

SCIAMUS



ISSN: 1869-8247

Impressum

Herausgeber/Editors	Frank Daumann Julian Alexander Klöcker Benedikt Römmelt
Reviewer Board	Markus Breuer André Bühler Michael Dinkel Florian Follert Freya Gassmann Andreas Hebbel-Seeger Gregor Hovemann Gerd Nufer Luca Rebeggiani
Editor-in-Chief	Julian Alexander Klöcker E-Mail: redaktion@sciamus.de
Layout/ Design	Julian Alexander Klöcker
Verlag/ Publisher	Sciamus GmbH Waldsteinweg 32 D-95182 Döhlau E-Mail: redaktion@sciamus.de
Erscheinungsweise/ Period of Appearance	halbjährlich/biannual
ISSN	1869-8247 Vol. 17(1) © 2010 - 2026 Sciamus GmbH, Döhlau
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Wettbewerbsausgeglichenheit im professionellen Segelsport: Eine kritische Analyse der Deutschen Segel-Bundesliga

Competitive Balance in Professional Sailing: A Critical Analysis of the German Sailing Bundesliga

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DOI: 10.24403/jp.1563769

Abstrakt: Der vorliegende Beitrag untersucht erstmals systematisch die Wettbewerbsausgeglichenheit der ersten Deutschen Segel-Bundesliga und schließt damit eine Forschungslücke im professionellen Segelsport. Datengrundlage bilden archivierte Saisonergebnisse aus dem Zeitraum 2014 bis 2023, die im Rahmen einer Sekundärdatenanalyse quantitativ ausgewertet wurden. Die Resultate zeigen, dass sich die Liga tendenziell zu mehr Ausgeglichenheit entwickelt hat. Dabei weist die Saison 2022 die geringsten Unterschiede zwischen den Vereinen auf, während das Jahr 2018 die höchsten Streuungen erkennen lässt. Gleichzeitig verdeutlicht die Langzeitanalyse aber auch, dass einzelne Vereine den Wettbewerb nachhaltig dominieren.

Schlüsselwörter: Langzeitanalyse, Profisport, Segel-Bundesliga, Wettbewerbsausgeglichenheit

Abstract: The present article is the first to systematically examine competitive balance in the German Sailing Bundesliga, thereby addressing a research gap in professional sailing. The study is based on archived season results from the period 2014 to 2023, which were quantitatively analyzed as part of a secondary data analysis. The results show that the league has tended to develop towards greater balance over time. The 2022 season shows the smallest differences between clubs, whereas 2018 exhibits the greatest dispersion. At the same time, however, the long-term analysis also reveals that individual clubs have sustainably dominated the competition.

Keywords: Long-term analysis, Professional sports, Sailing Bundesliga, Competitive balance

1. Einleitung

Die Gewährleistung von Wettbewerbsausgeglichenheit stellt im Kontext professioneller sportlicher Wettbewerbe einen wesentlichen Aspekt dar, da sie sowohl die Spannung als auch die Unvorhersehbarkeit der Spielausgänge erhöht. Insbesondere der sportliche sowie der ökonomische Aspekt sind in diesem Zusammenhang von entscheidender Bedeutung (Michie & Oughton 2004). Im Vergleich zu anderen Sportarten ist der Segelsport durch eine besondere Kombination aus menschlicher und technischer Leistung sowie durch unterschiedliche Ausführungsformen gekennzeichnet. Im professionellen Bereich kann Segeln somit als ein hochkomplexer Sport bezeichnet werden, bei dem eine Vielzahl von Faktoren die Leistung beeinflusst. Dazu gehört die Bootshandhabung, die Entwicklung und Kontrolle der Ausrüstung, sowie das technische und taktische Verständnis der Athleten. Zudem sind körperliche Fitness und Muskelkraft wichtige Faktoren für die Leistungsoptimierung (Bojsen-Møller et al. 2007). Die Intensität beim Segeln variiert dabei je nach Boot und den Fähigkeiten des Seglers (Neville et al. 2009). Ferner sind Umweltaspekte wie Wind und Wellen, Sonne und Regen von maßgeblicher Relevanz für die Ausübung dieser Sportart. Dies führt zu einer Vielzahl von Variablen, die den Ausgang eines Wettbewerbs beeinflussen können.

Vor diesem Hintergrund wird im Rahmen des vorliegenden Beitrags die Deutsche Segel-Bundesliga (DSBL) als zentrales Untersuchungsobjekt beleuchtet. Die DSBL ist eine nationale Liga für Segelvereine in Deutschland, die 2013 gegründet wurde. Sie besteht aus der ersten und der zweiten Bundesliga und zielt darauf ab, den Mannschaftssegelwettbewerb zwischen den besten deutschen Segelvereinen zu fördern. Dabei treten jedes Jahr 18 qualifizierte Teams pro Liga in mehreren Regatten an, um den Meistertitel „Bester Segelverein Deutschlands“ zu erringen. Eines der Hauptziele der DSBL ist es, die Attraktivität des Segelsports zu steigern, die besten Segler Deutschlands zusammenzubringen und durch das sogenannte Einheitsboot-Prinzip eine hohe Wettbewerbsausgeglichenheit zu sichern. Mit Hilfe dieses Prinzips erfolgt eine Reduktion der Unterschiede zwischen den Teams auf deren seglerisches Können sowie auf die jeweilige taktische Umsetzung (Deutsche Segel-Bundesliga o. J. a). In diesem Zusammenhang stellt sich dennoch die Frage, ob und in welchem Umfang diese Maßnahmen zu einer ausgeglichenen Liga führen.

Ein ausschlaggebender Punkt für die Anfertigung dieses Beitrags ist die Tatsache, dass bislang kaum Forschungsarbeiten zum Thema Wettbewerbsausgeglichenheit im professionellen Segelsport existieren (beispielsweise im Vergleich zur Analyse der Wettbewerbsausgeglichenheit im professionellen Fußballsport die Studien von Littkemann et al. 2024; Oldenburg-Tietjen 2017). Deshalb soll im Kontext der DSBL eruiert werden, ob eine Angleichung der Leistungsniveaus der teilnehmenden Vereine im Zeitverlauf stattgefunden hat oder ob eine dauerhafte Dominanz einzelner Vereine zu beobachten ist (Deutsche Segel-Bundesliga 2023). Hierzu wird die Wettbewerbsausgeglichenheit der ersten DSBL untersucht und quantitativ ausgewertet. Methodisch folgt die Untersuchung einer deskriptiven Analyse der Platzierungen und Punktestände der Teams sowie der Anzahl der Siege pro Team und Saison im Zeitraum von 2014 bis 2023. Auf Basis der daraus gewonnenen Erkenntnisse sollen Trends evaluiert und Ergebnisse interpretiert werden, welche unmittelbare Auswirkungen auf die Attraktivität des Segelsports für Zuschauer, Sponsoren sowie die beteiligten Vereine ausüben.

Im Kern verfolgt dieser Beitrag somit die zentrale Fragestellung, welche Tendenzen hinsichtlich der sportlichen Wettbewerbsausgeglichenheit in der ersten Segel-Bundesliga zu beobachten sind. Die vorliegende Untersuchung soll damit einen sinnvollen Beitrag zur Forschung im Bereich der

Sportökonomie leisten, indem sie sich der bislang wenig untersuchten Wettbewerbsausgeglichenheit im professionellen Segelsport empirisch annimmt und damit zu einem besseren Verständnis der wettbewerblichen Strukturen im professionellen Segelsport verhelfen kann. Der weitere Verlauf des Beitrags ist dabei wie folgt strukturiert:

Kapitel 2 liefert die theoretischen Grundlagen zum Begriff der Wettbewerbsausgeglichenheit sowie zum System der DSBL inklusive der von ihr bereits implementierten Maßnahmen zur Sicherstellung eines ausgeglichenen Wettbewerbs. In Kapitel 3 wird die methodische Vorgehensweise der Analyse des untersuchten Datenmaterials beschrieben. Im darauffolgenden Kapitel 4 werden die Analyseergebnisse präsentiert und interpretiert, gefolgt von einer Darlegung mehrerer potenzieller Handlungsempfehlungen, die sich aus den Befunden ableiten lassen. Im Schlusskapitel 5 wird ein kurzes Resümee gezogen, verbunden mit einem Ausblick auf weitere denkbare Forschungsprojekte, die sich an diese Arbeit anschließen könnten.

2. Theoretische Grundlagen

2.1 Definition und Bedeutung von Wettbewerbsausgeglichenheit

In der wissenschaftlichen Literatur findet sich eine Vielzahl von Definitionen des Begriffs Wettbewerbsausgeglichenheit (Michie & Oughton 2004; Sanderson 2002). Diese Definitionen unterscheiden sich zum Teil erheblich voneinander und lassen sich in sportliche, finanzielle und strukturelle Definitionsansätze untergliedern. In Bezug auf die sportliche Perspektive bezeichnet der Begriff der Wettbewerbsausgeglichenheit die Ausgewogenheit der sportlichen Fähigkeiten der konkurrierenden Mannschaften. In einer perfekt ausgeglichenen Liga wäre somit die Chance, ein Spiel zu gewinnen, für jede Mannschaft gleich groß. Dies würde auch für die Chance gelten, den Meistertitel zu gewinnen. In der Konsequenz lassen sich drei Dimensionen des Wettbewerbsgleichgewichts unterscheiden: Spielungewissheit, saisonale Ungewissheit und Dominanz (Cairns 1987). Als verlässliche Indikatoren zur quantitativen Darstellung der (Un-) Ausgeglichenheit eines Wettbewerbs werden in der Literatur unter anderem die Punktedifferenz, der Anteil der Spitzenteams, sowie die Anzahl der Auf- und Absteiger genannt (Michie & Oughton 2004; Szymanski & Smith 1997; Zimbalist 2002).

Die Diskussionen über Wettbewerbsausgeglichenheit im Sport unter dem finanziellen Aspekt konzentrieren sich hingegen vorrangig auf Maßnahmen zur Umverteilung von Einnahmen. Sportverbände haben daher Regeln und Instrumente wie die Einnahmenteilung, Reserveklauseln und Gehaltsobergrenzen eingeführt, um ein finanzielles und wettbewerbliches Gleichgewicht zwischen den Teams sicherzustellen (Feddersen & Maennig 2005). Die Gründe für diese Entwicklung sind evident. Eine unregulierte Situation führt dazu, dass die erfolgreicherer Vereine an der Spitze der Liga vermögender werden, während die weniger erfolgreichen Vereine finanziell (und dadurch mittelbar auch sportlich) benachteiligt werden. Folglich begünstigen unregulierte Ligen eine tendenzielle Vergrößerung der Leistungsunterschiede zwischen den Vereinen an der Spitze und am Ende der Liga. Ein Mangel an Wettbewerbsgleichgewicht führt in der Konsequenz zu Vorhersehbarkeit und Langeweile der Spiele. Die Umverteilung finanzieller Ressourcen erfüllt somit eine wichtige Funktion, indem sie das Wettbewerbsgleichgewicht verbessert, mehr Zuschauer und Zuhörer anlockt und die Integrität einer Liga bewahrt (Michie & Oughton 2004).

Neben den finanziellen Aspekten sind im Kontext der Wettbewerbsausgeglichenheit im Sport allerdings eine Reihe weiterer Dimensionen zu berücksichtigen, die nicht unmittelbar mit monetären Faktoren in Verbindung stehen (Sanderson 2002). Hierbei sind vor allem strukturelle Mechanismen und

Anpassungen hervorzuheben, wie etwa Auswahlverfahren bzw. Draft-Systeme oder Fair-Play-Regelungen. Als ebenfalls relevante Faktoren zu erwähnen sind die Anzahl der Teams, Auf- und Abstiegsregelungen sowie die Ausgestaltung der Spielpläne (Fort & Quirk 1995; Kringstad & Gerrard 2007).

Zusammenfassend lässt sich festhalten, dass die Wettbewerbsausgeglichenheit von einer Vielzahl an Einflussfaktoren abhängt, wobei verschiedene Maßnahmen zu einer Angleichung der Wettbewerbsbedingungen sowie zu einer Steigerung der Chancengleichheit beitragen können (Fort & Quirk 1995).

