motivation. This romanticization of hooligan culture that pervades academic work can be seen as a result of the same romanticization that is present in mainstream thought. This same attachment to a past made books like Horsby’s “Fever Pitch” (1992) best sellers and films like “The Football Factory” (2004) box office hits. While many academic papers pay homage to a defined and historically important time in England’s not-too-distant past, they often ignore the state of the game today. It is not until recently that economists began to develop models that account for the factors that are particularly important to today’s football market. Nonetheless, as the older studies offer a starting point in any demand determinant analysis, they should not be ignored.

In the context of a post-WWII English society, English football was found to be an *inferior* good (Bird 1982). Bird’s data showed that individuals in the 1960’s and 1970’s were less likely to attend a match for each additional dollar of income that they earned. This sort of analysis made sense at the time. The demand for match attendance in an environment of numerous stadium disasters with large numbers of fatalities would not have followed the demand for other entertainment goods (i.e. the opera or a theme park) where safety fears and hooligan firms (read: gangs) would have been less prevalent. Sloane (1971) demonstrated that profit maximization was not the chief goal for team

owners at the time, as least via match ticket sales. Sloan noted that club owners usually felt an affinity for their club and therefore were less concerned about their bottom line. And as Neale (1964) first stated in his seminal work in demand for sports and Borland (2003) reminds us, the prime objective is chiefly a maximization of “fan interest” (Neale) and must take into account both “direct and indirect” (Borland) products that result from this interest. For the purposes of this study, I ignore the indirect products and treat other direct products (i.e. televised games) as competing substitutes.

Andrew Zimbalist in his book “Baseball and Billions” (1994) argues that this “fan maximization” must be extended even further to include personal benefits garnered by the owner through his role with the team. Zimbalist shows total maximization by the owner to include total portfolio maximization (how his ownership of the team affects his other investments)¹⁴, potential for entry into other markets (most notably television)¹⁵, and personal standing within the community¹⁶. Zimbalist’s analysis is probably the most poignant today; however, in England over the past 15 years since the Taylor Report, maximization of profits by direct products has clearly gained prominence.

¹⁴ Manchester United owner Malcolm Glazier is able to cross-promote United and his other team, the Tampa Bay Buccaneers, in both England and America. United has played matches at the Buccaneers home stadium, and the Buccaneers have been short-listed to play a regular season game in England in the coming years.

¹⁵ Unlike in America where regional sports networks compete for broadcasting rights, in England national networks show all Premiership games that are televised. However, many top clubs (i.e. Manchester United, Liverpool, Chelsea, Arsenal) have their own premium networks. These networks carry historically important games and provide exclusive insight and interviews. They have proved to be popular both in England and abroad.

¹⁶ An example of how an owner might value his place in the community can be seen through Newcastle United’s owner Mike Ashley. Ashley is known to wear his team’s jersey most days, and he proudly sits with team supporters at away matches.

Inability to Account for Price

While economic theory would contend that the most important variable to explain demand is naturally the price of the product, sports economists have historically shied away from using this variable since complex-pricing schemes inevitably obfuscate the actual price of attendance. Virgin Money recently attempted to create a pricing metric that would account for these pricing schemes, but this data source only begins with the 2003-2004 season. However, future studies might be able to benefit from such data, which would take into account additional expenditures such as parking, gas, and food to give an accurate depiction of the basket of goods that compose a match-going experience. In the meantime, we can look at the body of work dealing with other determinants that are tied to match attendance.

Match Quality

Clearly one of the most obvious determinants for match attendance is the quality of the game on display. Nearly all articles use a semi-log empirical model to examine how match quality accounts for demand. The match's quality is usually judged to be a combination of the home and away team's talent and, more controversially, the competitive balance in the match. A team's talent is normally calculated through a combination of its wage bill (with the assumption that higher salaries equate to better players), its short-run success (place in the standings in the current year), and its long-run successes (finishing position in league and supra-league competitions in previous years). Sugarman (2005) remarks that away team talent might be even more important than home team quality. In Simmons and Buraimo (2006), quality is assessed through the aggregate wage bill for both teams divided by twice the Premier League's average wage

bill and by the aggregate points accumulated in league play for both teams divided again by twice the number of games played. Simmons and Buraimo do not account for long-run successes in their study. They also ignore the effects of large draw, “Big 4” teams such as Manchester United, Arsenal, Chelsea, and Liverpool, who draw significant crowds to away matches even if their opponent is geographically far away. These teams’ perennial successes (even when they are faltering during a particular season) incite and excite the other team’s fans and consistently pull larger numbers of spectators into the stands.

Garcia et. al. (2003) does a better job looking at these omitted factors in its study of Spain’s *La Liga*. This league is of comparable talent and size to the English Premier League. Garcia finds that recent performance is important, somewhat validating Simmons and Buraimo’s choices of explanatory variables, but he also includes variables that isolate the attendance for the away matches of Barcelona and Real Madrid, the two Spanish clubs that most closely resemble the “Big 4.” Not surprisingly, Garcia finds their presence to stimulate attendance far beyond what would be expected by their slightly-better-than-average yearly success. This result offers credence to the argument that attendance choices are strongly influenced by long-term success.

Simmons and Buraimo (2006) choose to ignore competitive balance in their final analysis after showing it to be insignificant in their results. While some economists have historically shown that competitive balance is a meaningful determinant, most notably Peel (1992), more recent studies have eschewed the variable, as Borland describes in “Demand for Sport” (2003). Such a change in the importance of competitive balance may be able to be accounted for historically: Peel’s data comes from the 85-86 campaign

–before the Taylor reports mandates fundamentally changed the composition of match attendees.

Experience

Whereas the actual game being played provides 90 minutes of entertainment, some individuals choose to attend matches based on the utility that they obtain from the entire match-day experience. For others, the *hors competition* experience factors into their decision to attend in varying degrees. This experience includes far more than the goals scored or home team victories witnessed. Certain economists have attempted to examine which of these factors have the greatest effect on demand. One of these crucial factors was found to be *player movement*. Kahane (1997), for instance, showed a negative relationship of nearly 1 percent between the percent change in the starting lineup from year-to-year and match-day attendance the future year in Major League Baseball. Such a complete study has yet to be conducted for English football, since the Bosman Ruling is still a relatively new phenomenon.

