

BUSINESS 620

**Allegheny College
Meadville, Pennsylvania 16335**



Revenue Diversification and Financial Stability in European Soccer: A Comparative Analysis of Ligue 1 and La Liga

Michael German

April 3, 2025

**Revenue Diversification and Financial Stability in European Soccer: A
Comparative Analysis of Ligue 1 and La Liga**

by

Michael German

Submitted to The Department of Business and Economics

Project Advisor: Francisco Navarro-Sanchez

Second Reader: Chris Finaret

Date: April 3, 2025

**I hereby recognize and pledge to fulfill my responsibilities as defined in the Honor Code
and to maintain the integrity of both myself and the College as a whole.**

Michael German

Michael German

Acknowledgments

I am writing to express my sincere gratitude to all those who supported and contributed to the completion of this project.

First and foremost, I would like to thank my advisor, Francisco Navarro Sanchez, for his invaluable guidance, feedback, and encouragement throughout my research. His expertise in finance and statistics has been instrumental in shaping this project.

I am also grateful to Chris Finaret for his insightful suggestions and advice, which greatly enhanced the quality of my work.

I would like to acknowledge my girlfriend, Elle Carpenter, and my roommate, Xavier Grove, for their support and collaboration, which made this project possible.

Special thanks to Allegheny College for providing the resources and access to data essential for this research.

Lastly, I would like to thank my family and friends for their support and understanding throughout this process. Their patience and encouragement motivated me, even during the most challenging moments.

Table of Contents

Acknowledgments.....	pg. 3
Table of Contents.....	pg. 4
List of Tables.....	pg. 5
List of Figures.....	pg. 6
Summary of AI Use by Author.....	pg. 7
Abstract.....	pg. 8
CHAPTER 1: Introduction.....	pg. 9
CHAPTER 2: Literature Review.....	pg. 13
CHAPTER 3: Data Description.....	pg. 20
CHAPTER 4: Theory/Reasoning.....	pg. 22
CHAPTER 5: Results.....	pg. 25
CHAPTER 6: Conclusion.....	pg. 52
Bibliography.....	pg. 55
About the Author.....	pg. 57

List of Tables

Table 1.1: Descriptive Statistics for Data.....	pg. 26
Table 1.2: Main Regression Results	pg. 27
Table 1.3: Regression with Interaction Term Measuring RDI X Player Investment.....	pg. 28
Table 1.4: Regression Measuring Impact Revenue Diversification on Each League.....	pg. 29
Table 1.5: Revenue Diversification Index Data.....	pg. 31
Table 1.6: Net Profit Margin Data.....	pg. 38
Table 1.7: Player Investment Ratio Data.....	pg. 43
Table 1.8: Debt to Equity Ratio Data.....	pg. 48

List of Figures

Figure 1.1: Line Graph Measuring RDI During the Four Years Studied.....	pg. 32
Figure 1.2: Scatter Plot Measuring Each Team's Revenue Diversification and League Positio.....	pg. 36
Figure 1.3: Bar Graph Showing Average RDI for Each League.....	pg. 37
Figure 1.4: Line Graph Showing Net Profit Margin Over the Four Years Studied.....	pg. 39
Figure 1.5: Scatter Plot Showing Player Investment Ratio and League Position.....	pg. 47

Summary of AI Use by Author

Throughout the development of this project, AI-assisted tools supported research organization, data analysis, and writing refinement.

AI tools were used to assist in formatting regression outputs, verifying statistical interpretations, and structuring financial data comparisons.

AI provided feedback on sentence clarity, structure, and coherence to improve readability while ensuring the analysis remained accurate and well-supported.

AI-assisted searches were used to locate relevant economic literature and ensure proper citation formatting.

All final interpretations, conclusions, and analyses were conducted independently, using AI as a supplementary tool to enhance efficiency and organization.

Abstract

This study examines the financial sustainability of soccer clubs in Ligue 1 and La Liga, focusing on how revenue diversification impacts on-field performance. Through a thorough comparative analysis of financial data, I explore the relationship between broadcasting rights, matchday income, sponsorships, and player transfers. The research addresses the question: How do soccer clubs in Ligue 1 and La Liga diversify their revenue streams, and what factors contribute most to their financial sustainability? The methodology relies on financial ratios, including debt-to-equity ratio, player investment ratio, net profit margin, revenue diversification index, and data from economic reports and industry analyses like Capology. Key findings reveal that Ligue 1 clubs, particularly smaller teams, depend heavily on broadcasting and transfers, while big-market La Liga clubs leverage their global brand value and matchday revenue. The results suggest sufficient revenue diversification is crucial for teams' financial sustainability and on-field success, particularly with challenges like Financial Fair Play regulations, fluctuating TV deals, and post-pandemic recovery. This study contributes to a more in-depth understanding of how clubs in these leagues can adapt their financial strategies to ensure long-term stability and success.

Keywords: Soccer finance, Revenue diversification, Ligue 1, La Liga, Financial sustainability, Broadcasting rights, Sponsorships, Player transfers, Governance structures, Competitive success

Chapter 1: Introduction

Soccer, frequently referred to as “the beautiful game,” is a global sport and a highly lucrative, commercially driven industry. As one of the world’s most-watched sports (Sport for Business), soccer generates billions annually through diverse revenue streams. These revenue streams include broadcasting rights, matchday ticket sales, sponsorship deals, merchandise sales, and player transfers. With an estimated five billion fans worldwide (FIFA), soccer is a cultural and economic powerhouse, creating substantial capital for top clubs. However, as soccer becomes increasingly commercialized, clubs face growing challenges in managing their financial sustainability and competitive balance.

The financial sustainability of soccer clubs has become a growing concern for league officials, club owners, and governing bodies, particularly in an era of shifting revenue sources and increasing regulation. Economic sustainability refers to a club’s ability to stay profitable in the short- and long-term without outside help. Many regulations exist in soccer, like financial fair play, to help ensure clubs work to remain sustainable, looking to prevent bankruptcy. Soccer clubs have relied on traditional income streams such as matchday tickets, sponsorship deals, and broadcasting rights. However, the emergence of digital media, expanding global fanbases, and implementing Financial Fair Play (FFP) regulations have forced clubs to reevaluate and change their revenue models. However, with the rise of digital media, a growing global fanbase, and new FFP regulations, clubs have had to rethink and adjust how they approach generating revenue.

This piece addresses the research question: How do soccer clubs in Ligue 1 and La Liga diversify their revenue streams, and what factors contribute most to their financial sustainability? Using economic data, club reports, and case studies, I examine how clubs in these two leagues

have adjusted their business strategies to lower risks associated with fluctuating revenue sources and how this translates to on-field success. Financial data has been collected from eight teams for the 17/18, 18/19, 19/20, and 21/22 seasons. This data compares sustainability with league position to determine trends and what makes a team successful. It will also provide insight into how these clubs diversify their revenue.

The research will examine how disruptions like economic downturns and the COVID-19 pandemic have influenced clubs' ability to diversify revenue. I explore the connection between these strategies, the clubs' long-term financial sustainability, and their on-field success. While soccer clubs tend to generate substantial income, pursuing financial stability remains a pressing concern. The costs of running a top-tier club, such as player wages, transfers, stadium maintenance, and operations, continue to rise. At the same time, there is increasing pressure for clubs to succeed on the field, pushing many to incur additional costs in their pursuit of competitive success. These financial pressures are particularly tough for soccer clubs lacking wealthy owners, massive financial backing, or elite teams' global brand value. Ensuring financial sustainability has become a key challenge for clubs across Europe.

In response to these challenges, revenue diversification has emerged as a crucial strategy to secure financial sustainability in soccer. Revenue diversification is essential because it reduces the risks associated with dependence on any single revenue source. For instance, clubs heavily reliant on matchday income or broadcasting rights are particularly vulnerable to economic downturns, regulatory changes, or global crises such as the COVID-19 pandemic. Diversification helps spread risk across income sources while reducing their reliance on any one area. It is vital for assisting clubs in weathering financial shocks and unexpected challenges. Diversifying

revenue streams, including sponsorship deals, merchandising, player transfers, and digital innovations, has become essential for long-term economic stability.

This study focuses on two of Europe's most prominent soccer leagues: Ligue 1 and La Liga. These two leagues provide an interesting contrast regarding financial strategies, revenue structures, and market conditions. On the one hand, Ligue 1 clubs face a more restrictive financial environment, with smaller global brands and more strict financial oversight due to the lower market. As a result, these clubs tend to rely heavily on broadcasting revenues and player transfers in and out of the league. La Liga clubs, especially well-known clubs such as FC Barcelona, can leverage their global brand recognition to secure significant sponsorship deals and generate considerable matchday revenues. Their less restrictive financial regulations allow for riskier strategies like expensive transfer deals. This study works to explore how clubs in both leagues diversify their revenue streams and the factors contributing to on-field success. Ligue 1 clubs, particularly those outside the top tier, face challenges in building a diverse revenue base. For example, smaller teams like RC Strasbourg or Getafe often rely on player sales to generate substantial income. The financial strategies of clubs in these two leagues differ significantly based on their relative resources, governance structures, and market positions.

I investigate how these two leagues adapt their financial strategies, identifying the key drivers of revenue diversification and assessing how these strategies contribute to economic sustainability. This research will analyze the various revenue streams available to clubs in both leagues using financial data, including the debt-to-equity ratio, net profit margin, Player Investment ratio, and revenue diversification index. The debt-to-equity ratio shows how much a club relies on borrowed money versus its funds. A high ratio means more debt, which can help finance player transfers and stadium upgrades and adds financial risk. A low ratio means the club

is more financially stable but might grow more slowly. Net profit margin is the percentage of sales revenue after deducting operating expenses, depreciation, amortization, interest, and income taxes. It can help show a club's profitability. When the net profit margin is high, a club is highly profitable, while negative values represent a club facing yearly losses. The Player Investment Ratio represents the percentage of a club's total revenue allocated toward player acquisition and wages. This metric is a crucial indicator of how clubs prioritize short-term sporting success versus long-term financial sustainability. Higher player investment ratios typically signal clubs that focus heavily on squad strengthening through transfers and wages, while lower ratios indicate clubs that emphasize financial stability and operational efficiency. The RDI measures how evenly a club's revenue is spread across different sources. An RDI closer to 100% means more diversified revenue streams, while an RDI closer to 0% means dependence on a few revenue sources. I will also examine the role of external factors, such as economic conditions, regulatory frameworks, and global market trends, in shaping the financial strategies of these clubs.