2.2 Das System der Deutschen Segel-Bundesliga

Eine grundlegende Voraussetzung für die nachfolgende Betrachtung des Systems der DSBL ist die Definition einer einfachen Liga. Eine einfache Liga kann anhand von fünf Merkmalen beschrieben werden:

- Es liegt eine geschlossene Liga vor, d. h. in jeder Saison nimmt dieselbe Anzahl an Mannschaften teil.
- Es existiert eine einheitliche Struktur im Sinne der Gleichgewichtung der Ergebnisse aller gespielten Partien einer Saison, sprich, es finden keine Play-offs statt.
- Sämtliche Mannschaften in einer Liga treten gleichhäufig gegeneinander an. Ausscheidungsspiele mit K.o.-Phasen sind nicht vorgesehen.
- Es muss stets einen Sieger pro Spiel geben, ein Unentschieden ist ausgeschlossen und die Ergebnisse werden nicht unterschiedlich gewichtet.
- Der Sieger wird anhand einer einzigen Bewertungskategorie ermittelt. Dabei gibt die beste Sieg-Niederlagen-Bilanz den Ausschlag (Kringstad & Gerrard 2007).

In der Vergangenheit existierte im deutschen Hochleistungssegelsport kein bundesweiter Clubwettbewerb mit einem hohen sportlichen Stellenwert. Diese Situation änderte sich jedoch im Juni 2013 mit der Einführung der DSBL. Sie ermöglicht es den besten Segelclubs Deutschlands, über eine Saison hinweg bei mehreren Regatten gegeneinander anzutreten.

In der ersten Bundesliga, bestehend aus 18 Vereinen, gibt es pro Saison sechs Spieltage. Diese werden an unterschiedlichen Revieren, verteilt in ganz Deutschland ausgetragen. Ein Spieltag dauert über drei Tage an und findet zumeist von Freitag bis Sonntag statt. Gesegelt wird auf One-Design-Kielbooten, sogenannten J70, welche von der DSBL zur Verfügung gestellt werden. Somit ist es nicht notwendig, dass die Vereine ihre eigenen Boote zum jeweiligen Spieltag mitbringen (Deutsche Segel-Bundesliga 2024a). Das Konzept des One-Designs basiert auf der Prämisse, dass die erzielten Rennergebnisse stets durch die individuelle Leistung und das Können der Athleten bestimmt werden und nicht durch das verwendete Material. Innerhalb einer One-Design-Klasse soll dadurch die Homogenität bezüglich der verwendeten Ausrüstung sichergestellt werden.

Pro Liga gibt es sechs Boote, sprich, bei jedem Rennen segeln immer sechs Vereine direkt gegeneinander. Aus Gründen der Fairness gibt es sogenannte Flights. Ein Flight besteht aus drei Rennen, sodass pro Flight alle 18 Vereine genau ein Rennen bestreiten. Ein gesamter Spieltag setzt sich wiederum aus insgesamt 16 solcher Flights zusammen. Dadurch wird sichergestellt, dass am Ende eines jeden Spieltags jeder Verein mindestens einmal gegen jeden anderen Verein angetreten ist. Welcher Verein in welchem Flight gegen wen antritt, wird per Los entschieden. Zur Veranschaulichung des beschriebenen Wettkampfformats ist in Tabelle 1 ein beispielhafter Auszug einer Paarungsanordnung dargestellt. Aus Gründen der Übersicht

sind lediglich die Kürzel der Vereinsnamen aufgeführt. Die vollständigen Vereinsnamen können aus Abbildung 3 entnommen werden.

Tabelle 1: Auszug einer beispielhaften Paarungsanordnung der Rennen und Flights eines Spieltags

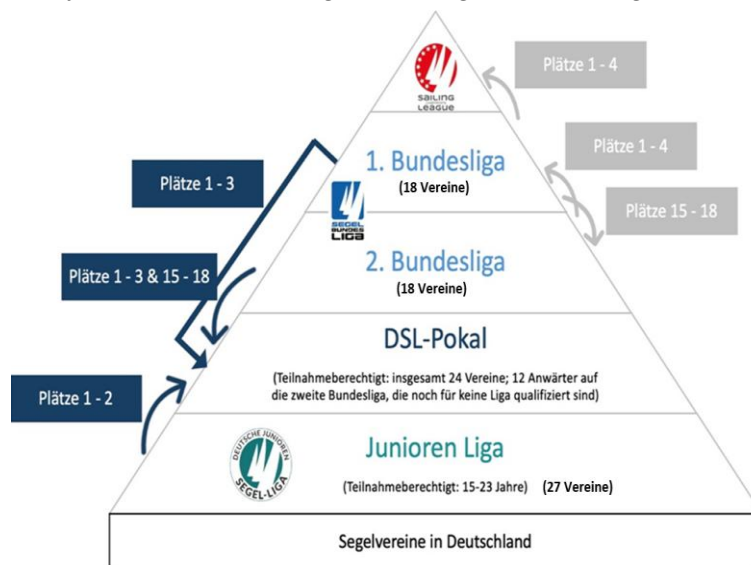
Flight	Rennen	Boot 1	Boot 2	Boot 3	Boot 4	Boot 5	Boot 6
1	1	MSC	WVH	DYC	SV03	VSAW	HSC
	2	CYC	RSN	FSC	BYCÜ	BYC (Be)	MYC
	3	SSC	NRV	ASVW	KYC (BW)	SMCÜ	WYC
2	1	WVH	BYC (Be)	ASVW	HSC	SMCÜ	FSC
	2	KYC (BW)	VSAW	RSN	MSC	SSC	BYCÜ
	3	NRV	WYC	CYC	MYC	DYC	SV03
...	...	...	...	...	...	...	...
16	1	SSC	ASVW	DYC	FSC	BYCÜ	SV03
	2	NRV	MSC	KYC (BW)	CYC	WVH	RSN
	3	SMCÜ	VSAW	HSC	BYC (Be)	MYC	WYC

Für jedes Rennen erhalten die Vereine Punkte. Der erstplatzierte bekommt einen, der zweitplatzierte zwei usw., der letztplatzierte erhält sechs Punkte. Sollte ein Verein zu früh gestartet sein, das Rennen nicht bis ins Ziel segeln oder aufgrund eines Regelverstosses disqualifiziert werden, so erhält dieser sieben Punkte. Alle gesammelten Punkte in allen gesegelten Rennen werden schließlich addiert, wobei der Verein mit den wenigsten Punkten den Spieltag gewinnt.

Die Ergebnisse der einzelnen Spieltage werden im Verlauf der Saison kumuliert. Dabei erhält der erstplatzierte Verein eines Spieltags 1 Punkt, der zweitplatzierte 2 Punkte und der letztplatzierte 18 Punkte. Am Ende der Saison wird derjenige Verein Deutscher Meister, welcher die wenigsten Punkte über alle Spieltage hinweg gesammelt hat. Dieser darf sich dann für ein Jahr „Deutscher Meister der Segelvereine“ nennen (Deutsche Segel-Bundesliga 2024b).

In der DSBL gibt es direkte und indirekte Auf- und Abstiegsmöglichkeiten, ähnlich wie in anderen Sportligen. Die letzten vier Vereine der ersten Liga steigen direkt in die zweite ab, während die ersten vier Vereine der zweiten Liga direkt in die erste aufsteigen. Eine Relegation fand in den Saisons 2015 und 2016 statt, wurde jedoch für die erste Liga wieder abgeschafft. Die Qualifikation für die zweite Liga erfolgt über den Deutschen Segel-Liga-Pokal (DSL-Pokal), der auch eine Relegationsmöglichkeit für abgestiegene Vereine der zweiten Liga bietet (Deutsche Segel-Bundesliga 2021). Die ersten vier Plätze der ersten Liga qualifizieren sich außerdem für die Sailing Champions League (SCL). Bei dieser können sich die Clubs international messen (Deutsche Segel-Bundesliga o. J. a). Einen zusammenfassenden Überblick über das gesamte Ligasystem bietet Abbildung 1.

Abb. 1: Das System der Deutschen Segel-Bundesliga (Deutsche Segel-Bundesliga 2017)

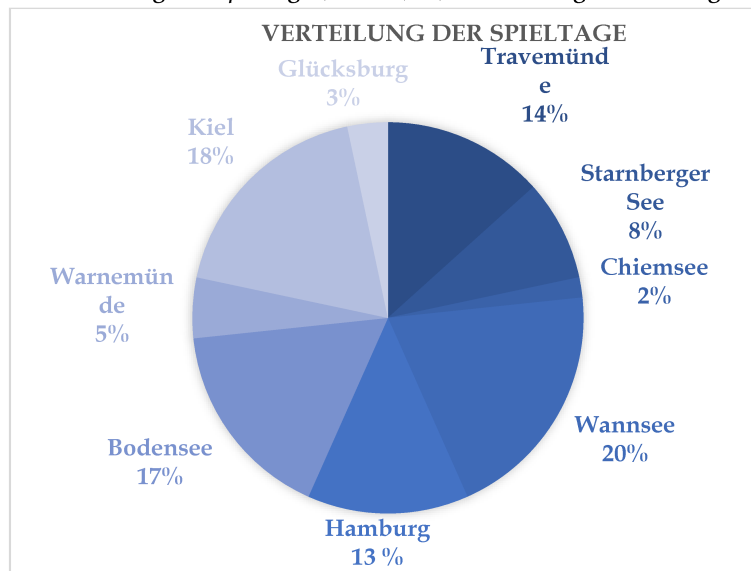


2.3 Maßnahmen der DSBL zur Förderung eines ausgeglichenen Wettbewerbs

Um den Wettbewerb zu fördern und die Spannung aufrechtzuerhalten, ergreifen die meisten Sportligen Maßnahmen, welche das Ausmaß der Ungleichheit zwischen den Mannschaften begrenzen sollen (Doria & Nalebuff 2021). Im Folgenden werden Maßnahmen vorgestellt, die von der DSBL in der Vergangenheit bereits zur Förderung eines ausgeglichenen Wettbewerbs ergriffen wurden.

Eine dieser Maßnahmen besagt, dass Segler nicht auf einem Markt gehandelt werden dürfen. Dadurch wird es erheblich erschwert, einen leistungsstarken Segler von einem Verein abzuwerben. Ferner hat die DSBL festgelegt, dass ein Segler für einen Verein nur dann startberechtigt ist, wenn dieser mindestens ein Jahr in diesem Verein Mitglied ist und in der vergangenen Saison nicht für einen anderen Verein angetreten ist. Eine frühere Startberechtigung kann dennoch in Ausnahmefällen erteilt werden. Eine weitere Regelung betrifft Frauen- und Juniorenteams. In der Regel setzt sich ein Team, das an einem Spieltag antritt, aus vier Seglern zusammen. Im Sinne der Fairness wird für Frauen- und Juniorenteams allerdings wahlweise die Möglichkeit gewährt, mit vier oder mit fünf Sportlern auf einem Boot an den Start zu gehen (Deutsche Segel-Bundesliga 2022). Auch hinsichtlich der Wettkampforte hat die DSBL von Beginn an dafür Sorge getragen, dass der Wettbewerb möglichst ausgeglichen abläuft. Die Verteilung der Spieltage über ganz Deutschland erfolgt dabei jährlich in neuen Konstellationen. Das Rotationssystem bietet somit jedem Team die Möglichkeit, mindestens einmal eine kürzere An- und Abreisezeit nutzen zu können oder auf Bedingungen zu treffen, die den eigenen Präferenzen entsprechen. Im Allgemeinen vollzieht sich die jährliche Rotation der DSBL zwischen insgesamt neun Orten bzw. Seen. Abbildung 2 zeigt die Verteilung der Spieltage der letzten zehn Jahre (Deutsche Segel-Bundesliga o. J. b).

Abb. 2: Verteilung der Spieltage (N = 60), (Deutsche Segel-Bundesliga o. J. b)



Auch die Förderung des Nachwuchses kann zu einer Stärkung der Ausgeglichenheit des Wettbewerbs beitragen. In diesem Bereich hat die DSBL ebenfalls frühzeitig Maßnahmen ergriffen. Im Jahr 2016 wurde die Deutsche Junioren Segel-Liga (DSJL) eingeführt, wodurch ein Förderprogramm für Jugend- und Nachwuchsteams etabliert wurde. Das Format entspricht im Wesentlichen dem der DSBL, wodurch ermöglicht wird, eine Vielzahl von jungen Seglern gleichzeitig auszubilden und auf das professionelle Bundesligasegeln vorzubereiten. Dies erfolgt ohne die Notwendigkeit des Einstiegs in den olympischen Wettkampfsport (Deutsche Segel-Bundesliga 2016). Zudem führt die DSBL eine offene Kommunikation, welche Transparenz schaffen kann. Durch diese kann Feedback von allen Stakeholdern eingeholt und Ideen schneller umgesetzt werden. In der DSBL gibt es hierfür den Deutschen Segel-Liga e. V. (DSL e. V.), der die Interessen der Bundesligavereine vertritt und als Sprachrohr zwischen den Vereinen und der DSBL dient (Deutsche Segel-Bundesliga o. J. c).