To Sit in the Stands or To Watch on My Couch: That is the Question

Numerous studies have attempted to look at the substitution effect of television on match attendance. Theoretically, one could argue that TV would reduce the number of attendees by giving them the opportunity to experience the game at home for a lower cost. Conversely, television might increase awareness of a team, and therefore increase the market size. Thus, even though a smaller percentage of fans will attend games, the increase in the total number of fans for the team makes the net result of television broadcasting ambiguous.

Empirically, Allen (2004) shows that satellite television has reduced attendance at matches by nearly eight percent. Simmons and Forrest (2006) argue that the English football leagues cater to television by placing certain games on weekdays. They show how these weekday games are significantly less attended than weekend matches, and that some of this decreased attendance is because the game is being broadcasted on television. Garcia et al. (2003) show a significant negative relationship between increased match broadcasting and match-day attendance in Spain. However, Szymanski et al. (2004) argue that this negative relationship is small in England. They also argue that in the context of a team's desire for profit maximization, the team's increase in its overall profits from television unambiguously offsets the small decline in match-day attendance. Szymanski notes the steep acceleration in fees paid for broadcasting rights that started in the late 1980's does not appear to be slowing down, suggesting that the aggregate effect is beneficial to clubs.

Geographic Determinants

Hart et. al. (1975) first showed that higher attendances could be correlated to larger metropolitan areas. This result was significant and controversial because it showed that an open league structure with a built-in promotion and relegation system does not inherently position teams in their most economically efficient locations. Likewise, Bobruff (1997) demonstrated that in the MLB additional teams in the same market negatively affect attendance. Meanwhile Szymanski shows that distance squared is highly significant in determining attendance at a football match in England.

Simmons and Buraimo (2006) use this information to construct a highly original model that examines attendance as a function of the total population within ten-mile radii

of the home ground and of the total fraction of that population that is also within a similar radius of one or more other teams. The authors use GIS mapping technology along with data from the 2001 census and attendance figures from the seasons 1997-1998 to 2003-2004. Simmons and Buraimo find that total population positively affects attendance and a higher multi-team fraction negatively affects attendance. Their result can be interpreted as a sign that teams do compete for fans, especially those in close geographic proximity. The implication of their study –that today’s fans are consumers and teams are competing for their patronage –serves as a motivating factor for this paper.

IV. Theory

I assume that owners are rational and that they wish to maximize their overall portfolio of investments concerning their club as Zimbalist (1994) argues. Unlike in closed leagues where total fan maximization is sufficient, in open league systems perennial success is a necessary corollary to portfolio maximization. In other words, while winning the league may not be a dominant strategy for every team, avoiding relegation is a necessary condition for overall portfolio maximization. Since a team's success is dependant on other teams' successes, a team will form their own expectations about their success based on their expectations about other teams' successes. In practice, this means that owners of a club like Bolton will not necessarily start the season intending to win the league; however, they will want to avoid relegation¹⁷.

We can model the maximization strategy faced by the average owner of a Premier League club:

Where positive returns to investment = f (total fan interest)

Where positive returns to investment_{year t + 1} = f (finishing position_{year t})

[Max| Portfolio] = f (max| total fan interest + min| cost of avoiding relegation)

A model for top teams like Manchester United, Liverpool, Arsenal, and Chelsea might look differently. These teams are more or less expected to reach European competitions each year, and a failure to do so would lower the international audience, a key component of these teams' fan bases:

[Max| Portfolio] = f (max| total fan interest + min| cost of avoiding relegation + min| cost of securing berth in European competition)

¹⁷ Thus, in English football, no team will ever willingly take a strategy like Major League Baseball's Florida Marlins.

What do these portfolio maximization strategies have to do with the forty-year fall in attendance, the recently revitalized English economy of the early 1990's, and the Taylor Report and Bosman Ruling? I argue that they economically reinforce the sociological explanation by Brick (1999). The changes in the economy allowed teams to redefine their profit-maximizing strategies to combat the fall in attendance, and club owners concluded that their dominant strategy was to redefine their place in the market as a good consumed predominately by higher socio-economic groups. The events at Hillsborough and the subsequent Report gave them the excuse, the new economy, an enticing strategy, and Bosman, a corollary to that strategy. This empirical study attempts to look at how effective the clubs were in redefining the type of fan that attends English Premier League football matches. It does not claim to show the results of these owners' business decisions on their total portfolio maximization. Returning to the assumption that owners are rational, I consider a successful demonstration of a changing demographic as evidence that teams have been successful in their efforts.

V. Data and Empirical Strategy

In this section, I propose a testable model to investigate the effects of globalization and club owner's strategies on match attendance. I address the benefits and drawbacks of the variables used in this model and discuss some of the issues resulting from the model's functional form.

Ideally, one would be able to note the changes in attendance probabilities of fans and compare these changes to fans' changing socio-economic positions in English society. Consider the following:

$$(1) \text{ Prob (Attendance)} = \alpha \text{ socio-economic position in England} + \text{other factors} + \varepsilon$$

While data are not available to test this question empirically, data are available to estimate a closely related equation that attempts to capture the same relationships as equation (1). In equation (2), I use census bureau information to get job-type data on English fans in the 10-mile area surrounding each team's stadia. I make the assumption that an individual's job-type offers some insight into their socio-economic class. I also employ Premier League statistical data to determine the compositional make-up of each team as a percentage of British, European, and non-European players. I use annual percent attendance figures to substitute for attendance preferences. Thus, equation (1) becomes:

$$(2) \text{ Percent (Attendance)} = \alpha \text{ job classification} + \beta \text{ European players} + \text{other factors} + \varepsilon$$

In what follows, this study estimates equation (2) to examine the issues brought forth in equation (1). I pay close attention to the economic limitations of equation (2) and the statistical limitations of its functional form in both this section and the analysis section. I now address the role of the key explanatory variables and the control variables in

estimating this result.

Key Explanatory Variables

In attempting to explain the effects of globalization and owners' business decisions on the demand for match attendance in English Football, I use empirics to look at the two factors previously discussed: the shift from a blue collar fan base to a white collar fan base and from a nationalistic fan base to one that emphasizes on-field successes. For the job-type factor, I employ a term that signifies the percentage of white-collar, presently employed individuals in the 10-mile area surrounding the club's home ground. I attempt to show correlation between white-collar and blue-collar individuals and attendance. For the fan type factor, I use the percentage of a team's players originating from EU countries. This term presupposes that teams will favor domestic players over international players of equal quality. Therefore, acquiring more players from Europe suggests a conscious decision by the club to place on-field successes over nationalistic sentiments. In the context of a profit-maximizing firm, it suggests that fans prefer success on the pitch to watching homegrown talent.