The findings of this study are significant for various stakeholders, including club executives, league administrators, policymakers, and others involved in sports finance. By understanding how different leagues and clubs navigate financial challenges, I will provide valuable insights into how revenue diversification can enhance economic stability and competitiveness. It will highlight best practices for smaller clubs seeking to improve their financial sustainability while considering the implications of regulating soccer club finances.

Chapter 2: Literature Review

The financial management of soccer clubs has become increasingly important as the sport has evolved into a global, commercially driven industry. A central part of economic sustainability is revenue diversification, which lowers the risks associated with reliance on a limited number of income sources. Tuckman and Chang (1991) laid the foundation for understanding the dangers of financial dependency in nonprofit organizations, suggesting that organizations relying on narrow revenue streams face greater vulnerability. This theory has been widely applied to soccer clubs, particularly in leagues like Ligue 1 and La Liga, where income sources like broadcasting rights and matchday revenues are volatile. Cordery and Baskerville (2011) expanded on this by addressing nonprofit sports organizations. They argue that clubs dependent on a single source of income, like ticket sales or broadcasting rights, are more prone to financial instability, especially when these revenues are disrupted. This understanding is essential for assessing how financial diversification can protect against external shocks like the COVID-19 pandemic, particularly for clubs in leagues such as Ligue 1 and La Liga.

The COVID-19 pandemic posed a serious financial challenge for European soccer clubs, especially those heavily dependent on matchday revenues and broadcasting deals. Alabi and Urquhart (2023) reveal how clubs with diversified revenue streams, such as digital platforms and merchandising, were better positioned to deal with the economic problems. Their analysis shows the urgency for Ligue 1 and La Liga clubs to adapt revenue strategies to lower risks during crises.

Similarly to Alabi and Urquhart's study, Fühner et al. (2021) show that clubs with diversified income streams, including digital ventures and alternative investments, fared far

better during the pandemic. Their findings show a recurring theme in soccer finance: adaptability and innovation are essential for weathering financial shocks. This is particularly relevant for Ligue 1 and La Liga clubs striving to build more resilient business models.

The digital revolution has redefined how soccer clubs engage with fans and generate income. Balzano and Bortoluzzi (2023) explore the impact of social media, streaming platforms, and esports on club business models. Their research demonstrates that digital-first strategies are essential for clubs in Ligue 1 to diversify revenue streams and reduce dependency on traditional sources like ticket sales. These strategies help add more modern revenue sources like e-commerce. These innovations allow smaller clubs to expand their financial reach despite limited budgets.

As Barros, Peypoch, and Tainsky's (2014) cost efficiency analysis shows, smaller Ligue 1 clubs have consistently demonstrated ingenuity in managing limited resources. Their work highlights how these clubs often outperform wealthier rivals by maximizing the impact of their financial decisions. This reinforces the argument that resourcefulness, rather than spending power, is key to sustainability and competitiveness in modern soccer.

While Barros, Peypoch, and Tainky look at smaller clubs, Matesanz et al. (2018) explore how top European teams increasingly rely on high-value transfers to gain a competitive edge, often at the expense of financial stability. This method brings serious risk as making a return on the player investment is crucial. By contrast, smaller clubs in Ligue 1 and La Liga can benefit from prioritizing sustainable policies, such as developing homegrown talent or scouting undervalued players. These approaches reduce financial risks while maintaining competitive potential. These strategies employed by smaller Spanish clubs to level the playing field are the

focus of Mourao and Salgado-Barandela's (2023) work. They highlight how innovative transfer policies and youth development programs allow these teams to compete against wealthier rivals. This approach helps address challenges faced by Ligue 1 clubs, offering lessons on how financially constrained teams can support their strategies for long-term stability and success.

Revenue diversification is not just a financial strategy; it reflects a club's broader mission. Wicker, Feiler, and Breuer (2013) argue that clubs prioritizing community engagement and social objectives are more likely to attract varied income sources, including sponsorships and public funding. Smaller Ligue 1 clubs could benefit significantly from integrating such initiatives, using their local connections to build a better financial foundation.

Rohde and Breuer (2016) help demonstrate how financial growth, sporting success, and private investment impact revenue strategies in European soccer. They show how clubs with private majority investors often adapt their business models to diversify income through sponsorships, merchandising, and digital innovation. This reduces their dependence on less predictable revenue sources like broadcasting deals or player transfers. As hypothesized by Rhode and Breuer, these private majority investors have a positive correlation with short-term and long-term success. These private majority investors are also becoming more common in the thirty teams analyzed by the study. These thirty teams represent a significant majority of elite European clubs.

A practical example of a club that has successfully shifted toward revenue diversification is Valencia CF, which has increasingly relied on digital media platforms, international sponsorship deals, and merchandise sales to reduce its dependence on broadcasting rights. According to Valencia's business plan and financial valuation Miguel Arias Prats (2017), this

shift represents a broader trend in La Liga and Ligue 1 clubs looking to expand their revenue beyond local markets. The Valencia CF case is particularly relevant because it demonstrates how a mid-tier club can reduce financial instability through revenue diversification. This study can help analyze how non-elite clubs in La Liga and Ligue 1 can build more stable financial foundations by using strategies previously used by wealthier clubs.

Valencia CF's financial model relies heavily on TV rights, contributing 40-60% of total income. Other revenue sources, including sponsorships, merchandise, and ticket sales, have declined recently. Ticket revenue, for example, decreased by 7.4% over five years, compared to La Liga's average increase of 4.9%. Sponsorship income has also been reduced from performance inconsistencies and board instability. Competition bonuses, which mainly depend on league performance, have also been inconsistent. To counteract this, Valencia CF has introduced new marketing campaigns to increase ticket and subscription revenue, with projections of a 5% rise and up to 25% growth if the team qualifies for the Champions League. However, the club's most pressing challenges have been constantly changing players and coaching staff. Over the past five years, the club has overhauled its squad and coaching personnel each summer, leading to increased costs and a lack of team cohesion. These difficulties show the need for a more stable strategy, improved recruitment policies, and better fan engagement to improve their long-term sustainability.

The importance of global fan engagement for financial sustainability is explored in the work of Güller and Sönmez (2022). They demonstrate how top clubs like Paris Saint-Germain (PSG) and FC Barcelona have leveraged their global fan bases through social media platforms, digital content, and esports ventures to expand their financial reach. These clubs have secured lucrative sponsorships and increased their digital media revenue by engaging with younger,

tech-savvy fans. For clubs in Ligue 1, engaging a global audience is essential to reduce dependency on traditional income streams such as matchday revenues and broadcasting deals. Güller and Sönmez (2022) provide a roadmap for smaller clubs, showing how digital-first strategies can effectively enhance revenue diversity and long-term sustainability.

The study also describes how smaller soccer clubs can significantly benefit from these digital-first strategies. Clubs should assess their current digital tools, like websites, social media, and management platforms, to find where to improve. Media is a key way to engage fans, with regular posts, behind-the-scenes content, and interactive updates helping to build a loyal following and develop their relationship with fans. Clubs can also use simple data analytics to track player performance and fan engagement, making it easier to adjust strategies. Partnering with tech companies can provide affordable online ticketing and performance-tracking solutions. Smaller clubs can grow their reach and improve efficiency by setting clear goals and gradually integrating digital tools.

Financial regulation through UEFA's Financial Fair Play (FFP) rules has significantly impacted clubs' economic strategies. Szymanski and Kuypers (2023) analyzes how FFP has forced clubs to move away from riskier investments and adopt more sustainable revenue strategies, focusing on sponsorship deals, merchandising, and youth development. These rules create financial incentives to promote youth development. It has also made specific rules that clubs cannot exceed \$64 million in losses. They also focus on player salaries, ensuring they do not surpass 70% of a club's revenue. These rules have helped promote sustainability and keep clubs from overspending. While FFP regulations initially hindered clubs' ability to make significant investments, they have ultimately prompted a shift toward sustainable growth. For smaller clubs in La Liga and Ligue 1, FFP presents both a challenge and an opportunity—forcing

them to seek diversified sources of income while constraining their ability to rely on wealthy ownership.

Alaminos et al. (2020) uses advanced financial modeling to examine the key factors driving financial sustainability across European soccer clubs. Their study shows that liquidity, leverage, and revenue diversification are the primary determinants of a club's ability to ensure long-term growth. Clubs that balance spending on player acquisitions with sustainable revenue streams tend to outperform those that rely too heavily on volatile sources like player transfers. For smaller clubs in Ligue 1, focusing on diversified sponsorship deals, merchandising, and media rights is essential to ensuring long-term financial health. Alaminos et al. (2020) show how Ligue 1 clubs can adopt similar strategies to improve their economic sustainability.

Finally, Galariotis et al. (2017) argues that financial stability is key to sustaining on-field success, explaining that clubs in good financial health are better able to invest in player acquisitions, facilities, and infrastructure, creating a cycle of continuous improvement. This virtuous cycle allows clubs to attract better talent and secure more lucrative sponsorship deals, leading to further financial success. Galariotis et al. (2017) contrast this with the vicious cycle of financially unstable clubs, where poor financial health restricts their ability to attract top talent, leading to underperformance on the field. For smaller clubs in Ligue 1, breaking free from this cycle is essential for achieving financial stability and competitive success. Galariotis et al. (2017) provide a valuable model for understanding how financial stability can lead to long-term growth and success, which is central to my research.

Contributions and Gaps in the Literature

The literature on revenue diversification in soccer has primarily focused on elite clubs, particularly those in La Liga and the Premier League. While this type of work provides valuable insights into the strategies of wealthier clubs, there remains a gap in the literature regarding how smaller clubs in Ligue 1 and La Liga navigate financial challenges. Most studies, including Rohde and Breuer (2016) and Galariotis et al. (2017), highlight the economic success of elite clubs, but few have explored how smaller clubs can diversify their revenue sources. This gap is particularly significant given the growing commercial pressures faced by Ligue 1 clubs, which struggle to compete with their wealthier opponents.

Additionally, while FFP regulations have been discussed, limited research examines their impact on smaller clubs, especially those in Ligue 1, which have fewer financial resources. The work by Szymanski and Kuypers (2023) provides insight into how FFP has affected larger clubs, but the implications for smaller clubs remain unclear. My research aims to address this area, focusing specifically on how Ligue 1 clubs can balance FFP compliance with the need for revenue diversification to ensure long-term financial stability.