Forschungsliteratur zum Thema Wettbewerbsausgeglichenheit im professionellen Segelsport ist zum aktuellen Zeitpunkt nach wie vor kaum vorhanden. Daher verwundert es auch nicht, dass bislang keine systematische Analyse dazu vorliegt, inwieweit die genannten Maßnahmen der DSBL tatsächlich zu einem ausgeglichenen Wettbewerb beitragen. Demgegenüber sind in anderen Sportarten bereits umfassende Forschungsaktivitäten zu verzeichnen, siehe zum Beispiel Gasparetto et al. (2023), Goossens (2006), Littkemann et al. (2024), Michie & Oughton (2004), Oldenburg-Tietjen (2017), Sass (2016), Szymanski (2001), Truyens et al. (2016), Vrooman (2009) und Zimbalist (2002). Eine weitere beispielhafte Analyse der Wettbewerbsfähigkeit wurde von Feddersen und Maennig (2005) vorgenommen, worin die wichtigsten europäischen Fußballligen in Italien, England, Deutschland und Spanien sowie die vier größten US-amerikanischen Profiligen NBA (Basketball), NFL (American Football), NHL (Eishockey) und MLB (Baseball) untersucht wurden. Im Rahmen ihres Beitrags argumentieren sie, dass insbesondere die Abschlusstabellen der Mannschaftssportligen eine geeignete Grundlage für die Berechnung der Wettbewerbsbilanz hinsichtlich der Unsicherheit des Saisonausgangs darstellen (Feddersen & Maennig 2005). Diese werden entsprechend auch im vorliegenden Beitrag als Datengrundlage herangezogen, um den Status quo der Wettbewerbsausgeglichenheit in der DSBL zu erfassen.

3. Methodik

3.1 Beschreibung und Verarbeitung der Datenbasis

Die gewählte Untersuchungsmethode ist die Sekundärdatenanalyse. Diese bezeichnet die Analyse von Daten, die von einer anderen Person zu einem anderen primären Zweck erhoben wurden. Bei den verwendeten Daten handelt es sich um Sekundärdaten, da sie dem Archiv der Webseite der DSBL entnommen wurden. Der Erhebungszeitraum umfasst die Jahre 2014 bis 2023. Die Datenerhebung erfolgte an den einzelnen Spieltagen und wurde gemäß des Programms SAP Sailing Analytics erfasst und dokumentiert. Das Programm wurde von SAP eigens für den Segelsport entwickelt (Konzeptwert Holding GmbH 2024).

Die Tabellen der DSBL sind stets nach einem einheitlichen Schema aufgebaut. Die Spalten beinhalten die Gesamtplatzierungen am Ende eines Spieltags, die Abkürzung des Vereins, den vollen Namen des Vereins, die Ergebnisse jedes einzelnen Spieltags über eine Saison hinweg, sowie die aufsummierten Punktestände der Teams. In den Zeilen sind die einzelnen Ergebnisse der jeweiligen Vereine und deren Gesamtpunktzahl aufgeführt.

In der Saison 2014 der DSBL wurden die Punkte noch nach dem Top-Down-Prinzip geordnet. Pro Spieltag erhielt der Erstplatzierte 18 Punkte, der Letztplatzierte einen. Am Ende der Saison war jener Verein Deutscher Meister, der über alle Spieltage hinweg die meisten Punkte gesammelt hatte. Ab der Saison 2015 wurde diese Vorgehensweise jedoch geändert. In der Folge wurde festgelegt, dass pro Spieltag der Erstplatzierte einen Punkt und der Letztplatzierte 18 Punkte erhält. Um die Auswertung der Daten unter Verwendung einer identischen Datenstruktur zu ermöglichen, wurden die Daten der Tabelle der Saison 2014 entsprechend an alle folgenden Saisons angepasst. Exemplarisch ist in Abbildung 3 die Gesamttabelle der Saison 2023 dargestellt. Die Tabellen aller weiteren Saisons können der Website der DSBL entnommen werden (Deutsche Segel-Bundesliga o. J. b).

Abb. 3: Tabelle am Ende der Saison 2023 (SAP Sailing Analytics 2023)

✓ ▲	Gesamtplatz	Team	Name	Berlin	Travemünde	Kiel	Konstanz	Überlingen	Hamburg	Σ
☐	1	NRV	Norddeutscher Regatta Verein	3	1	7	11	1	1	24
☐	2	MYC	Münchner Yacht-Club	2	6	1	3	10	7	29
☐	3	MSC	Mühlenberger Segel-Club	1	15	13	5	3	8	45
☐	4	WVH	Wassersport-Verein Hemelingen	9	12	12	2	2	10	47
☐	5	SV03	Seglervereinigung 1903	8	8	10	7	11	3	47
☐	6	SMCU	Segel- und Motorboot Club Überlingen	15	3	6	4	5	16	49
☐	7	VSAW	Verein Seglerhaus am Wannsee	18	2	2	17	12	2	53
☐	8	WYC	Württembergischer Yacht-Club	10	4	4	15	8	12	53
☐	9	DYC	Düsseldorfer Yachtclub	16	9	11	8	4	6	54
☐	10	BYCU	Bodensee-Yacht-Club Überlingen	12	7	9	9	7	13	57
☐	11	CYC	Chiemsee Yacht Club	11	16	3	1	16	11	58
☐	12	BYC (BE)	Berliner Yacht-Club	17	5	16	10	9	5	62
☐	13	RSN	Regatta-Segler Neuruppin	7	13	5	12	14	15	66
☐	14	FSC	Flensburger Segel-Club	4	17	15	14	13	4	67
☐	15	SSC	Schlei-Segel-Club	6	14	18	6	6	17	67
☐	16	ASVW	Akademischer Segelverein Warnemünde	5	11	14	16	17	14	77
☐	17	KYC (BW)	Konstanzer Yacht Club	14	10	17	13	15	9	78
☐	18	HSC	Hamburger Segel-Club	13	18	8	18	18	18	93

3.2 Variablen

Im Rahmen des vorliegenden Beitrags wurden insgesamt drei Variablen zur Analyse der Wettbewerbsausgeglichenheit herangezogen: Die Punktestände der Teams, die Platzierungen der

Teams sowie die Anzahl (bzw. der Anteil) der Siege pro Team je Saison. Alle drei Variablen stellen etablierte Messgrößen zur Operationalisierung der Wettbewerbsausgeglichenheit dar und finden in der einschlägigen Literatur Anwendung (Feddersen & Maennig 2005; Littkemann et al. 2024; Michie & Oughton 2004; Owen et al. 2007; Zimbalist 2002).

Die erste Variable befasst sich mit den Punkteständen der einzelnen Teams und erweist sich als vorteilhaft, da eine Verbindung zu anderen Variablen hergestellt werden kann. So können beispielsweise Korrelationen mit finanziellen Ressourcen, Trainingskapazitäten oder Sponsoring aufgedeckt werden, um zu eruieren, ob ein Zusammenhang zwischen der finanziellen Stärke eines Teams und dessen sportlichem Erfolg besteht (Szymanski 2003). Des Weiteren erlaubt die Anwendung eine unmittelbare Abbildung der Leistung eines Teams, da die Punktestände die sportliche Leistung adäquat widerspiegeln. Ferner erlaubt eine Analyse der Punktedifferenzen und des Punktedurchschnitts Rückschlüsse auf die Wettbewerbsstärke und Konstanz eines Vereins (Szymanski 2003).

Die zweite Variable bezieht sich auf die Platzierungen der Teams. Diese misst unter anderem die Leistungsdifferenzen zwischen den Vereinen und spiegelt die sportliche Leistung innerhalb einer Saison unmittelbar wider. Nimmt beispielsweise ein Verein über einen längeren Zeitraum hinweg eine dominierende Position ein, so lässt dies auf eine geringe Wettbewerbsausgeglichenheit schließen. Demgegenüber weisen wechselnde Platzierungen über die Jahre hinweg auf eine ausgeglichene Liga hin (Szymanski 2001). Zudem dient diese Variable der Erkennung langfristiger Trends, da die Analyse der Siege über mehrere Saisons die Aufdeckung von Trends in der Leistungsentwicklung der Vereine ermöglicht. Zeigen bestimmte Clubs über einen längeren Zeitraum hinweg eine höhere Anzahl an Siegen als andere, so kann dies auf eine systematische Dominanz oder auf eine ungleiche Verteilung von Ressourcen hindeuten.

Die dritte Variable bezieht sich auf die Anzahl (bzw. den Anteil) der Spieltags-Siege pro Team je Saison. Diese Größe kann als direkter Leistungsindikator für die Teamstärke betrachtet werden, da sie eine klare Aussage über die Stärke eines Teams im Vergleich zu anderen erlaubt. Vereine, die eine hohe Anzahl an Spieltags-Siegen aufweisen, dominieren folglich die Liga. Teams, die regelmäßig Siege verzeichnen, können zudem eine ungleiche Verteilung von Ressourcen und Talenten aufweisen, was auf eine geringe Wettbewerbsausgeglichenheit hindeutet. Eine gleichmäßige Verteilung der Siege deutet hingegen auf eine hohe Wettbewerbsbalance und Chancengleichheit innerhalb der Liga hin (Owen et al. 2007; Vrooman 2009).

3.3 Kennzahlen

Als geeignete ausgewählte Kennzahlen zur Beschreibung der empirischen Befundlage werden im Rahmen dieses Beitrags folgende Größen herangezogen:

- Arithmetisches Mittel ($\bar{x}$), wobei $\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$ (1)

- Standardabweichung (s), wobei $s = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_i - \bar{x})^2}$ (2)

- Variationskoeffizient (CV), wobei $CV = \frac{s}{\bar{x}}$ mit $0 \leq CV \leq \sqrt{n}$ (3)

- Normierter Herfindahl-Index ($nHHI$), wobei $nHHI = \frac{(HHI - \frac{1}{n})}{1 - \frac{1}{n}}$ mit $0 \leq nHHI \leq 1$ und
 $HHI = \sum_{i=1}^n (MS_i)^2$ mit $\frac{1}{n} \leq HHI \leq 1$ (4)

(Kohn & Öztürk 2022; Owen et al. 2007).

Dabei bezeichnet x_i den i -ten Beobachtungswert, n den Stichprobenumfang einer Stichprobe bzw. Datenreihe X und MS_i den prozentualen Anteil der Siege bzw. Meistertitel des i -ten Vereins.

Das arithmetische Mittel, auch als Durchschnitt bezeichnet, stellt ein Maß der zentralen Tendenz dar, welches den durchschnittlichen Wert eines Datensatzes angibt (Moore 1996). Es ist das am häufigsten verwendete Lokalisationsmaß und wird oftmals auch als Mittelwert bezeichnet (Schira 2009). Aufgrund seiner einfachen Berechnung und Verständlichkeit erfreut es sich einer breiten Anwendung. Zu erwähnen ist allerdings, dass das arithmetische Mittel durch Ausreißer stark beeinflusst werden kann, weshalb es nicht immer das geeignetste Maß der zentralen Tendenz darstellt, insbesondere bei stark asymmetrischen Verteilungen (Moore 1996).

Die Standardabweichung gilt als eines der am häufigsten verwendeten Maße für die Streuung (Kringstad & Gerrard 2007). Ihre Berechnung ermöglicht insbesondere die Ermittlung der durchschnittlichen Abweichung einer einzelnen Beobachtung vom arithmetischen Mittelwert. Eine geringe Standardabweichung lässt auf eine homogene Verteilung der Punktestände der Vereine schließen, was auf einen ausgeglichenen Wettbewerb hindeutet. Ein hoher Wert hingegen indiziert signifikante Unterschiede bei den Punkteständen der Vereine, was auf einen unausgeglichenen Wettbewerb schließen lässt (Feddersen & Maennig 2005). Ein wesentlicher Nachteil der Standardabweichung sowie zahlreicher weiterer zusammenfassender Statistiken besteht allerdings darin, dass der ermittelte Wert sowohl von der Einheit als auch von der Anzahl der Beobachtungen und dem Mittelwert der Datenreihe abhängig ist. Dies erschwert die unmittelbare Vergleichbarkeit zu anderen Datenreihen sowie die Interpretation konkreter Werte.