Control Variables

There are other factors that affect the decision to attend a football match. One is the distance to travel to the stadium. Those clubs located in areas farther away from other teams are likely to have a more difficult time filling their away bleachers, *ceteris paribus*, because away teams' fans (who can account for a significant portion of total tickets sold) should have more time-consuming and potentially more costly match-going

experience. I will use distance and distance squared in my model to account for this effect.

The quality of the teams involved has a role in deciding whether or not to attend a match. Since all teams play each other at home and away once during a season, each team has the same basket of matches over the course of the year. Therefore, attendance can be partially attributed to home team quality. This is measured by the team's finishing position in the two previous seasons.

By allowing their matches to be televised, teams can be said to create their own competition that negatively affects demand to go to the stadium. Teams are compensated financially for this, and yet television does lower the incentive for fans to attend the match. Attending a particular match also is affected by the day of the week on which the match is being played. It is unquestionably easier for fans on the average to attend matches on weekends as opposed to weekdays. More successful teams, particularly those in the Big Four (Arsenal, Chelsea, Liverpool, and Manchester United), have a disproportionate number of their matches on television and on weekdays (since there are no regional sports networks, all televised games are broadcast to a national audience). Thus, I attempt to capture the effects on both television broadcasting and weekday matches with a dummy variable that captures fixed-effects in Big Four team attendance. However, the predicted effect is ambiguous since these teams have an inherent inertial fan base and television could add to the aggregate number of supporters for these teams even if a smaller percentage of the total fan base will choose to attend a live match over a televised match.

The more top-level (Premiership) clubs located in a particular area around an

individual's home, the less the chance that a particular club will be an individual's choice team. Thus, the more teams located in a region should negatively affect attendance. I create a local "substitutes" factor to address this issue. This variable represents a logarithmic scaling of the overlapping of other teams' 10-mile concentric circles. It takes on values between 7.8 (Arsenal) and 0 (Ipswich, Middlesbrough). I also create a variable relating the total population to attendance again using 10-mile concentric circles. Positive correlation is expected for this variable.

With this analysis of the explanatory variables set forth, I now turn to the various issues concerning this model that are immediately apparent. In the following pages, I explain the rationale behind the model's form and offer some responses to common objections.

The Price is (not) Right

Studies addressing consumer demand traditionally consider price to be the most important factor. However, consistent with prior work in sports economics, price differences between stadiums and within stadiums are not considered in this thesis study. The reason is that price as an explanatory variable for attendance is very problematic. Pricing schemes are incredibly complex as teams use confusing price discrimination tactics to maximize revenue. More importantly, ticket prices do not account for the actual costs of attending a match. Match attendance is composed of a basket of goods including travel, parking, tickets, concessions, etc., and each of these items has variable prices. Ticket prices suffer from problems of simultaneity as well: in the short-run, teams cannot add seats to or change the capacity of their stadiums, but they can alter their pricing structure on a yearly basis. Too few (or too many) people attending matches will

cause teams to alter their pricing schemes to obtain attendances closest to the profit-maximizing level in the eyes of the ownership.

Tobit Modeling

The model employs a Tobit estimation procedure. Tobit estimation procedures are applied when the normal distribution of the dependent variable is truncated. In this paper, the attendance data suffers from right-sided truncation. A team cannot allow more than 100 percent of its capacity to enter its stadium even if additional demand is present. Whereas the marginal variable cost of having an additional spectator attend a match is small –a proportion of the wages for additional ushers and security personal –until it reaches 100 percent capacity, beyond full capacity, the fixed costs associated with stadium construction or renovation are quite high. While teams can and do renovate their stadiums or build completely new grounds in the long run, the data in this paper come from the time period right in the aftermath of these two legislations. Therefore, the ability to increase supply to meet the hypothesized new demand function based on these two legislations would not have been possible.

When employing a Tobit model, it is necessary to calculate the marginal effects of each variable. In employing the marginal effects approximation, we are able to analyze the instantaneous change of each explanatory variable on the dependent variable at the sample mean. The results of this marginal effects approximation give the best statistical approximation of the effects of each explanatory variable on percent stadium attendance. All results given in this paper are “marginal effects approximations.”

Substitution of Job Type for Socio-Economic Classification

In an ideal data set, one would have the ability to quantify the number of fans that support each club and would interview a random sampling of the fans to obtain a statistical breakdown of the socio-economic distribution in this fan base. Unfortunately, no precise accounting of fans exists for any of the Premier League clubs, and such a survey is beyond the scope of this study. Under these conditions, the UK Census Bureau's Population and Socio-Economic Status data set serves as a usable substitute. The data set is vast and quite detailed, allowing analysis down to the household level. It is also conveniently accessible in formats that facilitate spatial analysis. The data set does have numerous caveats in the context of this study. In the subsequent paragraphs, I address and attempt to account for these caveats.

First, I try to overcome the difficulty in determining fan affiliation with the use of GIS modeling. GIS systems allow for the population of the area surrounding a team's home ground to be calculated. This population can then be assigned to the home team as has been done in previous papers in the field. While many fans of a team do come from the team's home milieu, there are surely non-local supporters in the 10-mile concentric circle that has been devised and local club supporters outside of the 10-mile area. This is especially true in post-1990 England, where domestic migration is all the more common. Thus, this still leaves a fundamental problem with the data set. Secondly, a job type is no longer easily analogous to an individual's socio-economic status. There are countless reasons why an individual's job does not have to be commensurate with their socio-economic standing. Further, it is undoubtedly an overgeneralization to contend that blue-collar professionals will engage in rowdy behavior at football matches. However, I contend that they have a higher propensity of filling that societal role. The assignment of

white collar or blue collar to an individual depends on their job type as specified by the updated census demographic divisions of 2001. I consider “Managerial and Professional Occupations” and “Intermediate occupations” to be white collar in nature; meanwhile, “Routine and Manual Occupations” are considered to be blue collar¹⁸. This classification could be considered arbitrary in its own right, but it no more so than the assignment of breaks in income levels to determine white or blue collar individuals. I test robustness of the chosen break in the analysis section. I also offer an alternative variable that compares intra-England GINI Coefficients to test the robustness of my methodology in the analysis section. Third, any study that addresses a rightward shift to an individual’s budget constraint, as is contended the new football fans have experienced, must examine the income effect. At a certain point, high income individuals are going to demand more prestigious goods than football matches. This issue is further considered in the analysis section.