How My Thesis Contributes to the Literature

My research looks to fill these gaps by providing a comparative analysis of the financial strategies used by smaller clubs in both Ligue 1 and La Liga. It will explore how these clubs can leverage global sponsorships, digital engagement, and community-based revenue models to diversify their income streams and achieve long-term sustainability. This research will provide

critical insights into how smaller clubs can navigate the challenges of financial sustainability and move beyond traditional, volatile revenue sources like player transfers.

Chapter 3: Data Description

This study analyzes the financial strategies of soccer clubs in Ligue 1 and La Liga using a combination of primary and secondary sources. It focuses mainly on revenue diversification and its role in economic sustainability. The data comes from publicly available financial reports, industry analyses, and league-specific databases. The key components of the data include financial reports from soccer clubs, industry publications such as Deloitte's *Football Money League*, and academic articles focusing on soccer finance.

Financial Reports

The primary data sources are the financial statements and annual reports of clubs in Ligue 1 and La Liga. These reports provide detailed information on revenue generation, expenditures, profitability, and debt levels. Revenue data includes details on broadcasting rights, matchday income, sponsorships, player transfer fees, and other commercial activities. These data points allow an understanding of how each club generates income and how much it relies on particular revenue streams.

The clubs chosen for analysis in this study represent a wide range of financial situations, from elite clubs such as Paris Saint-Germain and FC Barcelona to mid-tier clubs like Marseille and Sevilla FC and smaller clubs such as Celta Vigo and Lille. This range ensures that the study captures the diversity of financial strategies clubs employ across the leagues regarding revenue, size, and brand recognition.

Industry Reports and Financial Data Aggregators

In addition to club-specific financial statements, this study relies on reports from financial analysts and aggregators, such as Deloitte's *Football Money League*, which ranks soccer clubs based on their annual revenue and provides an in-depth analysis of revenue composition. The *Football Money League* data is particularly valuable in understanding broader industry trends, as it allows for an analysis of clubs in different leagues and regions. Furthermore, data from UEFA's FFP reports and other industry studies provide insights into how league regulations influence the financial behavior of clubs.

Financial Ratios and Metrics

The analysis incorporates key financial ratios and metrics to evaluate clubs' financial health and sustainability. These include the debt-to-equity ratio, which provides insight into a club's ability to manage debt relative to income, with higher ratios indicating greater financial risk during downturns. The net profit margin measures profitability and shows whether a team is operating profit or loss. Net transfer income, calculated as the difference between transfer income and expenditure, highlights a club's reliance on player sales for financial stability. Additionally, the Revenue Diversification Index, which examines the breakdown of income sources such as broadcasting, matchday, sponsorship, and transfers, looks at the degree of diversification in a club's revenue model, with greater diversification indicating stronger financial resilience. By applying these metrics, the study evaluates how clubs in Ligue 1 and La Liga manage financial resources, identify dependencies on specific revenue streams, and determine which strategies contribute most to long-term sustainability.

Chapter 4: Theory/Reasoning

The economics of professional sports, mainly revenue diversification and financial sustainability, provide the foundation for this study. The analysis examines several key theories and frameworks, providing a way to evaluate soccer clubs' economic strategies.

Financial sustainability is closely related to maintaining long-term viability while balancing revenue generation with responsible expenditure. Galariotis et al. (2017) argues that financial stability enables clubs to invest in both on-field success and off-field operations. Financially stable clubs are more likely to have the resources to secure high-quality players, maintain a competitive edge, and attract sponsorships, all of which contribute to long-term success.

The “virtuous cycle” theory in sports economics, as discussed by Galariotis et al. (2017), states that financial stability enables clubs to reinvest profits into their operations, which leads to on-field success. This success generates more revenue, creating a positive feedback loop. Financially unstable clubs often struggle to compete, as their limited financial resources prevent them from investing in players and infrastructure. This results in on-field underperformance, worsening their financial difficulties.

However, this cycle is not always linear. There are also examples of financially unstable clubs achieving short-term success by spending beyond their means, often incurring substantial debt. This behavior is seen in some clubs' “financial doping” strategies, which spend heavily on players to achieve immediate success but at the cost of long-term financial stability.

The regulatory environment, particularly the UEFA Financial Fair Play (FFP) regulations, is critical in shaping soccer clubs' financial strategies. The FFP rules, which aim to ensure that clubs operate within their financial means and avoid excessive spending, have significantly impacted how clubs manage their finances. The FFP regulations limit the amount of debt clubs can accumulate and the amount of money they can spend on player transfers and wages relative to their revenues.

The theory of comparative advantage is also essential for this study, particularly about the market conditions in Ligue 1 and La Liga. Each league operates in a distinct economic and regulatory environment, shaping clubs' financial strategies. For example, Ligue 1 clubs generally have smaller domestic broadcasting deals, fewer international opportunities, and rely more on player transfers and local sponsorships. In contrast, La Liga clubs benefit from a more extensive global fanbase and more lucrative broadcasting deals, allowing them to secure significant sponsorships and invest heavily in global branding (Galariotis et al., 2017).

This comparative analysis highlights how market conditions and a club's global reach influence its financial strategies. Clubs in both leagues must navigate these factors while balancing their revenue streams to achieve economic sustainability.

Hypothesis

This study addresses how soccer clubs in Ligue 1 and La Liga diversify their revenue streams and what factors contribute most to their financial sustainability. Based on existing economic theories and prior research, this hypothesis is proposed.

Clubs with higher Revenue Diversification Index (RDI), higher Net Profit Margins, and greater Player Investment Ratios will achieve better league performance. In contrast, clubs with higher Debt-to-Equity ratios will perform worse.

Revenue diversification is widely regarded as a key factor in financial stability. It reduces reliance on volatile income sources such as broadcasting rights and player transfers (Tuckman & Chang, 1991). Clubs with well-balanced revenue streams can better withstand external shocks, allowing for consistent investment in squad development and long-term competitiveness (Cordery & Baskerville, 2011). Prior research suggests that clubs with higher RDI scores tend to perform better in league standings due to their financial flexibility and resilience (Alabi & Urquhart, 2023).

Additionally, net profit margin is a critical indicator of financial health, reflecting a club's ability to generate surplus revenue that can be reinvested into operations and player recruitment (Galariotis et al., 2017). Clubs with high profitability are more likely to make strategic investments that enhance performance, whereas clubs with low profitability may struggle to maintain squad quality and infrastructure (Matesanz et al., 2018).

Player investment is another major determinant of success, as clubs that allocate more resources to player acquisitions and wages often see improved performance on the field (Rohde & Breuer, 2016). However, financial mismanagement can undermine the benefits of high-player investment if spending is not aligned with sustainable revenue streams.

High debt-to-equity ratios are often associated with financial instability, leading to liquidity issues, regulatory sanctions, and forced player sales. Clubs accumulating excessive debt without sustainable revenue streams may struggle to finance squad improvements, which leads to

lower league performance (Fühner et al., 2021). While some clubs may effectively leverage debt to invest in future growth, high debt levels typically constrain financial flexibility and increase vulnerability to economic downturns.

This study will test this hypothesis, examine how these financial indicators influence league performance, and provide insights into the impact of sustainability on performance.

Chapter 5: Results

This study analyzes soccer clubs' financial sustainability and investment behaviors by exploring key metrics, including the Revenue Diversification Index (RDI), player investment ratio, net profit margin, debt-to-equity ratio, and league position. A primary element of the results examines the relationship between RDI and league position, identifying observable trends across football clubs.

The main variables considered in this study are RDI, player investment ratio, net profit margin, debt-to-equity ratio, and league position. A significant part of this study measures RDI against league position and finds trends between these variables. Net profit margin and debt-to-equity ratio show how financially healthy a club is and tell us how sustainable these teams are. In contrast, the player investment ratio shows trends in how different clubs balance player transfers with sustainability. These variables were calculated using financial data sourced from Football Finance, a database that provides access to financial statements for clubs across Europe. The ratios produced engaging descriptive statistics shown in Table 1.1. The Revenue Diversification Index ranges from 0.21(Getafe 19/20) to 0.79(Marseille 18/19), showing that some clubs heavily rely on a single source of income while others have well-balanced revenue streams. The Debt-to-Equity Ratio shows considerable variations across clubs, with some—such

as Monaco in the 2018/19 season—carrying exceptionally high debt obligations (313.35), while others demonstrate more balanced and stable financial structures.

Table 1.1

Variable	Mean	Std. Dev.	Min	Max
Revenue Diversification	0.58	0.14	0.21 (Getafe 19/20)	0.79 (Marseille 18/19)
Player Investment Ratio	0.32	0.13	0.11 (Lyon 21/22)	0.78 (PSG 18/19)
Net Profit Margin	-0.07	0.25	-1.04 (Lille 18/19)	0.32 (Celta Vigo 18/19)
Debt To Equity Ratio	35.9	80.98	0.61 (Lyon 18/19)	313.35 (Monaco 18/19)
League Position	6.6	5.33	1 (PSG, Lille, FCB)	18 (Getafe)

Regression Analysis

These results were analyzed further through regression analysis. The main regression result of the study, shown in Table 1.2, is that RDI is statistically significant when looking at league position. Clubs that better diversify their revenue sources tend to perform better on the field. The RDI is the only statistically significant predictor ($p = 0.009$), meaning clubs with more diversified revenue streams perform better in the league. This aligns with previous literature confirming that diversifying revenue can lead to better performances.

In contrast, player investment and net profit margin appear statistically insignificant, indicating that neither high spending on players nor profitability alone reliably predicts

competitive success. The Debt-to-Equity Ratio also has no effect, meaning financial leverage does not necessarily predict league position. These other ratios are also significant findings contradict previous beliefs, such as that financial health does not affect short-term performance. It also means heavy spending on players does not necessarily lead to short-term success.

Table 1.2

Variable	Coefficient	P-Value	Interpretation
Revenue Diversification Index	-17.93	0.009	Statistically Significant: Clubs with more diversified revenue perform better
Player Investment Ratio	-5.61	0.442	Not significant: Spending on players alone does not improve performance
Net Profit Margin	8.07	0.128	Not Significant: Profitability is not linked to success
Debt-to-Equity Ratio	-0.004	0.735	No effect on performance
League Position	N/A	N/A	Dependant Variable

I introduce an interaction term in Table 1.3 to explore whether clubs that reinvest diversified revenue into player spending perform better. The interaction regression tests whether clubs reinvest diversified revenue into player spending to achieve better performance. The results show no significant relationship between reinvestment and league position ($p = 0.985$). This shows that spending more money does not automatically improve performance; clubs need strategic financial management to succeed.