Der Variationskoeffizient ist (ebenfalls wie die Standardabweichung) eine weit verbreitete Kenngröße zur Streuungsmessung. Er gibt die durchschnittliche prozentuale Streuung der Beobachtungen um den arithmetischen Mittelwert an und lässt sich daher im Gegensatz zur Standardabweichung gut für Vergleichszwecke einsetzen. Rechnerisch ermittelt wird er als das Verhältnis bzw. als Quotient zwischen dem arithmetischen Mittel und der Standardabweichung. Der Variationskoeffizient stellt somit eine dimensionslose Größe dar, wodurch eine leichte Interpretation in der Praxis ermöglicht wird (Albert & Zhang 2010). Ein hoher Wert indiziert folglich eine stark variierende Leistung der Vereine und somit einen unausgeglichenen Wettbewerb. Ein niedriger Wert hingegen lässt auf eine weniger stark variierende Leistung und somit auf einen ausgeglicheneren Wettbewerb schließen (Truyens et al. 2016). Ergänzend sei angemerkt, dass sich der Wertebereich des Variationskoeffizienten für den Fall ausschließlich nicht negativer Beobachtungswerte in einer Stichprobe bzw. Datenreihe auf $0 \leq CV \leq \sqrt{n}$ beschränkt (Kohn & Öztürk 2022).

Die vierte und letzte für die Analyse relevante Kennzahl, der Herfindahl-Index (HHI), ist ein klassisches Konzentrationsmaß und dient dazu, die Verteilung einer bestimmten Erfolgsgröße zu analysieren. Ursprünglich wurde er verwendet, um zu untersuchen, ob sich die Marktanteile einer Branche auf viele Unternehmen verteilen, oder ob nur wenige (oder gar ein einziges) Unternehmen einen Markt dominieren. Im sportökonomischen Kontext kann er beispielsweise aufzeigen, wie sich in einem bestimmten Zeitraum die Siege oder Meistertitel auf die teilnehmenden Vereine einer Liga verteilen und wie stark einzelne Vereine den Wettbewerb dominieren (Owen et al. 2007). In der vorliegenden Studie wird der HHI sowohl auf Basis der Spieltags-Sieganteile als auch auf Basis der Meisterschafts-Sieganteile berechnet. Da sein Wertebereich von der Anzahl der Ligateilnehmer abhängt, wird er in seiner normierten Variante ($nHHI$) präsentiert, dessen Wertebereich sich auf $0 \leq nHHI \leq 1$ erstreckt und somit direkte Vergleiche zu Befunden anderer Studien ermöglicht.

4. Befunde

4.1 Darstellung

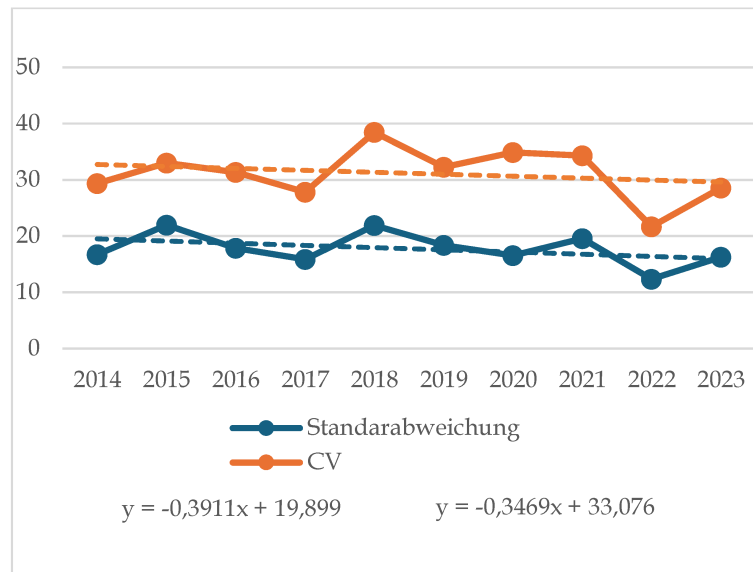
Zur Analyse der Wettbewerbsausgeglichenheit der DSBL wurden zunächst das arithmetische Mittel, die Standardabweichung und der Variationskoeffizient auf Basis der Punktestände aller $N = 18$ Vereine zum Ende einer jeweiligen Saison berechnet. Die Kennzahlenwerte im gewählten Beobachtungszeitraum von 2014 bis 2023 sind in Tabelle 2 zusammengetragen. Da in der Saison 2015 sieben Spieltage (bzw. in Saison 2020 nur fünf Spieltage) stattfanden, weichen die Mittelwerte in diesen beiden Saisons vom obligatorischen Wert $\bar{x} = 57,0$ ab.

Tabelle 2: Deskriptive Auswertung der Punktestände zu Saisonende im Zeitraum 2014-2023

Saison	$\bar{x}$	s	CV
2014	57,0	16,7	29%
2015	67,5	22,0	33%
2016	57,0	17,9	31%
2017	57,0	15,8	28%
2018	57,0	21,9	38%
2019	57,0	18,4	32%
2020	47,5	16,6	35%
2021	57,0	19,5	34%
2022	57,0	12,4	22%
2023	57,0	16,3	29%

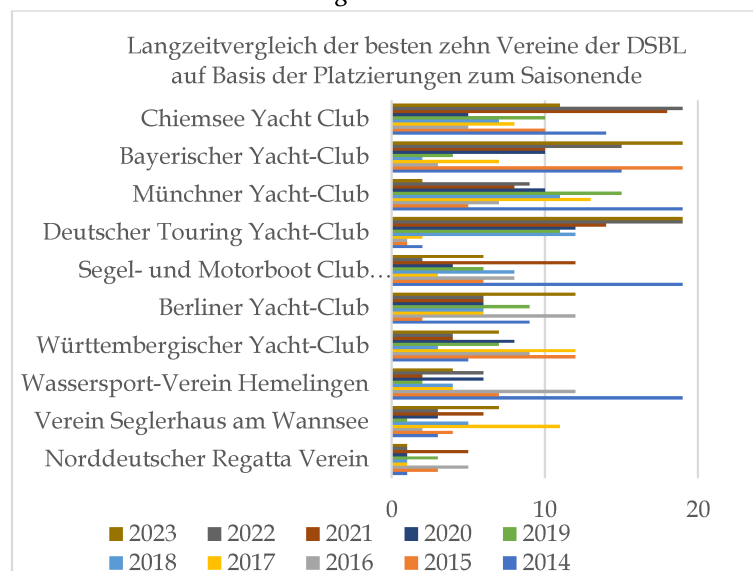
Eine Analyse der Daten zeigt, dass die höchste Standardabweichung mit einem Wert von $s = 22$ in der Saison 2015 vorliegt. Demgegenüber weist die Saison 2022 mit einem Wert von $s = 12,4$ die niedrigste Standardabweichung auf, wobei ein deutlicher Abstand von knapp 10 Punkten zu verzeichnen ist. Ein ähnliches Ergebnis zeigt sich für den Variationskoeffizienten mit einem Wert von $CV = 38\%$ in 2018 versus $CV = 22\%$ in 2022. Aus sportlicher Perspektive lässt sich somit ableiten, dass die Saison 2022 die ausgeglichene war, während sich die Saisons 2015 und 2018 durch einen vergleichsweise weniger ausgeglichenen Wettbewerb auszeichneten. Die langfristige Entwicklung der Standardabweichung sowie die des CVs sind in Abbildung 4 veranschaulicht. Sowohl die Standardabweichung als auch der CV zeigen dabei einen leicht negativen Trend, was darauf hindeutet, dass sich die Wettbewerbsausgeglichenheit auf Basis der Punktestände im Untersuchungszeitraum auf einem relativ stabilen Niveau bewegt.

Abb. 4: Entwicklung der Standardabweichung und des CV der erreichten Punktzahl im Zeitraum 2014-2023



Ergänzend zu den Befunden auf Basis der Punktestände bietet Abbildung 5 eine Langzeitübersicht der Platzierungen pro Verein. Hierzu sei angemerkt, dass dabei jedoch lediglich eine Fokussierung auf die zehn erfolgreichsten Vereine erfolgte, da im Untersuchungszeitraum insgesamt 34 verschiedene Vereine in der ersten Bundesliga vertreten waren. Eine Betrachtung aller Vereine war aufgrund der damit einhergehenden Unübersichtlichkeit nicht zielführend. Wie aus Abbildung 5 hervorgeht, weisen die führenden Vereine in den vergangenen zehn Jahren lediglich eine geringe Anzahl von Ausreißern nach oben auf, was insbesondere im Diagramm des Norddeutschen Regatta Vereins (NRV) ersichtlich ist.

Abb. 5: Langzeitvergleich der besten zehn Vereine der DSBL nach Platzierung im Zeitraum 2014-2023



Etwas anders aufbereitet ist dieses Resultat in Tabelle 3 auf Basis der Durchschnittsplatzierungen ersichtlich. Während der NRV eine durchschnittliche Platzierung von 2,2 erreicht, liegt der CYC im Durchschnitt auf Position zehn. Hervor sticht dabei auch die Differenz zwischen dem erstplatzierten

NRV und dem zweitplatzierten VSaW.

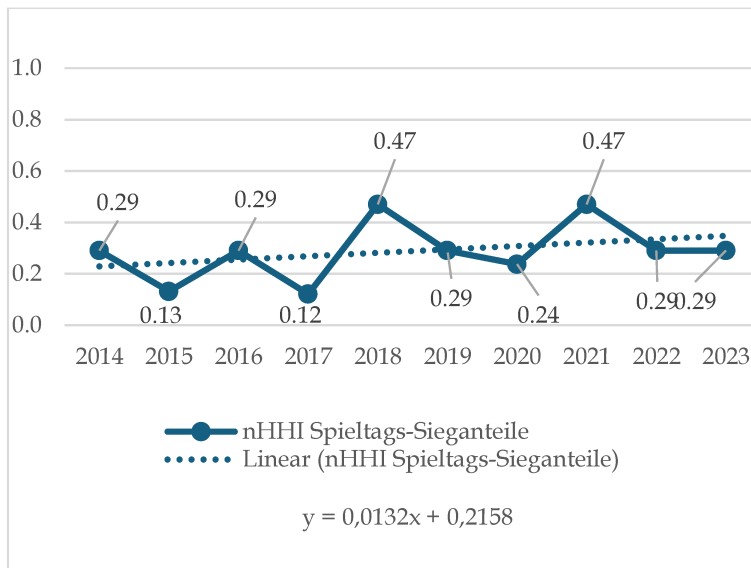
Tabelle 3: Durchschnittliche Platzierung der besten zehn Vereine im Zeitraum 2014-2023

Verein	Ø Platzierung
Norddeutscher Regatta Verein (NRV)	2,2
Verein Seglerhaus am Wannsee (VSaW)	4,6
Wassersport-Verein Hemelingen (WVH)	5,4
Segel- und Motorboot Club Überlingen (SMCÜ)	6,2
Deutscher Touring Yacht-Club (DTYC)	7,0
Württembergischer Yacht-Club (WYC)	7,4
Berliner Yacht-Club (BYC) (BE)	7,5
Bayerischer Yacht-Club (BYC) (BA)	8,4
Münchner Yacht-Club (MYC)	9,0
Chiemsee Yacht Club (CYC)	10,0

Bezüglich des Anteils der Meistertitel ist zu beobachten, dass der normierte Herfindahl-Index im Zeitraum von 2014-2023 mit einem Wert von $nHHI = 0,39$ eine relativ starke Konzentration aufweist. Hieraus lässt sich ableiten, dass sich die im Untersuchungszeitraum von 2014-2023 errungenen zehn Meistertitel auf nur einige wenige Vereine konzentrieren.

Einen weiteren Befund im Zusammenhang mit dem $nHHI$ bietet Abbildung 6. In ihr sind die Werte bezogen auf die Spieltags-Sieganteile einer jeweiligen Saison aufgeführt und (ebenso wie die Standardabweichung und der Variationskoeffizient) in einem Langzeitvergleich dargestellt.