Data Source and Methodology

The UK Census Bureau published its most recent data for England and Wales in 2001. This census was the first to be completely digitized and to be made available for general use on the census bureau’s web site. Statistical categories for the data are available in various different population sizes –and the most useful for this project was its smallest output size, called the “output level” and comprised of 100-200 households per unit. These data allow for highly accurate and geographically significant analysis of the data; however, for privacy reasons, it does not allow for actual salaries to be released.

¹⁸ The methodology of these demographic classifications can be found on the UK Census bureau’s statistical methods sections: www.statistics.gov.uk/methods_quality/ns_sec/class_collapse.asp/. April 1, 2008.

Adults of working age not in the workforce –voluntarily or not –were not included in either category.

The UK Census Bureau also publishes *shapefiles* of its data, allowing for the data to be geographically constructed with GIS mapping software. This process was completed using 10-miles radii around stadiums to denote the home team’s most important market¹⁹ (see *Appendix I*).

Additional data are taken from the FA Premier League web site in regards to average attendance per season. Data on players’ countries of origin come from Major League Charts. Simmons and Buraimino (2006) also contribute data sets that provide some of the control variables.

¹⁹ The choice of a 10-mile radius stems from previous work in Sports Economics using GIS mapping software. Five and ten mile radii were used, and results appeared most significant at the 10-mile level.

VI. Analysis

Preliminary Investigation

As I argue above, globalization and club owners, aided by certain key legislations, has disenfranchised the poorer classes in England by changing the traditional match-day experience. I argue that those in higher socio-economic classes are more likely to attend matches today as a result of these changes. I also contend that, in light of recent migratory patterns, nationalistic tendencies that traditionally directed support towards homegrown talent have been mitigated.

A casual examination of the data (Table 5.1) reveals the impact of globalization and the Taylor and Bosman documents on the English public. The mean percentage of white collar individuals in the 10-mile area surrounding a team's stadium was 41 percent, fully 10 percent higher than the mean percentage of blue collar workers. At this point, more Englishmen engage in administrative or technical work than in traditional labor-oriented jobs.²⁰ Along with this structural change in the labor force, football stadiums are experiencing historic highs in attendance (Appendix A). The mean percent attendance at stadiums was slightly over 92 percent, with several clubs experiencing average attendances actually surpassing their advertised maximum capacity.

As the quality of play in the Premier League has increased, acquisitions of non-England players have become the league standard. All clubs have at least one player that is not from the UK or Ireland, and English players are minorities on multiple clubs.

²⁰ One issue that needs to be considered is a classification error leading to a measurement bias. However, the social-economic breakdown used in this paper follows the breakdown used by the very demographers that produced the data set. If they seem satisfied with the classification system –since they devised it –I have little recourse but to trust that it is a valid methodology for a socio-economic subdivision.

Table 5.1:				
Summary Statistics				Obs = 140
Variable	Mean	SD	Minimum	Maximum
Percent Capacity	0.92	0.1	0.6	1.2
Total Pop	1577692	1290132	190696	4169451
Local Substitutes Factor	3.12	2.81	0.000058	7.88
European Players	25.4	14.75	0	61
English Players	49.74	15.26	14	94
Distance Squared	3.29	1.49	1.73	7.37
Percent Skilled Job Position	0.42	0.066	0.33	0.54
Percent Unskilled Job Position	0.32	0.051	0.14	0.4
Highly-Skilled Professionals	104514	119840	9611	370164
Regional GINI Coefficients	0.32	0.026	0.27	0.35

Main Results

Equation (2) suggested in the data and empirical strategy section is tested using these data. The results of this regression are found in Table 5.2. The linear relationship between job type and attendance is positive but statistically insignificant. Therefore, non-linear relationships are examined, and the second order condition of this function is found to be highly significant, suggesting a high order relationship between the demographics of an area and attendance. The skilled job type variable for white collar workers has an elasticity of 14.02, and the elasticity for skilled job type squared is -17.20. This result contends that attendance increases with additional white collar workers until the socio-economic make-up of the community becomes nearly 50 percent white collar. At this point, attendance begins to drop off.

Table 5.2:
Panel Data Estimates of the Relationship Between Socio-Economic Breakdown
and Match Attendance

Regression	1	2	3
Skilled Job position	0.09 (0.12)	5.86** (2.03)	14.02*** (1.8)
Skilled Job position Squared		-6.67** (2.34)	-17.2*** (2.18)
Unskilled Job position			-.32* (0.19)
Total Population			5.91*** (0.97)
Final Position in Standings			-0.00082 (0.0013)
Local Substitutes Factor			-0.04*** (0.0089)
European Players on Team			-0.00049 (0.00043)
Relative Distance from Other Team			2.97* (1.63)
Relative Distance from Other Team Squared			-4.6 (4.16)
ManU, Chelsea, Arsenal, Liverpool Dummy			0.066** (0.021)
Promoted Team Dummy			0.054*** (0.017)

This result has multiple implications. First, there appears to be an income effect to attendance. When more individuals in a community are employed in white collar, well-paying professions, different entertainment options seem to become more important to these individuals as they attempt to gain social capital. Second, there appears to be a distributive effect on attendance. Football appears to be a preferred entertainment choice for individuals in communities with greater parity in the relative numbers of white collar and blue collar workers. Both of these implications are examined in the alternative methodologies section below through the use of regional GINI estimations and through

the percentage of highly paid white collar professionals for each of the concentric circles. These results confirm the above intuition: members of the highest socio-economic bracket are not as interested in football as other entertainment choices, and socio-economic diversity in a community makes match attendance among white collar individuals more attractive.

The composition of the team –as a percentage of European, non-British players – is found to have a negligible effect on attendance. The result is marginally negative and insignificant. This suggests that the current fan base does not make its decision to attend a match based on the origin of the players coming from anywhere in the European Community. This result reinforces the results discussed above: in an industry now frequented by wealthier individuals, geographies of support are being redefined. Local affiliation with players seems to have lost some its importance in determining fan support and attendance.