Table 1.3

Variable	Coefficient	P-Value	Interpretation
Revenue Diversification Index	-10.57	0.529	Not Significant
Player Investment Ratio	6.44	0.807	Not Significant
Net Profit Margin	7.99	0.138	Not Significant
Debt to Equity Ratio	-0.004	0.758	Not Significant
Interaction Term (diversification x investment)	-21.22	0.634	There is no evidence that reinvesting diversified revenue into players improves performance
Constant	15.78	0.120	Not Significant
League Position	N/A	N/A	Dependant Variable

To explore whether Ligue 1 clubs benefit more from revenue diversification than La Liga, we included an interaction term between revenue diversification and Ligue 1, shown in Table 1.4. However, the coefficient for this interaction term is not statistically significant ($p = 0.209$), which means there is no clear evidence that Ligue 1 clubs gain a more substantial benefit from diversification than La Liga clubs. However, the dummy variable for Ligue 1 is significant ($p = 0.004$), with a coefficient of -8.32. This shows that, on average, Ligue 1 clubs tend to perform better than La Liga clubs, even after accounting for other financial factors. Revenue diversification shows a marginally significant effect on league position ($p = 0.052$), confirming that clubs with more diversified revenue streams tend to perform better. In contrast, player investment does not appear to significantly impact league performance ($p = 0.115$), implying that spending on players may not directly affect league position in this model.

Table 1.4

Variable	Coefficient	P-Value	Interpretations
Ligue 1	-8.32	0.04	Ligue one clubs, on average, have better league positions
Revenue Diversification	-0.089	0.052	Diversification boosts performance
Player Investment	-0.075	0.115	No significant effect on performance
Net Profit Margin	0.048	0.274	No significant effect
Debt-to-Equity Ratio	0.012	0.301	No significant effect
Ligue 1 x revenue diversification	0.073	0.209	No Evidence that Ligue 1 clubs benefit more from diversification
League position	N/A	N/A	Dependant Variable

Overall Trends

Through these regressions, many trends are made evident. The Revenue Diversification Index(RDI) data from the 2017/18 to 2021/22 seasons reveals significant variation in how clubs across La Liga and Ligue 1 manage and diversify their revenue streams. FC Barcelona and PSG maintain relatively high RDI values throughout these seasons, with Barcelona consistently hovering around 65%. This indicates a well-balanced revenue structure, drawing income from various streams, including broadcasting rights, commercial partnerships, and matchday revenues.

The impact of COVID-19 during the 19/20 season is evident, with several clubs showing significant drops or spikes in RDI, likely influenced by the loss of matchday revenues and fluctuating commercial deals. Clubs with consistently high RDI, like FC Barcelona, demonstrate resilience by reducing risks associated with overreliance on single income streams. FC Barcelona

maintained a high RDI with 65% across all seasons. Despite a significant dip in NPM to -13.75% in 19/20 (likely due to COVID-19), the club rebounded with a substantial 15.54% margin in 21/22. This proves that a diversified revenue model provided a buffer that helped them recover post-pandemic.

Clubs with significant RDI fluctuations often show inconsistent profitability, reflecting the risks of overreliance on short-term income sources. Celta Vigo had an RDI of 76.83% in 17/18, followed by a sharp drop and recovery. Its NPM reflected similar volatility, swinging from -15.49% in 17/18 to 31.55% in 18/19, then facing data gaps in 19/20. These fluctuations emphasize the club's dependence on unpredictable income sources, such as major player transfers. Teams with consistently low RDI values often struggled with profitability, indicating a lack of diversified revenue streams.

While the regressions show diversification is critical, the case of PSG highlights that it is not a guaranteed path to sustainability if not paired with sound financial management. Despite a strong RDI of 69% in 17/18, PSG's NPM plummeted to -55% in 19/20 and 21/22. This disconnect shows that excessive spending can negate the benefits of diversified income. This can be attributed to the spending increase on player wages and transfer fees, displayed by their high player investment ratio peaking at 78.86 during the 18/19 season and the signing of Kylian Mbappe from AS Monaco FC for \$210 million. PSG's strategy, heavily reliant on high-profile signings and inflated wage bills, exemplifies how poor cost control can undermine even diversified revenue streams.

Clubs with higher RDI tend to have more stable financial performance because they rely on multiple income sources. PSG, FC Barcelona, and Lyon consistently maintain high RDI

values, showing diverse income streams. Monaco, Valencia, and Lille show fluctuation, indicating periods of financial instability or dependence on specific revenue sources. Getafe had a sharp dip in 19/20 with 21.30% but recovered to 76% in 21/22, signaling a post-pandemic recovery.

Clubs that consistently maintain high RDIs, such as Barcelona, PSG, and Lyon, appear more resilient. However, clubs with rising debt-to-equity ratios, such as Valencia, Monaco, Lille, and Barcelona, struggled with financial sustainability. High-spending clubs like PSG and Barcelona struggled because they lacked diversified revenue sources and manageable debt. Additionally, clubs that consistently incur losses, such as PSG, Valencia, and Marseille, even with substantial revenues, risk becoming financially unstable.

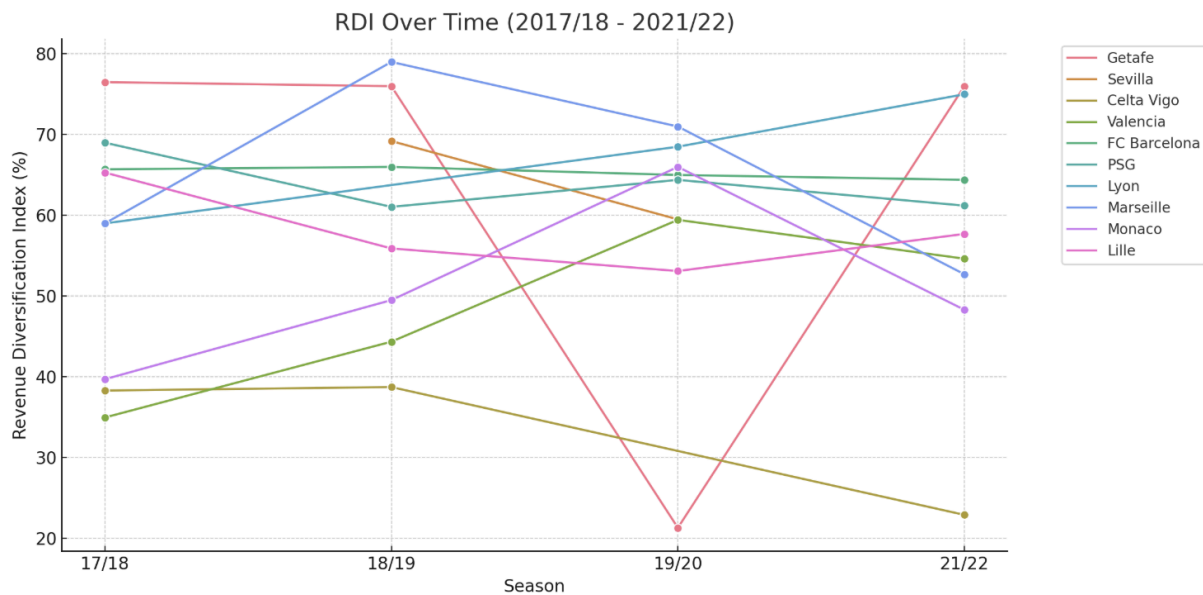
RDI

Table 1.5

<u>Team</u>	<u>17/18</u>	<u>18/19</u>	<u>19/20</u>	<u>21/22</u>
<u>Getafe</u>	<u>76.50%</u>	<u>76.00%</u>	<u>21.30%</u>	<u>76.00%</u>
<u>Sevilla</u>	<u>N/A</u>	<u>69.20%</u>	<u>59.50%</u>	<u>N/A</u>
<u>Celta Vigo</u>	<u>38.30%</u>	<u>38.73%</u>	<u>N/A</u>	<u>22.90%</u>
<u>Valencia</u>	<u>34.96%</u>	<u>44.35%</u>	<u>59.44%</u>	<u>54.63%</u>
<u>FC Barcelona</u>	<u>65.70%</u>	<u>66.00%</u>	<u>65.00%</u>	<u>64.40%</u>
<u>PSG</u>	<u>69.00%</u>	<u>61.05%</u>	<u>64.39%</u>	<u>61.20%</u>
<u>Lyon</u>	<u>59.00%</u>	<u>N/A</u>	<u>68.50%</u>	<u>75.00%</u>
<u>Marseille</u>	<u>59.00%</u>	<u>79.00%</u>	<u>71.00%</u>	<u>52.70%</u>
<u>Monaco</u>	<u>39.70%</u>	<u>49.50%</u>	<u>66.00%</u>	<u>48.30%</u>
<u>Lille</u>	<u>65.30%</u>	<u>55.90%</u>	<u>53.10%</u>	<u>57.70%</u>

While these general interactions are important for understanding the financial environment, analyzing these ratios is essential. The RDI measures how evenly a club's revenue is spread across different sources. An RDI closer to 100% means more diversified revenue streams, while an RDI closer to 0% means dependence on a few revenue sources.

Figure 1.1



Clubs like FC Barcelona and PSG maintain stable RDIs of 60-66%, indicating consistent revenue diversification. Getafe shows extreme fluctuation, dropping from 76% to 21% in 19/20 before rebounding, reflecting volatile revenue streams.

Ligue 1 teams generally exhibit higher RDI values than mid-tier La Liga teams, suggesting more balanced revenue streams. The 19/20 season during COVID-19 led to noticeable drops in RDI for teams like Getafe and Sevilla, indicating over-reliance on vulnerable revenue sources.

FC Barcelona's RDI remains consistent at around 64-66%. As for sporting success, FC Barcelona stayed in the top three during these seasons. Despite financial turmoil, such as Messi's departure, the club maintains diverse revenue sources—sponsorships, merchandising,

broadcasting, and global brand deals. This seems to have helped them weather the financial strain going forward and remain successful on the field.