Abb. 6: Entwicklung des $nHHI$ auf Basis der Spieltags-Sieganteile im Zeitraum 2014-2023



Im Gegensatz zu den Langzeitbefunden, die auf Basis der Punktestände beobachtet wurden (siehe

Abbildung 4), indizieren die nHHI-Werte in Abbildung 6 eine vergleichsweise hohe Konzentration der Spieltags-Siege zugunsten einzelner Vereine, da in sieben von zehn Saisons nHHI-Werte von mindestens 0,29 oder höher erreicht wurden. Die höchsten Werte wurden dabei in den Saisons 2018 und 2021 erreicht, da der NRV in diesen beiden Spielzeiten jeweils vier von sechs Spieltagen gewonnen hat. Darüber hinaus deutet die leicht steigende Trendlinie darauf hin, dass sich diese Dominanz langfristig auf einem relativ konstanten Niveau bewegt bzw. tendenziell sogar leicht zugenommen hat. Zum Vergleich der vorliegenden Ergebnisse mit anderen Sportligen kann an dieser Stelle auf eine Studie von Triguero-Ruiz und Avila-Cano verwiesen werden. Darin werden nHHI-Werte mehrerer europäischer Fußballligen ausgewiesen und im Hinblick auf ihre Aussagekraft für die Wettbewerbsausgeglichenheit eingeordnet (Triguero-Ruiz & Avila-Cano 2018).

4.2 Interpretation

Es lässt sich festhalten, dass auf Basis der Punktestände die Saison 2022 als die ausgeglichene bzw. die Saison 2018 als die unausgeglichene Saison im Zeitraum von 2014 bis 2023 betrachtet werden kann. In der Langzeitbetrachtung zeigt sich, dass die in Abbildung 4 dargestellten Werte der Standardabweichung und des Variationskoeffizienten zwar gewissen Schwankungen unterliegen, sich insgesamt jedoch auf einem relativ konstanten Niveau bewegen. Der entsprechend flache, leicht negative Verlauf der Trendlinie deutet somit darauf hin, dass die Wettbewerbsausgeglichenheit in der DSBL im Zeitraum von 2014-2023 weitgehend stabil geblieben ist bzw. leicht zugenommen hat. Ein möglicher Grund für die tendenziell zunehmende Ausgeglichenheit des Wettbewerbs, insbesondere ab der Saison 2018, könnte dabei in der strukturellen Weiterentwicklung des Ligasystems verortet sein. Ab 2017 wurden neben der 1. und 2. Segel-Bundesliga auch Regionalligen, eine Junioren-Liga sowie der DSL-Pokal eingeführt, wodurch mehr Vereine systematisch an das Ligaformat herangeführt wurden. Der DSL-Pokal ersetzte zudem die bisherige Qualifikation zur 2. Segel-Bundesliga und führte Vereine aus unterschiedlichen Leistungsebenen zusammen. Dadurch konnten sich nicht mehr nur etablierte Vereine behaupten, sondern auch leistungsstarke Vereine aus den unteren Ligen über ein geregeltes Qualifikationssystem aufsteigen, was zu einer Zunahme der Leistungsdichte innerhalb des Ligasystems geführt haben könnte (Deutscher Segler-Verband 2017).

Im Langzeitvergleich der Vereine auf Basis der Platzierungen zum Saisonende wird allerdings auch deutlich, dass der NRV mit großem Abstand das Ranking dominiert. Auf Platz zwei liegt der VSaW, gefolgt vom drittplatzierten WVH. Zum Analysezeitpunkt belegt der CYC den zehnten Rang im Langzeitranking. Diese Konstellation wird sich jedoch in absehbarer Zeit ändern, da der CYC das Bundesliga-Segeln inzwischen eingestellt hat. Dieselbe Entwicklung lässt sich beim DTYC beobachten. Nach Beendigung der Saison 2021 ist der Austritt aus der Bundesliga erfolgt.

Bezüglich der Spieltags-Sieganteile zeigen die nHHI-Werte in Abbildung 6 ebenfalls eine vergleichsweise hohe Konzentration. Dies bedeutet, dass sich die Siege der insgesamt sechs Spieltage einer Saison größtenteils auf einige wenige Vereine konzentrieren. Darüber hinaus deutet der leicht steigende Trend des nHHI-Wertes im Zeitverlauf darauf hin, dass sich die Konzentration langfristig auf einem relativ konstanten Niveau bewegt bzw. leicht zugenommen hat. Diese tendenziell zunehmende Konzentration sollte jedoch nicht fehlinterpretiert werden, da sie vor allem durch die nHHI-Spitzenwerte in Höhe von 0,47 in den Saisons 2018 und 2021 zustande kommt, in denen der NRV jeweils vier von sechs Spieltagen gewonnen hat. Es ist stets zu bedenken, dass sich dieser Trend auch schlagartig umkehren kann, beispielsweise für den Fall, dass alle sechs Spieltage einer Folgesaison von unterschiedlichen Vereinen gewonnen werden.

Bezüglich des Meistertitels ist zu erwähnen, dass dieser im Betrachtungszeitraum von 2014 bis 2023 von zehn verschiedenen Vereinen hätte errungen werden können. Tatsächlich haben in diesem Zeitraum jedoch nur vier Vereine den Titel "Deutscher Meister der Segelvereine" gewonnen. Dabei konnte der NRV den Kampf um den Titel insgesamt sechs Mal für sich entscheiden. Dies entspricht einem Anteil von 60 %. Diese relativ hohe Konzentration deckt sich entsprechend mit dem ermittelten nHHI-Wert in Höhe von 0,39. Der VSaW, der im Langzeitranking direkt hinter dem NRV liegt, konnte bisher lediglich einen Meistertitel gewinnen, während der DTYC den Kampf um den Titel insgesamt zweimal für sich entscheiden konnte. Ein weiterer Verein, auf den an dieser Stelle noch eingegangen werden muss, ist ONE Kiel e. V., der ebenfalls einmal den Meistertitel erringen konnte. Die Teilnahme dieses Vereins an der ersten Bundesliga wurde jedoch nach nur zwei Jahren wieder eingestellt. Aufgrund der unzureichenden Informationslage konnte ein Grund hierfür nicht identifiziert werden. In Bezug auf die deutsche Meisterschaft lässt sich somit zusammenfassend feststellen, dass der NRV als führender Akteur den jährlichen Wettbewerb um den Titel klar dominiert. In der Konsequenz bleibt die Frage, in welchem Umfang die tatsächliche Konkurrenz für den NRV noch gegeben ist und auch zukünftig gegeben sein wird. Der einzige Verein neben dem NRV, der den Titel bereits gewinnen konnte, ist gegenwärtig der VSaW. Der einzige Sieg im Jahre 2019 liegt allerdings inzwischen fünf Jahre zurück.

Nichtsdestotrotz bestätigen die Belegungen der Plätze zwei und drei am Ende einer Saison die berechneten Ergebnisse, dass ein ausgeglichener Wettbewerb in der DSBK dennoch möglich ist und auch stattfindet. Diese Platzierungen konnten in der Vergangenheit von einer Vielzahl unterschiedlicher Vereine erzielt werden. In den vergangenen zehn Jahren konnte der zweite Platz am Ende einer Saison insgesamt acht Mal von verschiedenen Vereinen erreicht werden. Dabei wird das Ranking vom WVH und dem DTYC mit jeweils zwei Siegen angeführt. Dies entspricht einem prozentualen Anteil von jedem Verein von 20 %, was als ein vergleichsweise geringer Wert einzustufen ist. Darüber hinaus gelang es in den vergangenen zehn Jahren insgesamt sieben verschiedenen Vereinen, den dritten Platz am Ende einer Saison in der DSBK zu ersehlen.

Die durchgeführte Datenanalyse lässt somit den Schluss zu, dass gesamtheitlich betrachtet ein weitestgehend ausgeglichener Wettbewerb in der DSBK gegeben ist und auch zukünftig gegenüber dem NRV eine Konkurrenz bestehen kann. Dies kann daraus geschlossen werden, dass sechs der acht Vereine der jeweils zweitplatzierten und alle sieben Vereine der jeweils drittplatzierten weiterhin dem Bundesliga-Segeln nachgehen. Zudem zeigte die Langzeitbetrachtung auf Basis der Punktestände, dass der (wenn auch leichte) Trend hin zu einem zunehmend ausgeglicheneren Wettbewerb insgesamt als stabil angesehen werden kann. Zwar lässt sich einwenden, dass der nHHI auf Basis der Spieltags-Sieganteile bzw. der Meisterschafts-Sieganteile auf einen zunehmend unausgeglicheneren Wettbewerb hindeutet. Methodisch ist jedoch zu berücksichtigen, dass der nHHI bei einer geringen Anzahl an Wettbewerbsereignissen besonders sensibel auf einzelne Ausreißer reagiert. Da in der DSBK nur sechs Spieltage pro Saison betrachtet werden, kann bereits die Dominanz eines Vereins in einer einzelnen Saison den nHHI deutlich erhöhen. Zugleich ist der nHHI mit einer gewissen Einschränkung der inhaltlichen Aussagekraft verbunden, da er die sportliche Leistungsfähigkeit über eine gesamte Saison hinweg lediglich anhand der binären Unterscheidung zwischen „Spieltag bzw. Meistertitel gewonnen“ und „Spieltag bzw. Meistertitel nicht gewonnen“ abbildet. Vor diesem Hintergrund sind die vorliegenden nHHI-Werte eher als ergänzende Ergebnisse zu interpretieren, während die Analyse auf Basis der Punktestände für eine differenzierte Beurteilung der sportlichen Leistungsfähigkeit über den Zeitverlauf hinweg als die aussagekräftigere Grundlage angesehen wird. Ein ähnlicher Befund zeigt sich beispielsweise auch im Rahmen einer von Goossens durchgeführten Analyse elf europäischer Fußball-Profiligen: Während die saisonale Ausgeglichenheit in einigen Ligen über längere Zeit relativ stabil blieb, konnten auf Ebene der Meistertitel deutliche Konzentrationen zugunsten einzelner Vereine

festgestellt werden (Goossens 2006). Übertragen auf die DSBL bedeutet dies, dass die relativ stabile Wettbewerbsausgeglichenheit auf Basis der Punktestände somit nicht im Widerspruch zur langfristigen Dominanz des NRV bezüglich der Spieltags-Sieganteile und Meistertitel stehen muss.

4.3 Handlungsempfehlungen zur Verbesserung der Wettbewerbsausgeglichenheit

In Anbetracht der Ergebnisse werden darauf aufbauend, neben den bereits implementierten Maßnahmen, weitere potenzielle Handlungsempfehlungen vorgeschlagen, die in Zukunft ein noch höheres Wettbewerbsgleichgewicht gewährleisten können.

Als erster Schritt könnte die Förderung schwächerer Teams in Erwägung gezogen werden. Diesbezüglich bestehen vielfältige Möglichkeiten: Eine dieser stellt die Gewährung finanzieller Unterstützung dar (Szymanski 2003). Eine solche Förderung könnte beispielsweise in der Bezahlung zusätzlicher Trainer bestehen, die das Team zu einer höheren Leistung anleiten. Eine weitere Möglichkeit der finanziellen Unterstützung wäre die Förderung von Reisekosten. So ist die Anreise für ein Team, das relativ zentral in Deutschland wohnt, zu einem guten Trainingsrevier mitunter deutlich weiter als für Teams, die beispielsweise im Norden wie in Hamburg stationiert sind. Darüber hinaus wäre eine stärkere organisatorische Unterstützung denkbar, etwa bei der Planung der Saison. Aus Kosten-Nutzen-Perspektive erscheinen darüber hinaus vor allem Maßnahmen sinnvoll, die mit vergleichsweise geringem finanziellen Aufwand verbunden sind, aber einen sportlichen Mehrwert erzeugen können. Dazu zählen beispielsweise spezifische Trainingslager (Szymanski 2003). Solche Angebote könnten gezielt für Teams organisiert werden, die am Saisonende im unteren Mittelfeld (beispielsweise auf den Rängen 9-14) platziert sind. Auf diese Weise würde nicht in den Wettbewerb selbst eingegriffen, aber dennoch die sportliche Leistungsfähigkeit schwächerer Mannschaften langfristig gestärkt. Da die effektivste Trainingsform sechs Teams umfasst (da auch in der DSBL in dieser Konstellation gegeneinander gesegelt wird), könnte auf diese Weise dazu beigetragen werden, dass die schwächeren Teams den Anschluss an die führenden Mannschaften nicht verlieren.