Other Results

All other variables appear to offer results that are consistent with expectations, except for the variable concerning relative distance between stadiums. The distance-squared term should account for measurement error in the inability to differentiate between home and away fans at a game. Teams that require farther travel should have a smaller average attendance, since away fans have less incentive to travel further (and therefore pay more) to see a match. Since the distance (non-squared) variable is positive and significant with an elasticity of 2.97 and the distance squared variable is negative with an elasticity of -4.60, the relationship between distance and attendance appears to be non-linear and concave. This sort of result has intuitive qualities suggesting that matches

at London stadiums are more attractive to away fans than matches in the countryside. These London teams are located in the middle of the distribution of the teams arranged by total distance from other clubs. The general shape of the curve shows that these games are best attended. That London would be able to draw numbers to watch a match is not surprising; *ceteris paribus*, a trip to the capital to watch football is intuitively more appealing than the same trip to a middle-tier city in the Midlands. This result is then supported by the use of a dummy variable for London teams in the main regression. This value is positive and significant.

Corroborating previous research, larger populations around teams increase attendance at stadia. Each additional percent of the total domestic population located within the 10-mile radii increased attendance at a stadium by 5.91 percent, and this result is highly significant.

As expected, spectators are inherently drawn to those clubs that form the economically and competitively superior “big four”. These clubs’ inherent ability to draw spectators to matches accounts for a 6.6 percent increase in percent attendance over the other clubs. This value is noteworthy because it explains three competing characteristics. That these clubs finish perennially at the top of the standings should increase interest in the clubs, but that they feature disproportionately on television and play more games during the midweek should decrease interest in attending their matches. Overall, the added allure of success seems to have dominated the television broadcasting and midweek match effects. Promoted teams also generate additional interest during their first year back in the top flight. These teams enjoy a 5.4 percent increase in attendance over the average, and this result is highly significant.

Regressions are run with finishing position in the league from the previous season and one season before; and yet, these two variables were found to be collinear. This suggests that finishing positions are relatively static. Accounting for this collinearity, the team's position in the rankings is found not to have a significant effect on attendance.

Other Premiership teams acting as substitutes in the immediate area around a team's home stadium negatively affects attendance, as anticipated. A 100 percent increase in competition decreases percent attendance by .04 percent. This result is also highly significant.

Alternative Methodologies

In this section, I test the robustness of the above results by employing alternate specifications and functional forms. I also propose alternate methodologies to address the distributive and income effect concerns discussed in the main results section. These alternative methodologies focus on the problems inherent to the model in identifying white and blue collar individuals and in considering the effects of the open league structure on clubs.

To test the robustness of the percent high income and percent low income variables, I offer alternative functional forms of the model. These forms include non-linear models and Splines.²¹ Second order conditions are imposed jointly for the percent high and low income variables. Cubic functions are also considered. Neither is found to yield statistically significant results. Splines are introduced with four knots each to look for evidence of a piecewise linear effect produced by components of the data for the two key explanatory variables. Neither the "percentage of white collar" Spline nor the

²¹ Non-linear models express more complex, non-static relationships in the data while Splines divide the data into quintiles to perceive any correlation in component parts.

“percentage of European players on the team” Spline yields an economically significant result.

Income Effect

By examining a different cut-off point in determining the white collar percentage of the population, it is possible to address the potential for an income effect in the population. The income effect would show individuals over a certain income level beginning to consume less of a particular normal good (football) and more of a luxury good. As noted above, the number of high-income white collar workers is found to be negatively and significantly related to attendance. The UK Census bureau classifies these workers as occupying Higher Managerial and Professional occupations. This result suggests that as the number of high-income white collar workers increases, these workers may search for alternative leisure activities. These other activities might offer more viable forms of social capital in these communities; however, more likely, these individuals value social capital less than individuals in lower socio-economic classes and instead may prefer more conspicuous manners of consumption.

Distributive Effects

Distributive effects are an important issue to discuss whenever job types or wages are discussed. I find a first-order, positive, significant relationship between the percentage of high income, white collar workers and attendance, suggesting that these professionals are a significant component of the socio-economic class scale that produced the main results²². In English Premier League Football, regional differences must be discussed whenever distributive issues are addressed. Historically, the main “regions” of England have included London, the South, the Greater Midlands, and the North. These

²² These workers are the same used in the income effect discussion above.

regions have historically featured different types of industries and, therefore, may respond to issues of distribution differently. Splines are found an appropriate tool to employ when examining these regional differences. The results suggest that regional differences do play an important role in addressing how distributive effects affect attendance. When generalities are combined, there are positive relationships between inequality and attendance in the Greater London, Greater Manchester, and Greater Birmingham. Put another way, more inequality appears to increase attendance. In contrast, indirect correlation exists in the East Midlands and the North. Intra-England Gini²³ coefficients are available²⁴ and offer a commonly used metric by which comparisons of the distributive effects can be seen in the Census data. Again, Splines are used to analyze the data, and similar regional assessments can be made. Greater London, Greater Liverpool, Greater Manchester, and East Midlands areas experience a positive relationship while an inverse relationship is seen in the West Midlands and the North. The contradictory effects in certain regions in the two measurements can be partially explained by the fact that these two measurements do not evaluate the identical properties. The squared difference measurement (using the UK Census data) looks at how the relative number of each category of job type affects attendance while the GINI coefficient reflects how income proportions affect attendance. For the purpose of this study, I argue that the prior has more relevance. Sociologically speaking, an individual's co-workers and associates will affect his socialization patterns more than his relative wealth. Nonetheless, both measurements offer interesting glances into the effects of the distribution of socio-economic classifications on attendance.

²³ Gini Coefficients are one of the standard measures of inequality. Measuring from 0 (perfect equality) to 1 (perfect inequality), its values provide information on a country or region's composition.

²⁴ Jenkins, S. P. (1999) Analysis of income distributions. *Stata Technical Bulletin*. 48, 4-18

I contend that these income inequality tests in addition the previously-discussed relationship between stadium distance and attendance suggest that there is a strong regional component to the results in general and to the effects of inequality on attendance in particular. Certain regions seem to experience greater attendance when there is greater social parity while others have greater attendance when greater social division exists. These results echo some of the expected consequences of globalization. Some regions will be more affected by the emergence of a more globalized market than others. As time progresses, the effects seen in London (arguably the most globalized region in England) should become more prevalent in the outlying regions. As such, it would be informative to reproduce this research when new Census data are available in 2011.