Sevilla maintained a Moderate RDI of 59.5%—69.2% and consistent top-four finishes (4th in 2021/22), which puts them almost in a tier below FC Barcelona. They maintained high RDI while maintaining sporting success, staying in the Champions League during all four years studied.

As for Valencia, they show RDI growth from 34.96% - 59.44%, but primarily mid-table finishes getting 9th in 2021/22. While Sevilla sustains strong on-field and off-field performance, Valencia's improved RDI has not translated to consistent high-league placements. This proves that revenue diversification alone is not enough without strong sporting strategies. Without studying the most recent years for Valencia, it is hard to tell if their financial success continues; however, it is relevant to mention that they sit 18th in La Liga as of February 24th, 2025, potentially cementing them as a considerable outlier.

Celta Vigo's RDI dropped moderately during the studied period from 38.3% - 22.9%. Data is unavailable for the 19/20 season, but they did see improvement in on-field performance this time until finishing 13th place in 2021/22.

Getafe had erratic RDI, dropping to 21.3% in 2019/20 before rebounding to 76% during the 2021/22 season. Their league position fell significantly during this period, from 8th to 15th, and while their RDI rebounded, their league position only got lower as they were relegated to 18th. In this case, a lower RDI correlates with weaker performance, suggesting clubs dependent on singular revenue streams struggle to remain competitive. Failing to qualify for the Europa League in 2018/19 also had a significant impact. They had to adjust to a much lower revenue and the loss of a key revenue source. It also shows that they failed to invest this money effectively.

As for the French league, let us start with Paris Saint-Germain. Their RDI remains consistently around 61-69%, with three first-place finishes and one second-place finish. With PSG, it is relevant to mention that they are the biggest market team in the league by a fairly significant margin. This means they have better access to sponsorships, global merchandising, and substantial broadcasting deals to diversify their income streams. This high RDI aligns with both sporting dominance and financial sustainability.

Lyon's RDI rose to 75% in 2021/22 despite finishing seventh. The RDI values consistently rose, although data was unavailable for the 18/19 season. This rise could be due to their sale of Bruno Guimaraes for around \$55 million. This rise is also consistent with the post-COVID recovery shown by many teams. Their league position fell slightly from 3rd to 7th and then from 4th to 7th, but with a historic fluctuation in league position, this is not considered significant.

Marseille experienced a rising RDI pre-COVID and had their best league finish of second while having 79% RDI. It dropped significantly after COVID-19, down to 52.7%, while league position dropped slightly. These clubs show that high RDI does not always guarantee top league positions but helps cushion the financial impacts of underperformance.

Monaco's RDI climbed from 39.7% to 66% in the 19/20 season, finishing 3rd; however, their RDI and league position fell post-COVID. After winning Ligue 1 in 2020/21, Lille stabilized their RDI at 55-65% but dipped to 5th in 2021/22. They maintained a somewhat consistent RDI during this period, and their league position fluctuated between 1st and fifth. Clubs like Monaco effectively diversified revenues after high-profile player sales like Mbappé, while Lille struggled to maintain top performance despite strong revenue diversification.

RDI and League Performance consistently correlate, especially for top clubs like Barcelona and PSG. They show consistently high RDI, which correlates with high league positions. These clubs benefit from diversified global revenue sources like sponsorships, ticket sales, media rights, and merchandising. PSG and Barcelona attract lucrative deals due to star players and global fanbases, strengthening RDI. Mid-table clubs lack this leverage, leading to over-reliance on broadcasting. Mid-lower table clubs like Getafe and Celta Vigo have lower RDI values and heavy dependence on single revenue streams, often linked to weaker league performance and financial vulnerability. While it is generally more straightforward for big clubs to diversify revenue, teams like Marseille show it is possible at any level. They have the highest RDI value at 79%, beating out clubs like FC Barcelona and PSG.

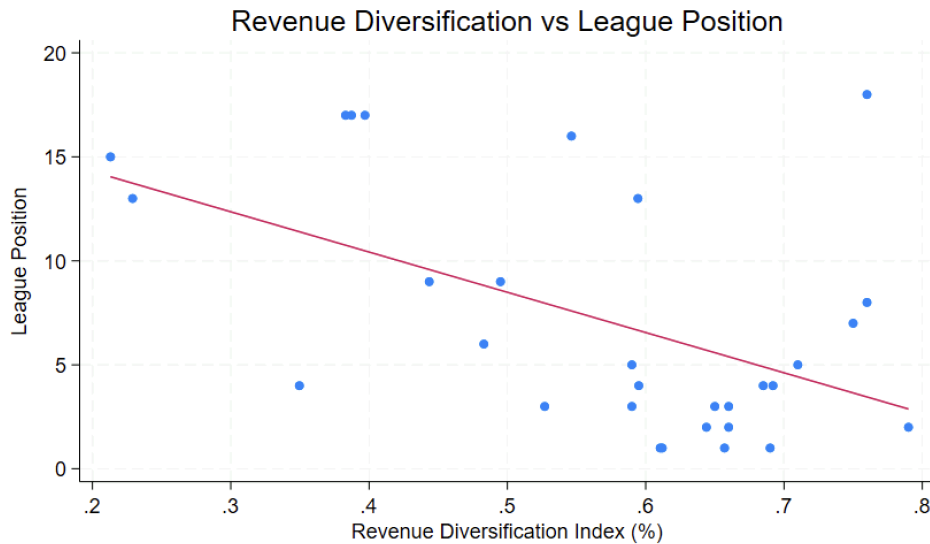
La Liga clubs tend to have more volatile RDI trends. Clubs like Valencia and Celta Vigo struggle to diversify revenues, consistently finishing mid-lower in the table. Barcelona's global brand status ensures high RDI despite on-field or financial struggles. Ligue 1 Clubs, especially PSG and Monaco, show excellent revenue diversification stability. Ligue 1's centralized broadcasting deals may reduce revenue gaps among clubs, though PSG still dominates due to massive sponsorship deals.

COVID-19 caused RDI drops for many clubs during 2019/20, likely due to a loss of matchday revenues. Clubs with higher RDI, like PSG and Barcelona, weathered the storm better. This demonstrates that a high RDI can significantly impact a team's ability to endure financial strains.

RDI and performance are heavily correlated, but not always directly. While top clubs often maintain high RDI and strong league finishes, some clubs like Lyon show that diversification does not always guarantee sporting success. Ligue 1 clubs, especially PSG,

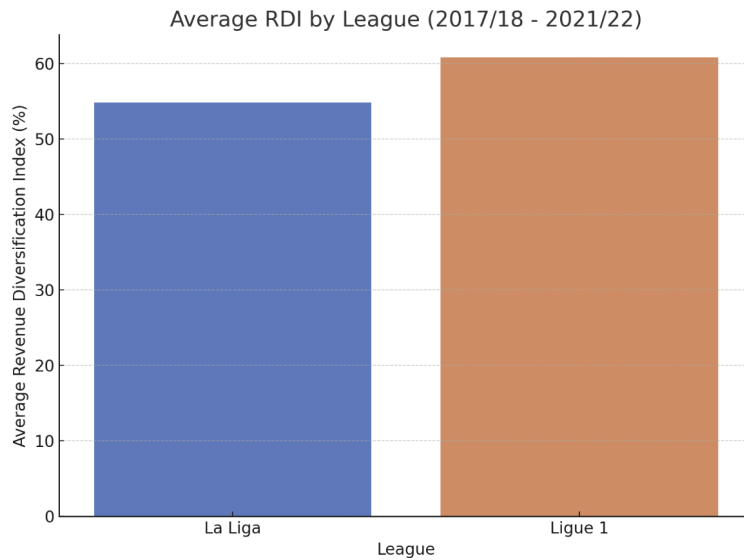
benefit from more balanced revenue streams, while La Liga clubs often show greater dependency on broadcasting rights.

Figure 1.2



Teams with consistently high RDI generally achieve higher league positions. Clubs like FC Barcelona and PSG maintain top spots with relatively stable RDI (60-66%), indicating that financial strength and diversification play a role. Ligue 1 clubs generally cluster in higher RDI ranges while still performing well. La Liga teams show more variability. Valencia and Celta Vigo exhibit lower RDI with mixed league positions. Lille's winning the 20/21 Ligue 1 title despite mid-range RDI (53.1%) highlights that success is not solely dependent on revenue diversification.

Figure 1.3



Ligue 1 clubs maintained a slightly higher average RDI of 61% compared to La Liga at 55%, potentially indicating a broader diversification of revenue streams in Ligue 1. This could reflect Ligue 1 clubs relying more evenly on multiple income sources. La Liga clubs, especially giants like Barcelona, often have dominant revenue streams from broadcasting and commercial deals.