Eine weitere Möglichkeit zur Förderung eines ausgeglicheneren Wettbewerbs wäre ein System für Fair-Play-Prämien (Gasparetto et al. 2023). Ein speziell für die DSBL entwickeltes System könnte dazu dienen, diejenigen Teams zu belohnen, die sich über eine Saison hinweg durch ein besonders faires und sportliches Verhalten ausgezeichnet haben. Praktisch umgesetzt werden könnte die Einführung einer solchen Prämie, indem jedes Team zu Beginn der Saison einen bestimmten Betrag in eine gemeinsame Kasse einzahlt, welcher am Ende der Saison an die drei fairsten Teams ausgeschüttet wird. Die Ermittlung dieser drei Teams könnte etwa mittels einer anonymen Online-Abstimmung erfolgen oder aber auch auf Basis eines vorgegebenen Kriterienkatalogs bestimmt werden.

Ein weiterer Punkt, der in Erwägung gezogen werden kann, ist der Einsatz eines Monitoring-Systems, welches ermöglicht, regelmäßige Analysen durchzuführen, um eine fortwährende Überwachung der Leistungen der Teams sowie eine zeitnahe Erkennung von Leistungsunterschieden festzustellen. Hierdurch wäre eine frühzeitige Adaption von Regularien möglich, um den Wettbewerb kontinuierlich in einem ausgewogenen Zustand zu halten (Avila-Cano & Triguero-Ruiz 2023).

Denkbar wäre zudem, dass das Hinzuziehen von externen Experten aus anderen Sportligen eine Möglichkeit zur Generierung innovativer Ansätze darstellen könnte. Durch einen solchen branchenübergreifenden Austausch könnten Perspektiven eröffnet werden, die innerhalb der eigenen Branche möglicherweise unentdeckt geblieben wären (Sass 2016).

Ein weiterer Aspekt, der Berücksichtigung finden sollte, ist das Kostenmanagement (Hughes & Bartlett 2002). Ein effektives Controlling ermöglicht es den Teams sowie der DSBL selbst, die entstehenden Kosten besser zu überwachen und somit auch zu kontrollieren. Infolgedessen ist es möglich, unter begrenzten Ressourcen wettbewerbsfähig zu bleiben bzw. im Falle der DSBL einen ausgeglicheneren Wettbewerb zu gewährleisten. Ferner kann das Controlling grundsätzlich dazu beitragen, finanzielle und materielle Ressourcen in einer Weise zu verteilen, die einem unausgeglichene Wettbewerb entgegenwirkt. Darüber hinaus kann das Controlling eine unterstützende Funktion bei der Entwicklung und Umsetzung von langfristigen Strategien zur Verbesserung der Liga und ihrer Strukturen einnehmen.

Nicht zuletzt haben auch Aspekte der Transparenz und des Reportings einen hohen Stellenwert. In diesem Kontext ist zunächst die regelmäßige Berichterstattung an alle Stakeholder zu nennen. Dies führt zu einer Vertrauensbasis, welche eine langfristige Bindung ermöglichen kann (Varmus et al. 2021). Zu den Stakeholdern der DSBL zählen insbesondere Sponsoren, aber auch die teilnehmenden Vereine, sowie der Deutsche Segler-Verband. In diesem Zusammenhang wäre es empfehlenswert, vor allem finanzielle und leistungsbezogene Indikatoren mit anderen Ligen und Verbänden zu vergleichen (Varmus et al. 2021). In der Konsequenz können Beispiele für Best Practices übernommen und spezifisch auf die DSBL übertragen werden.

5. Fazit

Der vorliegende Beitrag befasste sich mit der Untersuchung der Wettbewerbsausgeglichenheit im professionellen Segelsport. In diesem Kontext verfolgte er das Ziel, die DSBL im Zeitraum von 2014 bis 2023 zu analysieren. Aufgrund der bislang unzureichenden Forschungsaktivitäten im Bereich der Wettbewerbsausgeglichenheit im professionellen Segelsport wurde diese Motivation als Gegenstand der Untersuchung gewählt.

Die zentralen Erkenntnisse der Untersuchung lassen sich wie folgt zusammenfassen: Die Saisons 2015 und 2018 zeichnen sich durch eine vergleichsweise hohe Unausgeglichenheit aus. Die Saison 2022 hingegen kann als die ausgeglichene Saison der DSBL im gewählten Beobachtungszeitraum bezeichnet werden. Zudem deutet die Langzeitanalyse auf Basis der Punktestände der Saisonabschlusstabellen auf einen im Zeitverlauf konstanten und ausgeglichenen Wettbewerb hin. Die durchgeführte Analyse zeigt jedoch auch, dass der NRV mit einem Siegesanteil von 60 % der Meistertitel die Ligaspitze klar dominiert. Selbiges gilt für die Analyse auf Basis der Spieltags-Siegeanteile. Einige Maßnahmen zur Gewährleistung von Wettbewerbsausgeglichenheit wurden seitens der DSBL bereits implementiert. Darüber hinaus konnten jedoch weitere potenzielle Maßnahmen vorgestellt werden, die in den kommenden Jahren ergriffen werden könnten.

Ungeachtet der identifizierten Maßnahmen zur Förderung der Wettbewerbsausgeglichenheit ist die vorliegende Studie auch kritisch zu reflektieren, da sie mit einer Reihe von Einschränkungen verbunden ist. Insbesondere aufgrund der Tatsache, dass sie sich einem bislang noch nicht hinreichend untersuchten Thema widmet, ist die Quellenlage in diesem Bereich als sehr beschränkt zu bezeichnen. In der Konsequenz ist die Verfügbarkeit der Daten entsprechend begrenzt. Vergleiche zu anderen Sportarten können zwar angestellt werden, sind jedoch nicht Gegenstand der Untersuchung. Hinzu kommt, dass (Stand: Mai 2026) lediglich die Ligatabellen und -ergebnisse bis einschließlich der Saison 2023 auf der Website der DSBL veröffentlicht wurden, was den Beitrag bezüglich des Untersuchungszeitraums und der Aktualität limitiert.

Ebenfalls zu berücksichtigen ist, dass die finanziellen Datenquellen der einzelnen Teams sowie der DSBL nicht öffentlich zugänglich sind, weshalb keine konkreten Berechnungen hinsichtlich der

ökonomischen Wettbewerbsausgeglichenheit unternommen werden konnten. Die durchgeführte quantitative Analyse basierte daher lediglich auf sportlichen Ergebnisdaten. In diesem Kontext wäre eine erneute Durchleuchtung der DSBL mit Fokus auf den finanziellen Aspekt denkbar. Im Rahmen einer solchen Untersuchung könnten etwa die Budgets der einzelnen Vereine analysiert werden, um festzustellen, inwieweit die Höhe der Budgets einen Einfluss auf die Wettbewerbsausgeglichenheit ausüben. In der Folge könnte ein Vergleich des sportlichen und finanziellen Aspekts angestellt werden. Ebenso könnte die Wettbewerbsausgeglichenheit im professionellen Segelsport anhand eines internationalen Vergleichs, etwa der SCL, evaluiert werden.

Insgesamt zeigt sich, dass die DSBL ein spannendes und attraktives Wettbewerbsformat darstellt, das im Vergleich zu anderen Sportarten jedoch spezifische Herausforderungen mit sich bringt. Dies ist besonders darauf zurückzuführen, dass der Segelsport in hohem Maße von äußeren Faktoren wie Wind- und Wetterbedingungen beeinflusst wird. Dadurch entstehen einzigartige Dynamiken, die die Vorhersagbarkeit von Ergebnissen erschweren. Somit wird deutlich, dass die DSBL ihre besondere Spannung gerade aus der Verbindung von leistungsbezogenem Wettbewerb, taktischer Anpassungsfähigkeit und naturbedingter Ergebnisoffenheit gewinnt.

Erklärung

Die Autorinnen und Autoren erklären, dass keine konkurrierenden Interessen bestehen.

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Demand-Side Perceptions in Sports Event Markets: Evidence from German Residents Ahead of UEFA Euro 2024

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DOI: 10.24403/jp.1563768

Abstrakt: Diese Studie untersucht die Wahrnehmungen der deutschen Bevölkerung im Vorfeld der UEFA Euro 2024. Auf Basis einer sechs Monate vor dem Turnier durchgeführten Befragung analysiert sie erwartete ökonomische, soziale und ökologische Auswirkungen sowie Determinanten des Zuschauerinteresses und der Eventunterstützung. Die Ergebnisse zeigen überwiegend negative Erwartungen hinsichtlich der Auswirkungen des Turniers. Gleichwohl ist das Interesse am Turnier hoch und wird durch Eustress, Selbstwertsteigerung und Unterhaltungsmotive geprägt. Die Eventunterstützung hängt vordergründig vom Interesse am sportlichen Wettbewerb und dessen Unterhaltungswert ab. Folglich bewertet die Bevölkerung die UEFA Euro 2024 primär anhand ihres sportlichen Kernprodukts und weniger anhand ihrer politischen, ökonomischen oder gesellschaftlichen Auswirkungen.

Schlüsselwörter: Vermächtnis, Event Auswirkungen, Fußball, Anspruchsgruppen

Abstract: This study examines perceptions of German residents prior to UEFA Euro 2024. Drawing on a survey conducted about six months before the tournament, it analyzes perceived economic, social, and environmental impacts, determinants of spectator interest, and drivers of event support. Most respondents expect predominantly negative impacts across all three dimensions. Nevertheless, spectator interest is high, driven mainly by eustress, self-esteem, and entertainment motives.

Event support primarily depends on interest in the sporting competition and its entertainment value. Consequently, UEFA Euro 2024 is evaluated primarily through its core sporting product rather than its broader societal impacts.

Keywords: Legacy, Impact, Football, Soccer, Stakeholder

1. Introduction

18 years after the FIFA World Cup in 2006, Germany once again had the chance to excite its residents and guests by creating positive legacies and impacts as Germany hosts the UEFA European Championship in 2024 (Euro 2024). Successfully organizing a sporting event like the World Cup and now the European Championships requires years of preparation, good cooperation between several stakeholder, like event organizers and politicians as well as the support of the local population. Gaining residents' support for an event is regarded as a key success factor in the bidding as well as in the preparing and hosting process (Gursoy & Kendall 2006). However, looking back to the recent past, it can be stated that residents' support for sporting events is not self-evident: cities like Munich and Hamburg, which wanted to bid for hosting Olympic Games were forced to withdraw their bids after failed public referendums (Johnston et al. 2021; Thomson et al. 2019). The early involvement of locals in the bidding and planning processes of major sporting events therefore seems to be essential in order to gain a better understanding of residents' perception on the event, to address and resolve potential concerns as well as ultimately to achieve event support (Johnston et al. 2023; Kaplanidou 2021; Ritchie et al. 2009). Given the failed referendums particular in German cities, it is necessary to analyze whether this opposition within the German population is only directed towards hosting Olympic Games or towards hosting sporting events on German soil in general. As the nationwide hosting of smaller scaled sporting events such as the Euro 2024 (smaller compared to Olympic Games) didn't require a referendum in Germany, recognition for German residents' perception about this event is missing. This study aims to fill this gap and provide insights from German residents on the Euro 2024 and thereby meet the claim of involving hosting communities already in the planning process. The research was therefore conducted in the pre-event stage of the Euro 2024 and is driven by the following three objectives:

The first one is to analyze the perception among German residents of potential negative and positive legacies and impacts of the Euro 2024. The second objective is to analyze spectator interest of German residents in the Euro 2024 to identify different influencing factors and motives to follow the Euro 2024. Finally, the third purpose is to find influencing factors for residents' support for the event and understand the role of legacy and impact perception as well as spectator interest in the formation of event support. Therefore, the following questions arise for sports economics research: First, how do German residents perceive potential legacies and impacts of the Euro 2024 in the pre-event stage? Second, which determinants influence the spectator interest in the Euro 2024 among German residents in the pre-event stage? Third, how does the residents' legacy and impact perception as well as their spectator interest in the Euro 2024 affect their support for the event? To answer these questions, empirical research using quantitative research design is conducted. The methodological approach and the questionnaire take previous studies on event legacies and impacts as well as on spectator interest as orientation. In the context of the Euro 2024 and the sporting event sector in general, findings of this study can thus provide new evidence and establish causal relationships between legacy and impact perception, determinants of spectator interest and event support. In this way, recommendations for action for policymakers and event planners can be provided.