Effects of Open League Structure

Most professional sports leagues –with the exception of those found in the United States –operate within an open league system. An open league system allows anyone to form a professional team without encountering significant barriers to entry. The system has a hierarchy of divisions that teams move through based on their on-field performance. Teams advance (gain promotion) to the next level division when they finish at the top of their current league, and they drop down (are relegated) to the division below when they finish at or near the bottom of their current league. In addition to these inter-division movements, each professional team participates in non-league competitions against teams from the other divisions. For teams in the Premier League division, these competitions include the Football Association Cup and the League Cup.

The key questions to ask is whether this open league system with *hors* division competition affects fan attendance and, if so, how. The regression results suggest that

final position in the Premier League standings positively affected attendance demand, but, as discussed previously, this effect is very slight. From a profit maximizing perspective, additional spending on players does not yield a significant return on the investment. Since final positions in the Premier League have historically been static²⁵, this result most likely captures inherent predispositions to the more successful teams. On the other hand, promotion increases a team's expected attendance by 3.6 percent, the equivalent to a 10 team jump in the final standings over the course of a year.

A regression was run with clubs facing relegation. Their impending demise brought additional fans to their stadiums as they attempted to stave off relegation. Within the context of the type of competition facing Premier League teams, teams that finished in the middle of the league standings would be the least attractive to spectators. However, fans have no way of knowing the finishing position of their team during the season. Most fans' expectations of their team's finishing position will be higher than its actual position for those not battling to avoid relegation, and those fans whose teams are fighting to stay in the Premiership will be eager to watch their team's every move. Thus, no fans are going to expect their team to finish in the middle of the standings. A regression is run that included a variable for these middle finishers, and as expected it is not significant. Thus, all fans have incentive to support their team and attend their matches throughout the course of the season.

²⁵ Only 5 teams have won the Premier League since its inception in the early 1990's.

VII. Discussion of Findings and Conclusion

In this thesis, I find that blue collar, traditional, match attendees at football matches have been marginalized by Premier League club business strategies and English and pan-European legislations of the past 15 years. I find that these fans have been replaced by white collar, wealthier fans. As noted in the historical evidence section, this change coincided with higher attendance at football matches (see appendix B), although I do not attempt to show any correlation for this point. I discover that these new fans prefer on-field successes to homegrown talent. In robustness tests, I find that the effects of inequality have a strong regional component that is consistent with the general view of globalizing markets.

We can extrapolate from these results that there is a relationship between the type of job held and attendance. In other words, white-collar workers are slowly crowding out blue-collar workers at football stadiums. As white-collar workers typically earn more money than blue-collar workers, we can consider football match spectatorship (at least at the top level) a normal good. We can also consider the industry to be significantly impacted by globalization. That this extremely large industry is a normal good suggests that –in our globalized society of consumption –the large and financially important sports industry is now consumed in higher amounts by the wealthy and the white-collared and in smaller amounts by its traditional audience, the less wealthy, unskilled, working class labor force.

The Bosman Ruling of 1998 granted footballers the same freedom of movement as any other profession. Before this landmark legislation, countries set quotas for the maximum number of foreign-born players that a team could field for a given match. The

English Football Association had set this limit at seven. After Bosman, players from any EU country could play in any other EU country. The ruling caused a large increase in the number of non-UK born footballers in the Premiership as players from around the EU began arriving in large numbers to play in the wealthiest league in Europe. These players were shown to have a nominal effect on percent attendance. While a positive correlation between the percentage of European-born players and attendance would have unambiguously shown that European players are preferred, it would not have inherently demonstrated the normalization of European players in England. Such a positive relationship could have explained a potential fetishization of European players. Conversely, a statistically significant negative correlation would have suggested a preference for UK-based players. However, the results suggest ambivalence towards European players: they are not necessarily preferred or not preferred. This result is important in its own right. It suggests that the football industry has become fully integrated, at least from a pan-European perspective. Fans do not care if their team's composition is primarily UK or European based; they care if their team wins or not. The same test was run of the percentage of non-European players –although their standing in the workforce was not affected by the Bosman Ruling –with similar, insignificant results. While this result does not allow us to answer how immigrants value non-English players, it does allow us to rule out fan-based discrimination in Premiership Football.

Discrimination can come in many forms. While many economists have studied race-based fan discrimination in the past, none have examined the discrimination against European players post-Bosman. Discrimination would be apparent if fans valued homegrown talent over players from Europe. In England, however, this discrimination

does not appear to be present. English soccer fans are fervent supporters of their favorite club, and, to them, any home bias would have pushed the expected marginal cost of preferring a team with homegrown talent (a less successful season) higher than the expected marginal benefit of such action.

The results of this study offer some insight into the football fan confronted with the realities of globalization. Football fans may blindly support their clubs, but they are not blind to market changes and well constructed signaling mechanisms. The football industry was able to refashion their product in a way that made match attendance less appealing to the very group it wanted to remove from its stands. If the football industry can re-brand itself effectively to target and capture a new fan base without great difficulty, other entertainment industries with less loyal followings should find such re-branding processes relatively simple. The results also demonstrate a clear prioritization on the behalf of the new fans: they want to enjoy top-level football and are indifferent to the national aspect of the English League.

Instead of extending the results of this thesis with broader generalizations, I find it more relevant to end where we started: by refocusing on those fans who formed F.C. United of Manchester. What can these outliers tell us about the English football industry in the 21st century? Are they the dawn of a “new order” or just a short-lived expression of desperation? I argue that, regardless of their long-term sustainability, the F.C. United formation was a necessary and important step in the development of the football industry. Its creation demonstrated that seemingly disenfranchised fans could join together and create a club that they deemed worthy of supporting. The successful organization of F.C.

United was a tribute not only to the hard work of F.C. United's founding members but also to the open league structure prevalent in England and the rest of the world.

Open league structures can be equated to markets with (relatively) low barriers to entry. Non-dominant perspectives surface in these types of markets, and it is the market –and the market alone –that determines their successes. In sport, this allows those fans that detest the recent changes in the leading clubs' business models to start their own teams. And these teams do not need to be inherently *hors systeme*. While Northern Premier League teams are multiple divisions below the Premier League teams²⁶, they are still part of the same superstructure. Teams in the Northern League can ascend the ladder of divisions and eventually compete against Premier League teams. While such occurrences are rare, they do happen and serve to vindicate the link between all clubs in an open system. If concerned fans can raise the requisite capital, they can place themselves on equal footing with any other team in England: as a member of the FA.