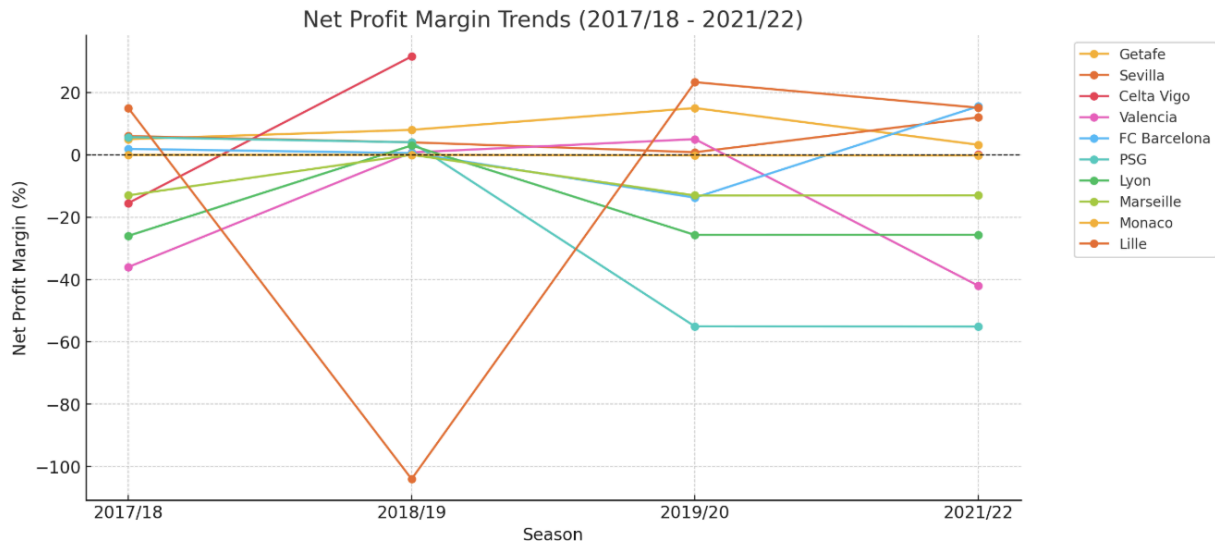
Net Profit Margin

Table 1.6

Team	17/18	18/19	19/20	21/22
<u>Getafe</u>	<u>11.70%</u>	<u>11.70%</u>	<u>19.30%</u>	<u>3.22%</u>
<u>Sevilla</u>	<u>1.83%</u>	<u>6.85%</u>	<u>0.81%</u>	<u>N/A</u>
<u>Celta Vigo</u>	<u>-15.49%</u>	<u>31.55%</u>	<u>N/A</u>	<u>0.19%</u>
<u>Valencia</u>	<u>-36.00%</u>	<u>0.76%</u>	<u>5.03%</u>	<u>-42.00%</u>
<u>FC Barcelona</u>	<u>1.88%</u>	<u>0.54%</u>	<u>-13.75%</u>	<u>15.54%</u>
<u>PSG</u>	<u>5.66%</u>	<u>4.00%</u>	<u>-55.06%</u>	<u>-55.10%</u>
<u>Lyon</u>	<u>-26.00%</u>	<u>3.00%</u>	<u>-25.71%</u>	<u>-25.70%</u>
<u>Marseille</u>	<u>-13.00%</u>	<u>0.00%</u>	<u>-13.04%</u>	<u>-13.00%</u>
<u>Monaco</u>	<u>-0.02%</u>	<u>0.00%</u>	<u>-0.22%</u>	<u>-0.22%</u>

Another metric important to this study is the net profit margin. Net profit margin is the percentage of sales revenue after deducting operating expenses, depreciation, amortization, interest, and income taxes. It can help show a club's profitability. When the net profit margin is high, a club is highly profitable, while negative values represent a club facing yearly losses.

Figure 1.4



Getafe and FC Barcelona have shown consistent profitability, with Getafe, in particular, standing out for its sustained increase in net profit margin. Lille and Valencia have experienced dramatic swings in profitability. Lille bounced from an extreme loss to recovery, while Valencia showed severe drops after some initial recovery. PSG, Lyon, and Marseille faced financial difficulties throughout the period, with PSG and Lyon seeing no recovery by 2021/22 and Marseille staying consistently negative. Monaco's numbers suggest financial stability but little to no profitability.

The net profit margins demonstrate significant variation in financial performance across the four seasons, reflecting the differing financial strategies and external pressures that clubs face in European soccer. Analyzing these changes provides insight into how clubs balance profitability with operational efficiency, player investment, and market dynamics.

Getafe exhibited consistent profitability growth throughout the 4 years observed, making it one of the more financially stable clubs in the sample. The club's net profit margin rose from 11.7% in 2017/18 to 19.3% in 2019/20, before falling to 3.22% in 2021/22. This steady upward trajectory, particularly between 2018/19 and 2019/20, shows that Getafe prioritized operational

efficiency and prudent financial management rather than relying on significant transfer revenues. The decline in 2021/22 can be attributed to the broader economic impact of the COVID-19 pandemic, which strained smaller clubs with limited commercial income.

Sevilla's net profit margins displayed greater volatility than Getafe's, reflecting the club's more aggressive financial model. The club's profitability began at 1.83% in 2017/18, increased to 6.85% in 2018/19, but fell sharply to 0.81% in 2019/20. No data was reported for 2021/22, further complicating whether the decline was temporary or indicative of more profound financial instability. This pattern can be linked to Sevilla's frequent involvement in the transfer market, where the club's model often hinges on selling high-value players to generate profit.

Celta Vigo demonstrated one of the most dramatic financial recoveries in the sample. The club started with a significant loss of 15.49% in 2017/18 before surging to 31.55% in 2018/19, one of the dataset's highest profit margins. However, this recovery was short-lived, as Celta Vigo reported a marginal 0.19% net profit margin in 2021/22. The absence of data for 2019/20 creates uncertainty about whether the club maintained consistent profitability. However, it is worth noting that there were one-time player transfers to offset prior losses. This means that Celta Vigo's financial performance largely depended on external transfer market factors rather than structural stability.

Valencia experienced severe financial instability throughout the period, with large fluctuations in profitability. The club began with a dramatic -36% net profit margin in 2017/18, briefly improved to 0.76% in 2018/19, and peaked at 5.03% in 2019/20 before plunging back to -42% in 2021/22. This pattern highlights Valencia's vulnerability to short-term financial shocks, driven by inconsistent revenues from player sales and high operational costs, and the fact that it

exceeded La Liga's salary cap rules in 21/22. The club's reliance on transfer market profits without a diversified revenue model made it particularly susceptible to economic disruptions.

FC Barcelona's net profit margins illustrate the club's unstable financial management during the observed period. Beginning with 1.88% in 2017/18, the margin declined to 0.54% in 2018/19 before collapsing to -13.75% in 2019/20 amid the COVID-19 pandemic. The club rebounded to 15.54% in 2021/22, showing a partial recovery through wage reductions and restructuring efforts. However, the overall pattern highlights the fragility of Barcelona's financial model, which relied heavily on player wages and commercial revenues rather than diversified income streams.

PSG exhibited a consistent downward trend in profitability, reflecting the club's high-cost transfer policies and wage expenditures. Starting at 5.66% in 2017/18, PSG's margin declined to 4% in 2018/19 before plummeting to -55.06% in 2019/20 and -55.10% in 2021/22. These losses highlight the financial strain of PSG's reliance on high-profile player acquisitions and inflated wage structures. Despite significant commercial revenues, the club's business model appears unsustainable.

Lyon's performance followed a cyclical pattern of decline and recovery. The club reported -26% in 2017/18, recovered to 3% in 2018/19, and fell again to -25.71% in 2019/20 and marginally improved to -25.70% in 2021/22. This pattern demonstrates that Lyon's profitability is closely tied to transfer income cycles, with the club alternating between selling key players for profit and reinvesting in the squad; the lack of sustained profitability points to the limitations of a player trading model without complementary revenue streams.

Marseille's profitability remained consistently negative, showing persistent structural financial problems. These issues stem from Marseille's aggressive spending without a proper

structure. They also had a significant breach of FFP in 2020, resulting in fines that added to their losses. The club's net profit margins hovered between -13% in 2017/18 and -13% in 2021/22, with a brief recovery to 0% in 2018/19. Marseille's static financial performance shows that the club struggled to generate sustainable profits due to high operational costs and limited revenue.

Monaco maintained steady but minimal profitability, with net profit margins ranging from 0% to -0.22%. This consistency reflects Monaco's low-risk financial model, where the club balanced player trading profits with operational expenses. However, the narrow profit margins demonstrate that Monaco's model provides limited room for long-term growth.

Lille exhibited extreme volatility, making them the most unpredictable club in the dataset. The club posted 15% in 2017/18, plummeted to -104% in 2018/19, rebounded to 23.3% in 2019/20, and stabilized at 15.10% in 2021/22. This shows that Lille relied heavily on player sales like Nicolas Pepe for \$80 million in 18/19 and the Sale of Victor Osimhen for \$70 million in 19/20 to generate profits. The drastic swings in profitability underscore the risks of relying on the transfer market without developing consistent revenue streams.

The analysis of net profit margins highlights the contrasting financial strategies among clubs in Ligue 1 and La Liga. Clubs with diversified revenue streams, such as Getafe and Monaco, maintained more stable profit margins. In contrast, clubs dependent on player trading and high-wage spending, such as PSG and Valencia, experienced greater volatility.

Teams like Getafe and Sevilla have generally experienced steady growth, especially Getafe, which saw continuous improvement. However, PSG, Valencia, and Lyon have faced severe challenges in profitability, particularly PSG, which experienced a massive drop in 2019/20 and further deterioration.

Most teams struggled in 2019/20, but some recovered faster, like Barcelona, Getafe, and Lille, while others declined further, like PSG and Valencia. Despite poor financials, PSG and Barcelona remain among the top teams. Lille's 2018/19 crash coincided with a low league ranking but rebounded alongside improved financials.

Player Investment Ratio

Table 1.7

Team	17/18	18/19	19/20	21/22
<u>Getafe</u>	<u>26.90%</u>	<u>42.80%</u>	<u>58.60%</u>	<u>36.00%</u>
<u>Sevilla</u>	<u>28.00%</u>	<u>29.10%</u>	<u>42.37%</u>	<u>N/A</u>
<u>Celta Vigo</u>	<u>22.65%</u>	<u>34.13%</u>	<u>N/A</u>	<u>22.53%</u>
<u>Valencia</u>	<u>27.67%</u>	<u>30.82%</u>	<u>30.82%</u>	<u>38.00%</u>
<u>FC Barcelona</u>	<u>44.37%</u>	<u>38.84%</u>	<u>40.48%</u>	<u>39.20%</u>
<u>PSG</u>	<u>40.42%</u>	<u>78.86%</u>	<u>30.20%</u>	<u>32.80%</u>
<u>Lyon</u>	<u>13.08%</u>	<u>24.00%</u>	<u>34.26%</u>	<u>11.30%</u>
<u>Marseille</u>	<u>16.00%</u>	<u>41.00%</u>	<u>11.95%</u>	<u>12.40%</u>
<u>Monaco</u>	<u>30.00%</u>	<u>32.99%</u>	<u>27.20%</u>	<u>17.90%</u>
<u>Lille</u>	<u>24.00%</u>	<u>43.00%</u>	<u>31.40%</u>	<u>19.47%</u>

Another relevant indicator is the player investment ratio. The Player Investment Ratio represents the percentage of a club's total revenue allocated toward player acquisition and wages. This metric is a crucial indicator of how clubs prioritize short-term sporting success versus long-term financial sustainability. Higher player investment ratios typically signal clubs that focus heavily on squad strengthening through transfers and wages, while lower ratios indicate clubs that emphasize financial stability and operational efficiency. However, higher investment

in players does not always guarantee on-field success, particularly if the spending is not accompanied by sound financial planning or diversified revenue streams.

Analyzing the Player Investment Ratio across clubs in Ligue 1 and La Liga offers insights into clubs' differing financial strategies in both leagues. Clubs with consistently high ratios may face greater financial risk if they fail to achieve sporting objectives. In contrast, those with lower ratios may benefit from more sustainable long-term growth. This section looks at the trends in player investment among the clubs, identifying which clubs prioritize player spending and how this strategy correlates with their overall financial performance.