2. Literature Review

2.1 Event Legacies and Impacts

In event and impact research, the effects of an event are characterized by two terms: event legacies and event impacts. Preuss defines legacy as »(...) all planned and unplanned, positive and negative, tangible and intangible structures created for and by a sport event that remain longer than the event itself.« (Preuss 2007, p. 211). The distinction to event impacts is especially clear in the last part of the definition and refers to the time component (Li & McCabe 2013). Impacts represent short-term impulses that occur as a result of hosting an event (Preuss 2007). Creating positive legacy and positive impacts has become a crucial task for event organizers and politicians during the bidding and hosting process of an event (Li & McCabe 2013; Scheu & Preuss 2017, 2018). Event organizers and policymakers therefore tend to focus on the positive effects of an event and mitigate negative aspects (Gursoy & Kendall 2006) in order to gain the support of residents which is considered to be a critical factor for the success of an event (Preuss & Solberg 2006). Beside the practical interest in this field, also scientific studies have recorded an exponential increase in studies on the topics of event legacies and impacts since the early 2000s (Thomson et al. 2019).

In the following, *legacies* are categorized based on different facets and examples (Preuss 2019; Scheu & Preuss 2017):

- (1) *Urban development*: This includes all infrastructure changes, for example the construction and expansion of roads, buildings, sports facilities, transportation and mobility infrastructure, as well as energy and telecommunications supply.
- (2) *Environmental enhancement*: This covers all measures that lead to the improvement of air and water quality as well as to the reduction of CO₂ emissions, for example through the construction of climate-friendly sport facilities, green spaces, or a climate-friendly public transportation system.
- (3) *Policy and governance*: This includes new laws, regulations, and governance systems (e.g., new anti-doping policies after doping scandals or new laws on worker protection, e.g., for workers on event construction sites).
- (4) *Human development*: Hosting an event represents an opportunity for residents to build up new skills, knowledge, and networks, especially in the tourism and service sector (e.g. by learning new languages and service skills and by building a network within the industry).
- (5) *Intellectual property*: This contains all innovations, patents or other intellectual property created for or through an event (e.g. new products in the sporting goods industry, the theme music of an event or technical innovations such as slow-motion recordings).
- (6) *Beliefs and behavior*: This addresses new (changed) beliefs of the population, from which potentially new habits result, for example the development of a national pride, the improved image of a country or the increase of sports participation in the population through an event.

For categorizing *impacts*, the short-term stimuli that are directly related to the staging of an event, the *triple bottom line approach* has become established in the literature (Prayag et al. 2013). Impacts are differentiated into three categories: economic, social, and environmental.

- (1) *Economic Impacts*: The literature identifies several positive economic impacts, including increased awareness of the host region as a tourist destination (Preuss & Solberg 2006), additional visitor spending during and around the event, and employment creation (Crompton et al. 2001). Negative economic impacts include rising prices and rents as well as increased tax burdens for local residents (Preuss & Solberg 2006).
- (2) *Social Impacts*: On the positive side the literature includes impacts such as the strengthening of

cultural values and traditions (Prayag et al. 2013; Preuss & Solberg 2006), increased national pride (Waitt 2003), a growing sense of belonging, social cohesion, social camaraderie as well as cultural exchange between locals and guests (Inoue & Havard 2014; H. J. Kim et al. 2006). On the negative side there are mainly event impacts that affect locals in their daily life, especially increased traffic, noise, and litter as well as increased security risks and crime (Balduck et al. 2011; H. J. Kim et al. 2006; Ritchie et al. 2009).

- (3) *Environmental Impacts*: The compliance of environmental protection and (major sporting) events seems paradoxical at first (Johnston et al. 2023). Nevertheless, the literature points to positive effects of an event for the environment, for example by promoting and initiating environmentally friendly projects as well as the possibility of creating an increased environmental awareness in the population (Johnston et al. 2023). Negative aspects discussed in the literature are air and environmental pollution due to construction measures and increased traffic as well as the damage of natural areas (Johnston et al. 2023; Preuss & Solberg 2006).

Regarding the perception of legacies and impacts, it is important to acknowledge the following: Whether legacies and impacts of an event are perceived positively or negatively by residents depends on the respective individual perspective. For example, hoteliers, restaurants, and bar owners may enjoy increased and sustained tourism, while locals may find it disturbing due to crowded streets, increased noise, and litter. Depending on the stakeholder and even within a stakeholder group, the same legacies and impacts may be perceived and valued differently (Inoue & Havard 2014; Ma et al. 2013; Preuss 2007; Waitt 2003).

2.2 Event Support and Residents' Perception

The supportive attitude of a host population towards an event is described by the term residents' event support, while there is neither a uniform definition nor a standardized form of operationalization for the construct of event support. Nevertheless, it is regarded as a critical component for the success of an event (Gursoy & Kendall 2006; Prayag et al. 2013). It is only through the support of residents that a sporting event becomes a special social experience for locals and guests. The local population fills the stadiums and streets and creates a (guest) friendly atmosphere (Al-Emadi et al. 2016; Balduck et al. 2011; Gursoy & Kendall 2006; Preuss & Solberg 2006). The supportive attitude of residents can also be reflected by positive word of mouth, in which people speak positively about the event in their social environment as well as the willingness of locals to participate and engage in the volunteer program of the event (Karadakis & Kaplanidou 2012).

On the other hand, an event opposing attitude of residents can become a »highly charged political affair« (Johnston et al. 2023), resulting in the risk of delays, civil unrest or even the abandonment of an event (Gursoy & Kendall 2006; Karadakis & Kaplanidou 2012). In the recent past, the lack of residents' support has become apparent in failed referendums that forced affected cities to withdraw their bids to host Olympic Games (Johnston et al. 2021; Thomson et al. 2019). Accordingly, it seems essential to involve residents at an early stage (e.g. even before a bid) and over a longer period of time (e.g. before, during and after an event) by examining perceptions about possible positive and negative event legacies and impacts in order to develop a better understanding for residents (Johnston et al. 2023; Kaplanidou 2021; Ritchie et al. 2009).

A large number of studies have already examined event support and possible influencing factors. It should be noted that these studies often result from the field of (event) tourism research and that not all studies make a clear distinction between legacies and impacts, so that often only the term event impact is used comprehensively for all (short- and long-term) event effects. One of the most frequently

tested factors influencing event support is the residents' perception of event impacts. In their studies, Gursoy et al. (2017) for residents from Brazil ahead of the 2014 World Cup, Polcsik et al. (2022) for residents from Budapest ahead of the Euro 2020 as well as Müller (2012) for residents of Sochi ahead of the Winter Olympics 2014 found a significant relation between positive impact perception and event support as well as a significant relation between negative impact perception and decreasing event support. Accordingly, residents who view the impact of an event positive are more likely to support the event than residents who view the impact negative. Gursoy et al. (2017, p. 401) even consider positive and negative impact perception to be significant determinants of event support because of the consistent study results. Although Gursoy and Kendall (2006) confirmed a positive relationship between perceived positive impacts and event support, they found no relationship between perceived negative impacts and event support among residents of Salt Lake City during the 2002 Winter Olympics. The same applies to Al-Emadi et al. (2016) who only identified a significant positive influence of perception of socio-cultural impacts on event support among Qatar residents ahead of the 2022 World Cup. In their study among residents in two potential Commonwealth Games host cities in New Zealand, Johnston et al. (2023) came to the conclusion that residents who perceived an increase in community pride as an impact were more likely to support the event. In contrast, the perception of opportunity cost and unequal distribution of costs and benefits would reduce event support. Liu (2016) identified four significant predictors of support for future sporting events among residents of Shanghai. Perceived improvements in the city's image and status, international exchange and cooperation, and infrastructure development were positively associated with event support, whereas concerns about environmental pollution and public safety were negatively associated with support. Further studies investigate the influence of variables that could serve as a possible mediator between impact perception and event support. In their study, Kaplanidou et al. (2013) surveyed the population of South Africa before and after the 2010 World Cup and found the subjective variable quality of life to be a mediator: They found a significant positive relation between positive impact perception and increased quality of life as well as a positive relation between increased quality of life and event support. Another mediator was presented by Gursoy et al. (2017) who found a significant positive relation between the mediator variable trust in the organizing committee and positive impact perception as well as trust in the organizing committee and event support.

2.3 Determinants of Spectator Interest

Why do people attend sporting events in a stadium or watch them on TV? What motives and influencing factors drive their interest in sports consumption? These questions are addressed by sports spectatorship research, which is one of the most important fields of research in sports economics, according to Reichel (2020). From sociological and psychological perspectives, research has primarily examined the determinants of passive sport consumption. As both perspectives are relevant to the present study, influencing factors and spectator motives are jointly considered determinants of spectator interest. Identifying these determinants is of particular importance for sport managers and decision makers, as it enables them to align the sport product more closely with spectator preferences and demand (Borland & Macdonald 2003). The following literature review on determinants of spectator interest focuses on those studies which have examined determinants of spectator interest in the context of international football tournaments (FIFA World Cups and UEFA Euros) or, if relevant, in the context of league competition. In the present study, spectator interest encompasses both stadium attendance and media consumption. Accordingly, evidence from both strands of the literature is reviewed. From a sport economics perspective, one of the most extensively debated, and at the same time most controversial, determinants of spectator interest is the uncertainty of outcome hypothesis (Schreyer &

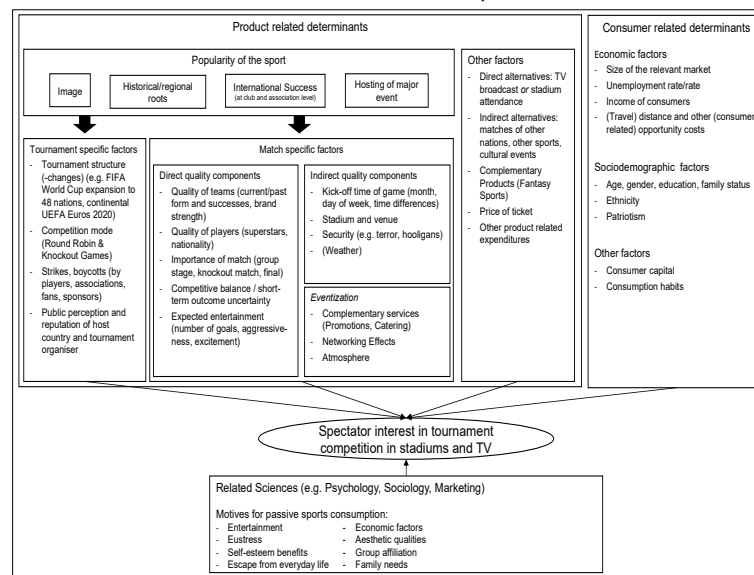
Ansari 2022). The uncertainty of outcome hypothesis proposes that spectator interest increases with the uncertainty surrounding the outcome of a match because greater uncertainty enhances the expected level of excitement. However, there are contrary empirical findings to this hypothesis and a partial lack of verifiability. Particularly in the context of major football tournaments, Schreyer, Schmidt and Torgler (2017) were able to show for their sample that game outcome uncertainty (measured by a comparison between the positions in the FIFA world ranking of the involved teams) does not play a significant role for audiences of tournament matches. While international friendly matches do show a declining viewership with decreasing uncertainty (teams with huge differences in FIFA world ranking indicate less expected excitement). The authors assume that this difference between tournament and friendly matches is due to the importance and significance of each tournament match as they are only played every four years (Schreyer et al. 2017). Consequently, spectator interest in international football – and tournament matches in particular – is influenced by a range of sport-related factors. Feddersen and Rott (2011) identify the quality of the competing teams (measured by the FIFA World Ranking), player quality (measured by the number of international appearances), and match importance (i.e., tournament versus friendly matches and the increasing importance of later tournament stages) as key determinants of spectator demand. Higher values for each of these variables are associated with higher levels of spectator demand. These results are consistent with studies that have investigated the same influencing factors for spectator demand in stadiums in the context of league competition (Lawson et al. 2008). Further influencing factors also arise on the consumers' side and their sociodemographic characteristics: Nüesch and Franck (2009) investigated the influence of patriotism on TV demand in Switzerland for two Euros and two World Cups between 2000 and 2006 and were able to show that the size of a national minority is related to the level of TV demand for matches from that nation.