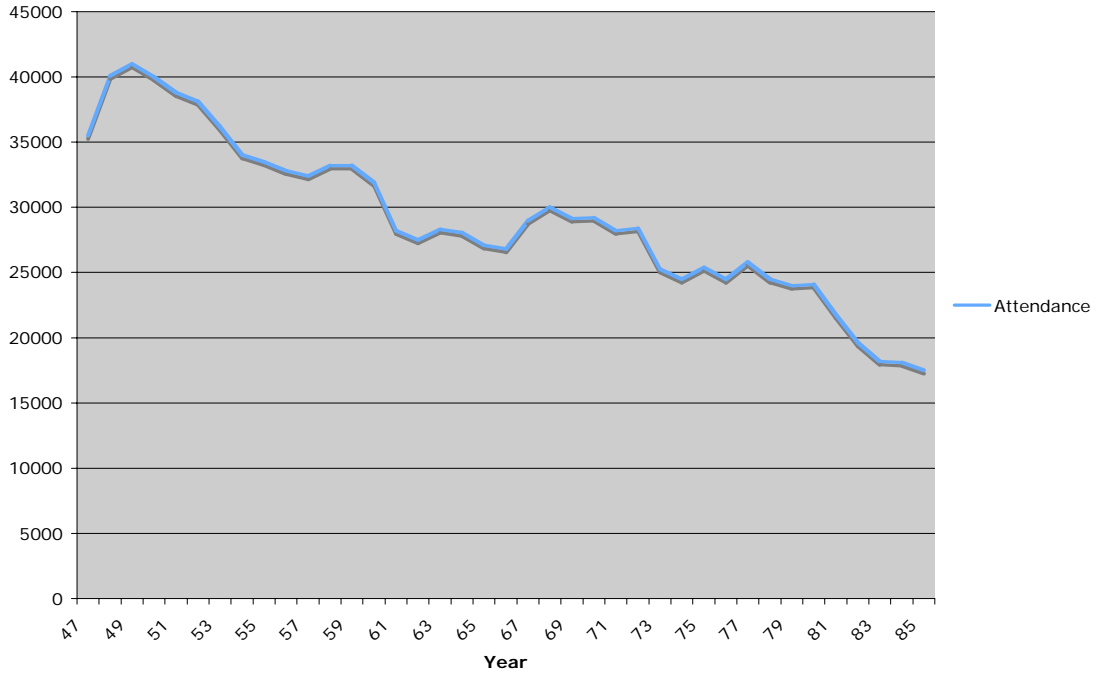
Open league structures in England imbue disaffected fans and businessmen with minority rights in a globalized, commercialized league majority system. F.C. United will most likely never compete directly with their counterpoints at Old Trafford; Manchester United's level of play and economic situation are orders of magnitude greater. But it will be the long-term appeal of both teams that will eventually determine their relative quality. It would be naïve to contend that "traditional" fans without strong financial interests will trump Malcolm Glazier's big business-driven motives. But they could, hypothetically, and this reality allows all fans, of teams big and small, to buy into the football league system in the context of a globalized, profit-driven economy.

²⁶ Six divisions to be exact.

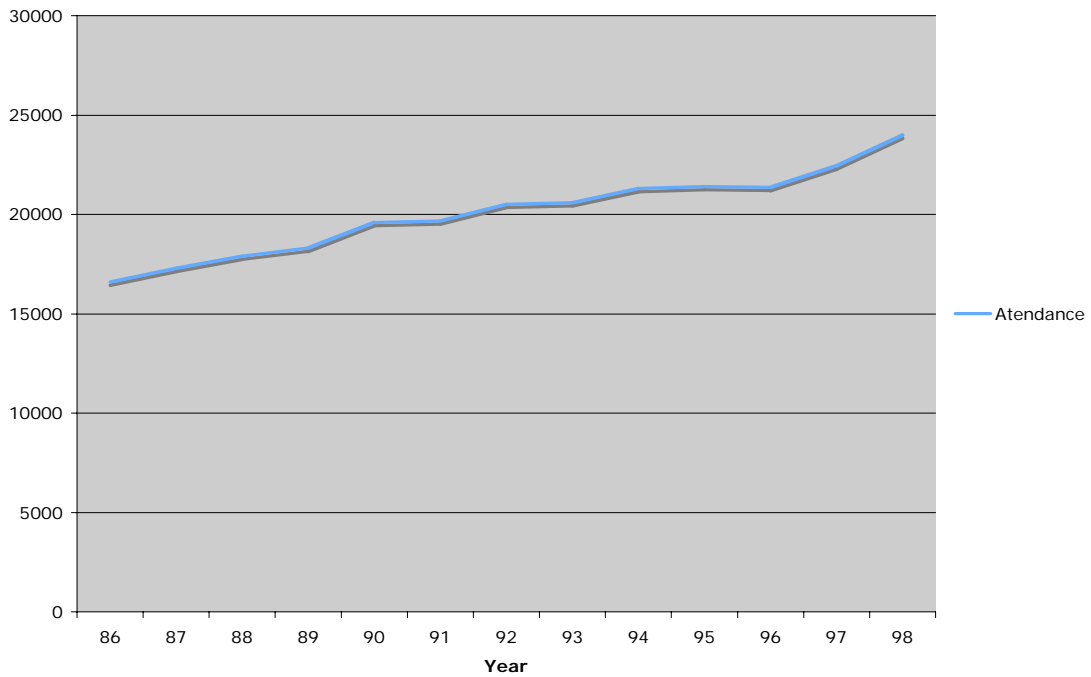
The results in this study thus need not be viewed negatively. Let's bear in mind that the national economies of the past have given way to the *economie monde* of today (Wallerstein 2006). The *hors système* approach of the discontented of the past has become a far less viable option today. In this era of globalization, nonetheless, those who feel disenfranchised by this change do have recourse within the system, at least in the football industry. In this light, globalization provides a vector for change by permitting the whims of supply and demand to dictate economic success and viability.

Appendix A

Total Annual Attendance in Top English Division



Total Annual Attendance in Top English Division



Graphs taken from Gratton (2000)

Appendix B

The images below are taken from ArcGIS, the geographic information systems software program used in this paper.