Getafe saw a sharp increase in investment, rising from 26.90% in 2017/18 to 58.60% in 2019/20 before dropping to 36.00% in 2021/22. Despite a strong 5th-place finish in 2017/18, their performance declined. They finished 15th in 2021/22. This increase in spending, paired with low league placement, shows their player investment in 2019/20 was ineffective due to poor squad planning or managerial instability, leading to an inability to sustain success.

Sevilla gradually increased investment, peaking at 42.37% in 2019/20, aligning with strong 4th-place finishes in 2018/19 and 2019/20. However, despite maintaining relatively high investment levels, they dropped to 12th in 2021/22. This indicates that while investment may contribute to short-term stability, it does not necessarily shield clubs from longer-term declines due to financial restructuring and external economic pressures.

Celta Vigo displayed fluctuating investment, peaking at 34.13% in 2018/19 but missing data for 2019/20. They narrowly avoided relegation in 2017/18 and 2018/19 (17th place), improved to 8th in 2019/20, but fell to 13th in 2021/22. Their brief improvement following an investment boost indicates that while spending can provide a short-term uplift, long-term consistency remains a challenge.

Valencia maintained investment levels around 30%, rising to 38.00% in 2021/22. Despite this, the club fell from a top-four finish in 2017/18 to 16th place in 2021/22. This sharp decline shows that stable investment alone is insufficient if the club suffers from mismanagement, financial instability, or internal conflicts.

FC Barcelona consistently invested between 40% and 45%, with a slight dip to 39.20% in 2021/22. Despite this, the club remained competitive, finishing first in 2017/18, second in 2018/19, third in 2019/20, and reclaiming the title in 2021/22. Despite slight investment reductions, their sustained success highlights the importance of youth development with La Masia, squad depth, and financial backing in maintaining performance.

PSG exhibited extreme investment variations, reaching 78.86% in 2018/19 before dropping to 32.80% in 2021/22. Despite this decline in spending, the club consistently finished first or second, indicating that its dominance is driven less by annual investment spikes and more by long-term financial strength, elite squad depth, and commercial revenue streams. It also shows that their investment paid off.

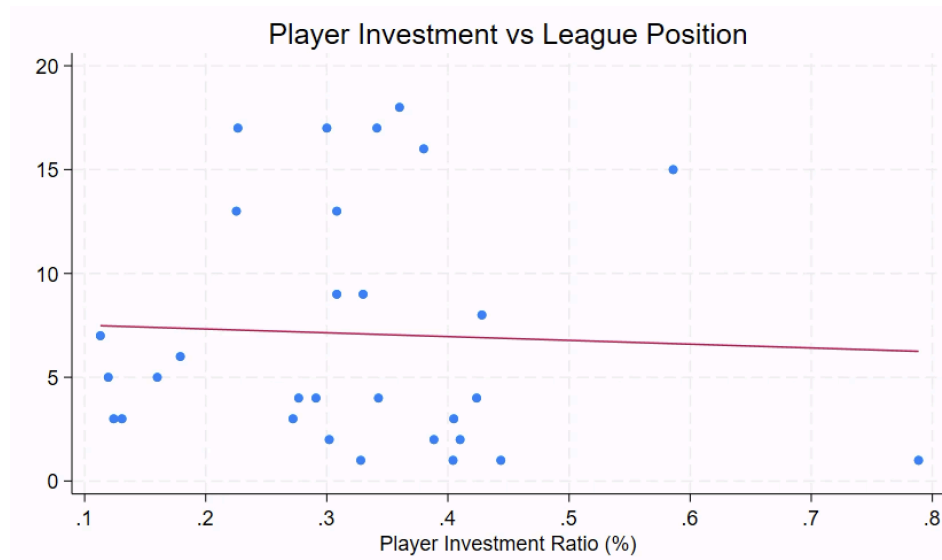
Lyon peaked at 34.26% in 2019/20, aligning with a 4th-place finish, but saw fluctuating rankings from 3rd in 2017/18 to 7th in 2018/19 and 2021/22. Their performance shows that while investment surges may yield temporary improvements, sustaining top-three finishes requires more than spending on players.

Marseille reached its highest investment level, 41.00%, in 2018/19, a season in which it finished second. However, its rankings varied between third and fifth in subsequent years, indicating that while spending correlated with higher finishes, it was not sufficient to secure a top-two placement consistently. This high spending was partly due to high wage bills for players like Kévin Strootman and Dimitri Payet.

Monaco peaked at 32.99% in 2018/19 but declined in subsequent seasons. Their severe drop to 17th in 2017/18 before rebounding to 3rd in 2019/20 demonstrates that investment can help clubs recover from near-relegation, but maintaining title contention requires broader structural stability. Their sales of 11 first-team players following the 16/17 season led to their poor results and high player investment ratio, as a rebuild was needed. This rebuild ended up being successful, as their results improved significantly.

Lille recorded its highest investment at 43.00% in 2018/19, which coincided with their league title win in 2019/20. However, following a reduction in spending, they dropped to 5th in 2021/22. This highlights how short-term investment spikes can lead to immediate success but may be difficult to sustain over multiple seasons. This is especially true with Lille, as they often sell important players following breakout seasons.

Figure 1.5



Top clubs like Barcelona, PSG, Lille, and Marseille saw high investment correlate with strong finishes, though PSG and Barcelona maintained dominance even with lower spending. Sevilla, Lyon, Monaco, and Valencia used investment to achieve short-term gains but struggled with long-term sustainability. Getafe, Celta Vigo, and Valencia had periods of heavy spending but still declined, showing poor squad planning, financial mismanagement, and external pressures. This data suggests that while investment can improve short-term performance, economic sustainability, squad depth, and club management are equally, if not more, essential factors in long-term success.

Debt To Equity Ratio

Table 1.8

Team	17/18	18/19	19/20	21/22
<u>Getafe</u>	<u>Negative Equity</u>	<u>8.32</u>	<u>12.04</u>	<u>22.28</u>
<u>Sevilla</u>	<u>1.59</u>	<u>2.47</u>	<u>2.47</u>	<u>N/A</u>
<u>Celta Vigo</u>	<u>0.93</u>	<u>0.66</u>	<u>N/A</u>	<u>0.79</u>
<u>Valencia</u>	<u>3.06</u>	<u>8.47</u>	<u>20.74</u>	<u>55.8</u>
<u>FC Barcelona</u>	<u>6.93</u>	<u>9.25</u>	<u>40.89</u>	<u>Negative Equity</u>
<u>PSG</u>	<u>1.05</u>	<u>2.11</u>	<u>1.94</u>	<u>5.74</u>
<u>Lyon</u>	<u>7.57</u>	<u>0.61</u>	<u>2.06</u>	<u>7.35</u>
<u>Marseille</u>	<u>6.13</u>	<u>1.85</u>	<u>8.93</u>	<u>8.93</u>
<u>Monaco</u>	<u>63.1</u>	<u>313.35</u>	<u>261.22</u>	<u>260.1</u>
<u>Lille</u>	<u>Negative Equity</u>	<u>Negative Equity</u>	<u>Negative Equity</u>	<u>Negative Equity</u>

Monaco had an extremely high revenue-to-debt ratio in all years, particularly 313.35 in 18/19 and 260.1 in 21/22. This is likely due to their rebuild after selling important players following their league win in the 16/17 season. Their league position fluctuated but improved from 17th in 17/18 to 6th in 21/22. Despite a very high D/E ratio, Monaco's league position improved significantly. This demonstrates that high leverage does not always correlate directly with poor performance. Their rebuild was somewhat successful given this improvement, even if it put them into significant debt.

FC Barcelona had a high ratio but gradually increased from 6.93 in 17/18 to 40.89 in 19/20. They were consistently 1st or 2nd, with 1st in 2021/22. Barcelona's high D/E ratio in later seasons, especially in 19/20, seems unsustainable given their continued dominance. The debt

resulted from significant player transfers like Coutinho and Griezmann, which were paired with the high wages of players like Messi and Suarez. However, this did not impact their performance. The increasing ratio hints at growing financial instability, as seen by their struggles off the field in recent years.

PSG's debt-to-equity ratio was relatively low, from 1.05 in 17/18 to 5.74 in 21/22. They also had impressive league performance, getting first in most seasons. PSG's relatively low and stable debt-to-equity ratio aligns with its consistent league dominance. The club has strong debt management and can invest in talent without excessive leverage, which may provide a more sustainable model.

Sevilla was moderate and consistent, ranging from 1.59 in 17/18 to 2.47 in 19/20. Sevilla's league position was strong in the top half but fluctuated from 6th in 17/18 to 12th in 21/22. The club's relatively low D/E ratio indicates that it maintains a balanced financial structure. However, its performance has dropped in recent seasons. This indicates that factors like managerial changes, player performances, and competitive balance in La Liga influence its results more than financial leverage.

Lille's debt-to-equity ratio was consistently negative in all years, even though it was consistently in the top half. Lille's negative equity shows financial difficulties resulting from its aggressive financial strategy under new ownership in 2017. Despite this, the club has performed well in league standings, especially in 2020/21, when it won Ligue 1. This shows that financial challenges do not necessarily prevent competitive success, but they might be risky in the long term.

Getafe's debt-to-equity ratio in 17/18 was negative and showed significant financial distress. They had decent league performances in 17/18 (8th) and 18/19 (5th) but declined to

15th in 2021/22. Getafe's initial negative equity and decent performance in 17/18 and 18/19 show how a poor financial structure can have delayed results. While showing a low debt-to-equity ratio, their performances remain consistent and have even improved. However, they still felt the effects of this financial distress later down the road in the 21/22 season.

Teams like Getafe and Monaco show that a high D/E ratio does not always translate to failure on the field. Getafe's poor start in 17/18 with a negative equity figure coincides with low league performance. At the same time, Monaco did better with high leverage, indicating that factors other than financial stability, such as investment in players or good management, can mitigate the negative impacts of high debt.

Sevilla and PSG demonstrate that moderate leverage (D/E ratio under 5) can result in stable or strong performances. PSG stayed at the top while maintaining a low D/E ratio, likely due to its financial strength and the backing of wealthy owners.