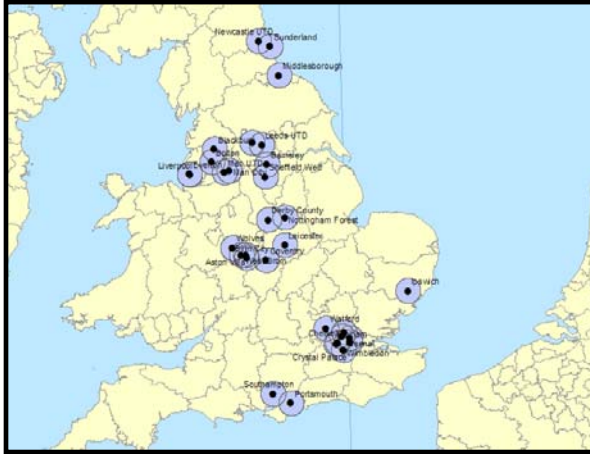


Image of England. Each stadium placed within its own concentric circle of 10-mile radius.

Image of the M25 Corridor (Greater London). Large population center with various stadia of close proximity. Arsenal in the center with highest local substitute factor of all clubs.

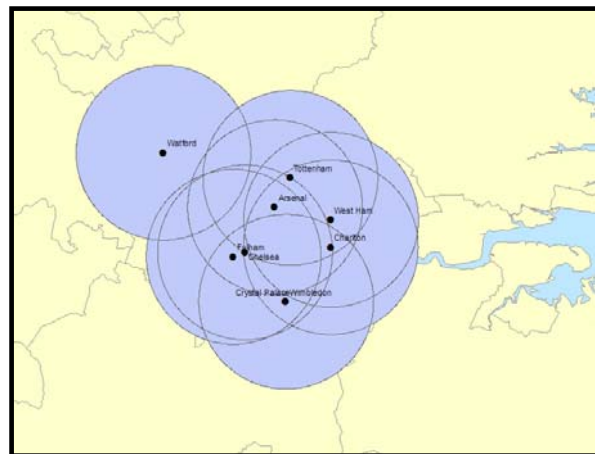


Image of the output areas around Old Trafford. Output areas shown composed of 100-250 households.

Appendix C: An English Football Primer

The term English Football, as used in this thesis study, identifies the professional game in England as overseen by the national supervising body, the Football Association (the FA). The FA supervises all professional and semi-professional leagues in the nation, from the Premier League –a super-league of top clubs founded in the early 1990’s to conclude for higher television broadcast revenue –to the regional northern and southern leagues whose players’ incomes barely supplement their fulltime jobs. The FA mandates that all leagues are open, and, in this sense, they operate similar to hierarchal divisions. This openness is a fundamental component of the system. First, it prevents any regional monopolies from forming and therefore limits a particular team’s market power. Second, it allows for teams to move between divisions within the system. The open league system has created an environment where multiple teams succeed in major urban centers. London, for example, contains around six of the twenty teams in the Premier League during any given season. Consistent with an open league system, there are no minor leagues in England. But there are junior teams fielded by many of the major clubs. These teams are primarily composed of players who leave high school after their O-level exams (comprehensive exams given halfway through high school) and sign professional contracts in the hope of making it as a football player.

Bibliography

- Allan, S. (2004). "Satellite Television and Football Attendance: the not so super Effect." Applied Economics Letters(11): 123-125.
- Bird, P. J. (1982), The Demand for League Football. Applied Economics, **14**, 637-649.
- Borland, J. a. R. M. (2003). "Demand For Sport." Oxford Review of Economic Policy **19**(4): 478- 502.
- Brick, C. (1999). "Can't Live With Them. Can't Live Without Them:Reflections on Manchester United." United We Stand(77).
- Brimson, D. (2001). "Fans to a Change." Hooligan Wars ed. M. Perryman.
- Crowther, P. (2006). "Our Club Our Rules: FC United of Manchester by the fans for the fans."
- Fifa Futbol Mondial (2008). "F.C. United of Manchester."
- Forrest, D., Simmons, Robert, Symanski, Stefan (2004). "Broadcasting, Attendance and the Inefficiency of Cartels." Review of Industrial Organization **24**: 243-265.
- Forrest, D., Simmons, Robert (2006). "New Issues in Attendance Demand: The Case of the English Football League." Journal of Sports Economics(7): 247.
- Fukuyama, F. (1989). "The End of History." The National Interest.
- Garcia, J. a. P. R. (2002). "The Determinants of Football Match Attendance Revisited: Empirical Evidence From the Spanish Football League." Journal of Sports Economics(3): 18.
- Gratton, C. (2000). "The Peculiar Economics of English Football." The Future of Football ed. John Garland: 11-29.
- Hart, R.A., Hutton, J., and Sharot, T. (1975). "A Statistical Analysis of Association

- Football Attendance." Applied Statistics. **24**(1), 17-27.
- Huntington, S. P. (1993). "The Clash of Civilizations." Foreign Affairs **72**(3): 22-23, 25-32, 39-41, 49.
- Intriligator, M. D. (1978). "Econometric Models, Techniques, & Applications."
- Kahane, I., and Shmanske, S. (1997). "Team Roster Turnover and Attendance in Major League Baseball." Applied Economics. **29**(4), 425-431.
- King, A. (1998). "The End of the Terraces."
- Manchester, Board of F.C. United (2006). "Who We Are and What We Mean."
- Neale, W.C. (1964). "The Peculiar Economics of Professional Sports." Quarterly Journal of Economics, **78**(1), 1-14.
- Nicholson, W. (2004). "Intermediate Microeconomics and Its Application".
- Peel, D. (1992). "The Demand of Football: Some Evidence on Outcome Uncertainty." Empirical Economics, **17**, 323-331.
- Putnam, R. (1995). "Bowling Alone: America's Declining Social Capital." Journal of Democracy **6**(1).
- Robertson, R. (1992). "Globalization: Social Theory and Global Culture."
- Simmons, R. a. B. B. (2006). "Working Paper: Market Size and Attendance in English Premier League football."
- Studenmund, A. H. (2006). "Using Econometrics: A Practical Guide."
- Taylor, P. (1989). "The Hillsborough Stadium Disaster." The Taylor Report. 1- 118.
- Wallerstein, I. (2004). "The Modern World-System as a Capitalist World-Economy." World-Systems Analysis: An Introduction: 23-30.
- Zimbalist, Andrew (1994). Baseball and Billions.