Lille stands out with negative equity yet strong performances, indicating that clubs can perform well despite financial instability—though this often carries a higher risk, and the sustainability of their approach may be questioned.

Getafe and Valencia highlight that clubs with weak financial structures, such as negative equity, can struggle in league performance, especially early on. However, later improvements in Getafe's league position show that financial mismanagement does not always have an immediate effect on success.

Discussion

This study's findings reinforce revenue diversification's importance in soccer clubs' financial sustainability. The regression analysis shows that clubs with a higher revenue

diversification index tend to perform better in league standings, suggesting that economic stability plays a crucial role in competitive success. However, the results also highlight the complexities of financial management in professional soccer. While diversified revenue streams provide a buffer against economic downturns and regulatory changes, they do not guarantee on-field success unless paired with effective spending strategies.

A key takeaway is that clubs in Ligue 1 benefit more from diversified revenue than their La Liga counterparts. Top La Liga clubs like FC Barcelona have historically relied on broadcasting deals and commercial partnerships, benefiting from a more extensive global fanbase. However, as seen in Barcelona's growing debt, financial instability demonstrates that even clubs with high revenue must carefully manage expenditures to ensure long-term stability.

The results also challenge the idea that high player investment necessarily leads to better performance. While some clubs that reinvested diversified revenue into player spending saw success, the regression analysis found no statistically significant relationship between spending alone and league position. This shows the importance of strategic financial management—clubs must balance investments in squad development with financial sustainability rather than simply increasing expenditures on player transfers.

Another notable finding is that clubs with high debt-to-equity ratios do not always suffer poor performance. Monaco, for example, maintained strong league positions despite high debt levels, while Valencia struggled despite relatively moderate debt. This shows that debt can be managed through long-term investments or short-term player spending. Clubs accumulating debt without a clear financial strategy risk long-term instability, as seen in cases like Valencia and PSG.

The study also shows the effects of external economic shocks, such as the COVID-19 pandemic. Clubs that relied heavily on matchday revenue saw steep declines in financial performance, while those with diversified revenue sources—such as digital sponsorships and merchandising—weathered the crisis more effectively. This displays the importance of adaptability in financial planning, as clubs that can pivot toward new revenue streams are more likely to sustain financial health during periods of economic uncertainty.

These findings contribute to a broader understanding of soccer finance by illustrating that financial stability is not just about generating high revenue but also effectively balancing income sources, managing expenses, and strategically reinvesting in club development.

Chapter 6: Conclusion

This study examined how soccer clubs in Ligue 1 and La Liga diversify their revenue streams and assessed the financial factors that contribute most to sustainability. Analyzing key financial metrics, including debt-to-equity ratios, net profit margins, and revenue diversification, I found that while financial stability offers a competitive advantage, it does not guarantee on-field success. Instead, strategic revenue diversification, sound financial management, and targeted investments drive long-term sustainability.

The findings highlight that clubs with balanced financial structures, such as PSG and Sevilla, often maintain stability, while those with excessive debt, like Barcelona and Valencia, face long-term financial risks despite periods of competitiveness. Teams like Monaco and Lille demonstrate that financially distressed clubs can still perform well if they invest wisely in talent and infrastructure. This demonstrates that financial mismanagement does not immediately lead to failure but gradually erodes a club's ability to sustain success over time.

Revenue diversification remains a key factor in mitigating financial instability. Clubs reliant on broadcasting deals or player transfers are more vulnerable to economic downturns. Conversely, those expanding into commercial partnerships, merchandising, and matchday revenues create more resilient financial foundations. PSG's success underscores the benefits of substantial ownership and diversified income sources, while Valencia's struggles highlight the dangers of excessive debt and overreliance on unstable revenue streams.

However, financial management is more complex than simply maximizing revenue sources. Regression analysis revealed that clubs with high Revenue Diversification Index (RDI) values generally performed better in league standings, but diversification alone does not drive success. For example, PSG maintained strong revenue diversification but suffered financial instability due to excessive spending on player wages. Similarly, high player investment did not necessarily correlate with improved league position, reinforcing the importance of sustainable financial strategies rather than short-term spending surges.

The study also revealed differences between Ligue 1 and La Liga regarding how clubs benefit from revenue diversification. Ligue 1 clubs, particularly mid-tier teams, gain more from diversified revenue streams, likely due to stricter financial oversight and more minor global brand influence. In contrast, top La Liga clubs like Barcelona have historically relied on broadcasting deals and commercial partnerships. However, financial mismanagement can still create long-term instability, as seen in Barcelona's rising debt.

Despite these insights, this study has limitations. Data availability varied between clubs, restricting the sample size and leading to the exclusion of the 2020/21 season. Future research

could incorporate additional leagues, financial ratios, and longitudinal data to confirm further and explore these conclusions.

Ultimately, financial sustainability in modern soccer requires a careful balance between profitability and sporting ambition. Clubs that diversify revenue streams are more likely to achieve long-term success. As financial regulations such as UEFA's Financial Fair Play evolve, clubs must adapt their financial strategies to remain competitive while ensuring stability. In an increasingly commercialized and unpredictable soccer landscape, diversifying revenue has never been more critical for sporting success and economic resilience.

Bibliography

Alabi, Mobolaji, and Andrew Urquhart. "Football finance and covid-19." *Sports Economics Review*, vol. 4, Dec. 2023, p. 100021, <https://doi.org/10.1016/j.serev.2023.100021>.

Alaminos, D., Esteban, I., & Fernández-Gámez, M. A. (2020). Financial performance analysis in European football clubs. *Entropy*, 22(9), 1056. <https://doi.org/10.3390/e22091056>

Andreff, W. (2018). Financial and Sporting Performance in French Football Ligue 1: Influence on the Players' Market. *International Journal of Financial Studies*, 6(4), 91. <https://doi.org/10.3390/ijfs6040091>

Balzano, M., & Bortoluzzi, G. (2023). The digital transformation of soccer clubs and their business models. *Impresa Progetto - Electronic Journal of Management*, 1, 1-15.

Barros, C. P., Peypoch, N., & Tainsky, S. (2014). Cost efficiency of French soccer league teams. *Applied Economics*, 46(8), 781–789. <https://doi.org/10.1080/00036846.2013.854304>

Breuer, C., & Bortoluzzi, G. (2023). Organizational mission and revenue diversification in soccer clubs. *International Journal of Financial Studies*, 1(4), 119-136. <https://doi.org/10.3390/ijfs1040119>

Cordery, C. J., & Baskerville, R. F. (2011). Revenue diversification in nonprofit sports organizations. *Nonprofit Management & Leadership*, 22(1), 45-68.

Deloitte. (2023). Deloitte Football Money League 2023: Financial performance of football clubs post-pandemic. Deloitte Insights.

Fédération Internationale de Football Association. (2021). The football landscape: FIFA Vision Report 2021. FIFA Publications. <https://publications.fifa.com/en/vision-report-2021/the-football-landscape/>

Fühner, Johannes, et al. "Are diversified football clubs better prepared for a crisis? First empirical evidence from the stock market." *European Sport Management Quarterly*, vol. 21, no. 3, 7 Jan. 2021, pp. 350–373, <https://doi.org/10.1080/16184742.2020.1862273>.

Galariotis, Emilios, et al. "A combined methodology for the concurrent evaluation of the business, financial and sports performance of football clubs: The case of france." *Annals of Operations Research*, vol. 266, no. 1–2, 31 Aug. 2017, pp. 589–612, <https://doi.org/10.1007/s10479-017-2631-z>.

Lago-Peñas, C., Lago-Ballesteros, J., Dellal, A., & Gómez, M. (2010). Game-Related Statistics that Discriminated Winning, Drawing, and Losing Teams from the Spanish Soccer League. *Journal of sports science & medicine*, 9(2), 288–293.

Matesanz, David, et al. “Transfer market activities and sportive performance in European First Football Leagues: A Dynamic Network Approach.” *PLOS ONE*, vol. 13, no. 12, 19 Dec. 2018, <https://doi.org/10.1371/journal.pone.0209362>.

Mourao, Paulo Reis, and Jesyca Salgado-Barandela. “Exploring Soccer Transfers in Spanish League—the Hidden Role of Strategic Differences among Teams.” *PLOS ONE*, Public Library of Science, journals.plos.org/plosone/article?id=10.1371%Journal.pone.0299853.

Rohde, M., & Breuer, C. (2016). Europe’s Elite Football: Financial Growth, Sporting Success, Transfer Investment, and Private Majority Investors. *International Journal of Financial Studies*, 4(2), 12. <https://doi.org/10.3390/ijfs4020012>

Sport for Business. (n.d.). The world’s most watched sports. <https://sportforbusiness.com/the-worlds-most-watched-sports/>

Szymanski, S., & Kuypers, T. (2023). Financial Fair Play and its impact on European soccer clubs. *European Sports Management Quarterly*, 23(2), 221-245.

Tuckman, H. P., & Chang, W. (1991). Revenue diversification and nonprofit financial health. *Nonprofit and Voluntary Sector Quarterly*, 20(4), 411-423.

Miguel Arias Prats (2017). Valencia CF Business Plan and Financial Valuation. Valencia CF Annual Financial Report.

Wicker, P., Feiler, S., & Breuer, C. (2013). Organizational Mission and Revenue Diversification among Non-profit Sports Clubs. *International Journal of Financial Studies*, 1(4), 119-136. <https://doi.org/10.3390/ijfs1040119>

OpenAI. (2025). ChatGPT (April 7 version) [Large language model]. <https://chat.openai.com/>

Football Finance. (n.d.). Football Finance – Business analysis of football clubs. <https://www.footballfinance.de/en>

About the Author

I am a senior at Allegheny College majoring in Business with a minor in Philosophy. My academic interests focus on sports finance and economics, particularly in the financial sustainability of soccer clubs. As part of my senior comprehensive project, I analyzed revenue diversification strategies in European soccer leagues, combining my passion for the sport with financial analysis.

Beyond academics, I am actively involved in campus life as Vice President of the Allegheny College Soccer Club and a member of the Ultimate Frisbee Club. My lifelong passion for soccer extends beyond playing. I am an avid Columbus Crew and Chelsea FC supporter and have a deep interest in the business side of the game.

Originally from Dublin, Ohio, I grew up playing soccer in the area, which shaped my appreciation for the sport's financial and strategic aspects. After graduation, I hope to pursue a career in soccer finance or financial advising, whether in club management, sports consulting, or economic analysis within the soccer industry.