In sociological and psychological spectator research, Wann (1995) identifies the following eight motives that influence the demand for passive sports consumption: entertainment, eustress, self-esteem benefits, escape from everyday life, economic factors, aesthetic qualities, group affiliation and family needs. According to Trail et al. (2000, 2003), these motives are based on a person's basic psychological and social needs and one or a combination of several motives creates the interest in sport consumption. Across several studies, it was shown that the entertainment motive is the most dominant motive on average (Wann 1995). Previous research indicates that the motives underlying sport consumption differ across consumer segments. Consequently, several studies distinguish between fans and spectators, reflecting differences in their motivations and patterns of consumption (J. W. Kim et al. 2013). Scientists are also investigating differences in motives between genders. A survey of the Swiss population for the 2006 World Cup, the 2008 Euros and the 2010 World Cup came to the conclusion that the entertainment motive is more dominant in men than in women, while women score higher values for an information motive, which according to the authors has a strong social component (Schallhorn et al. 2017).

2.4 Proposed Model: Determinants of Spectator Interest in Tournament Competition

The preceding literature review has demonstrated the wide range of factors and motives that influence spectator interest. Reichel (2020) synthesizes these determinants in a comprehensive conceptual model that provides a clear categorization and visual representation of the factors influencing spectator demand for team sports. The model is designed as a general framework that can be adapted to account for the specific characteristics of different contexts, such as competition format or the degree of professionalisation of a sport (Reichel 2020). To reflect the context of the present study, the original model of spectator demand in league competitions was adapted to the determinants of spectator interest in international tournament competitions. The resulting conceptual framework is presented in Fig. 1.

Fig. 1: Determinants of Spectator Interest in Tournament Competition
(based on Reichel 2020, p. 162)



On the first level of the model, a distinction is made between *Product related determinants* and *Consumer related determinants*. Starting with the Product related determinants, a further differentiation is made into the following categories under which individual influencing factors can be classified: *Tournament specific factors*, *Match specific factors* and *Other factors*. The *Popularity of the sport* acts as a separate influencing factor for the Tournament and Match specific factors. The former include the *Structure of the tournament*, the *Competition mode* as well as the *Public perception and reputation of the host country and tournament organizer*. The Match specific factors are divided into *Direct and Indirect quality components* of the match and the *Eventization*. While the Direct quality components are determined in particular by the *Expected entertainment value*, for example by certain *Players*, the *Importance of the match* and the *Quality of the teams*, the *Indirect quality components* include *external factors* such as the *Kick-off time of the match*, the *Stadium* and *Security*. *Complementary services* and the *Atmosphere*, which are included in the Eventization, complement the Match specific factors. Other factors of the Product related determinants include *Alternative or Complementary offers* and the *Ticket price*.

At the Consumer related determinants, influencing factors are differentiated into three categories: *Economic factors*, *Sociodemographic factors* and *Other factors*. The Economic factors include the *Size of the relevant market* and the *Income of the consumers*. The influence of *Age, Gender, Education and Family status*, *Ethnicity* and *Patriotism* are summarized under Sociodemographic factors. *Consumer capital* and *Consumption habits* form the Other factors. Finally, the model also includes the influence of other related sciences, in particular social sciences like the psychological and sociological research strand of *Motives and motivations* for sport spectator interest.

3. Methodology

3.1 Research Design and Measurement

This study collected primary data from German residents using a highly structured online questionnaire. Following a randomly sampled pretest to assess the questionnaire's comprehensibility and internal consistency, the survey was distributed via social media platforms (Instagram, Facebook, LinkedIn, and X), mailing lists, and online panel providers. To capture a broad range of opinions, perceptions, and motives within the German population, the distribution strategy targeted respondents

with diverse sociodemographic backgrounds, including age, gender, educational attainment, and income. Data were collected over a 32-day period in November and December 2023. The survey coincided with the final international football break of 2023 and the UEFA Euro 2024 final draw in Hamburg to take advantage of heightened public attention to international football and thereby increase participation. Data collection ended 179 days before the opening match of UEFA Euro 2024.

The questionnaire comprised 18 questions organized into five thematic sections. The first section (1) measured respondents' general interest in active sport participation, passive sport consumption, and football. The second section (2) assessed awareness of Germany hosting UEFA Euro 2024, support for the tournament, and attitudes towards professional football, international football associations, and major international competitions. The third section (3) focused on spectator interest. In this study, spectator interest is conceptualized broadly to encompass both stadium attendance and media consumption (e.g., television broadcasts and comparable media). Following UEFA Euro 2024 included checking match results, watching live matches or highlights, attending public viewing events, and attending matches in the stadium. Respondents were asked how they intended to follow the tournament, as well as about their willingness to travel to matches and purchase tickets. In addition, 13 items measuring determinants of spectator interest were assessed on five-point Likert scales (1=disagree to 5=agree). These items were derived from the theoretical framework developed for this study and from previous research in sport economics, psychology, and sociology (Feddersen & Rott 2011; Nüesch & Franck 2009; Schallhorn et al. 2017; Schreyer et al. 2017; Trail et al. 2000; Wann 1995).

The fourth section (4) measured residents' perceptions of event impacts and legacy. Respondents evaluated 28 statements describing potential positive and negative consequences of UEFA Euro 2024 using five-point Likert scales (1=disagree to 5=agree). Following the triple bottom line framework, the items were classified into economic (five positive and three negative), social (eleven positive and three negative), and environmental (three positive and three negative) outcomes (Baldock et al. 2011; Johnston et al. 2023; H. J. Kim et al. 2006; Preuss & Solberg 2006). The questionnaire concluded with questions on respondents' sociodemographic characteristics.

A central objective of this study is to explain residents' event support. Since no standardized operationalization of this construct exists, previous studies have employed different measurement approaches. Prayag et al. (2013), for example, measured event support using two items: »I support the 2012 Olympics Games as a resident«; and »London should bid for other major sporting events«. Al-Emadi et al. (2016) relied on a single item: »I support the FIFA decision to host the World Cup in Qatar«. Scheu and Preuss (2018) operationalized event support based on respondents' voting behavior in a referendum on hosting the Olympic Games. The present study measures event support by using two items: »I support Germany hosting UEFA Euro 2024« and »I am looking forward to UEFA Euro 2024 in Germany.« Responses to both items were averaged to construct the composite variable EVENT SUPPORT, which served as the dependent variable in the subsequent regression analyses.

3.2 Sample Description and Data Analysis

After data cleaning, the final sample comprised N = 503 respondents. Descriptive statistics were first used to characterize the sample and address the first two research questions. To further examine the data and identify the determinants of event support, multivariate analyses were conducted.

An exploratory factor analysis (EFA) with Varimax rotation was performed to reduce the dimensionality of the dataset and to identify underlying latent constructs. The analysis included all 28 legacy and impact items as well as the 13 items measuring determinants of spectator interest. The resulting factor scores were subsequently included as independent variables in the regression models predicting EVENT SUPPORT. In addition to the factor scores, the regression models incorporated

respondents' sociodemographic characteristics (gender, age, and education), general interest in sport (active and passive), variables capturing expectations regarding the sporting success of the German national team, and measures reflecting respondents' attitudes towards UEFA Euro 2024 and professional football. As the dependent variable EVENT SUPPORT was constructed by averaging two five-point Likert-scale items, ordered logit regression models were estimated. To assess the robustness of the findings, additional model specifications were estimated using both factor-based and item-based independent variables. Furthermore, a binary version of the dependent variable (binEVENTSUP; 1=[somewhat] agree, and 0=modest and [somewhat] disagree) was analyzed to examine a more restrictive operationalization of event support. All statistical analyses were conducted using Stata/SE 18.0. Additional information on the survey design and the dataset is available from the authors upon reasonable request.

4. Results

4.1 Descriptive Findings and Insights (Sample Description)

The number of female participants (n=256, 52%) is slightly higher than the number of male (n=234, 48%) and divers (n=1, 0%) participants. The mean age of the respondents was 29.7 years (SD = 10.17). The vast majority of respondents either has a higher education entrance qualification (42%) or a university degree (41%) which is also confirmed by the high number of students (35%) who participated in the survey. The biggest group of respondents are employees (59%). General interest in sports in this sample is at a relatively high level, demonstrated by a (somewhat) agreement of 70% of respondents who do sports (active) and a (somewhat) agreement of 59% of respondents who are generally interested in spectator sports (passive). 66% of respondents watch absolute top matches/tournaments in men's football (e.g. World Cup and European Championship) (29% for top matches/tournaments in women's football). A huge majority of 95% of respondents unaidedly know that Germany will host the Euro 2024, even though only 13% (somewhat) agree to feel well informed by event organizers and politicians about the event. However, at the same time respondents also show great level of (somewhat) agreement when asked if they trust Germany to organize the Euro 2024 well (85% of respondents) and if Germany as a great football nation deserves to host the Euro 2024 (73% of respondents). As discussed, an aggregated variable EVENT SUPPORT is created for further multivariate analyses. The two components of this variable individually show high agreement scores over the whole sample: 60% of respondents (somewhat) agree when asked if they are *looking forward to the Euro 2024 in Germany*. This is underlined by 72% of respondents who (somewhat) agree to the statement *»I support, that Germany hosts the Euro 2024.«* On top nearly three out of four respondents (75%) on a (somewhat) agreement level think *Germany should bid for other major sporting events in the future*. These numbers not only indicate a strong event support for the Euro 2024 but also demonstrate that most respondents are in favor of hosting more sporting events on German soil. Rather low agreement scores are found for respondents' perception of professional football and its values and image: Only 21% of the respondents (somewhat) agree with the statement *»For me, professional football stands for the values of respect and fair play.«* and even 71% (somewhat) disagree with the statement *»I associate professional football and its associations (e.g. DFB, UEFA, FIFA) with a positive image.«*

4.2 Legacy and Impact Perception

Table 1 presents the descriptive results for residents' perceptions of the potential positive and negative legacies and impacts of UEFA Euro 2024 during the pre-event stage across the three dimensions of the triple bottom line: economic, social, and environmental.

Table 1: Perception of Potential Legacies and Impacts of the UEFA Euro 2024

Positive economic legacies and impacts	N	Mean	SD
...companies in GER will benefit from the Euro 2024. (1)	491	3.78	0.96
...the tourism industry in GER will benefit from the Euro 2024. (2)	497	4.27	0.79
...new jobs will be created in GER as a result of the Euro 2024. (3)	483	3.00	1.12
...GER will benefit from infrastr. improvem. as a result of the Euro 2024. (4)	478	3.26	1.11
...the Euro 2024 will lead to increased investments in GER (5)	485	3.21	1.05
Grand mean		3.50	
Negative economic legacies and impacts			
...the costs of the Euro 2024 will be higher than planned. (6)	471	4.15	0.86
...prices and rents in GER will rise as a result of the Euro 2024. (7)	455	3.00	1.19
...newly built infrastructure will have no use after the Euro 2024. (8)	477	2.49	1.19
Grand mean		3.21	
Positive social legacies and impacts			
...the Euro 2024 will strengthen the cohesion of society. (9)	491	3.12	1.14
...GER will improve image abroad. (10)	485	3.24	1.05
...GER will spread its cultural values through the Euro 2024. (11)	485	2.86	1.12
...the Euro 2024 will increase my national pride for GER. (12)	486	2.45	1.25
...the Euro 2024 will strengthen my sense of belonging to society. (13)	488	2.64	1.27
...sports clubs in GER will benefit from the Euro 2024 (e.g. talent, investment). (14)	482	3.51	1.12
...the Euro 2024 will promote exchange between European citizens. (15)	490	3.39	1.04
...the Euro 2024 will create a positive atmosphere in society. (16)	490	3.55	1.00
...prejudices & stereoty. against oth. nations will broken down through the Euro 2024. (17)	480	2.68	1.08
...the Euro 2024 will make a contribution to building peace in Europe. (18)	480	2.48	1.18
...everyone, includ. the socially disadvantaged, will benefit from the Euro 2024. (19)	478	2.18	1.12
Grand mean		2.92	
Negative social legacies and impacts			
...the Euro 2024 will be a security risk in GER. (20)	491	3.02	1.07
...the Euro 2024 will lead to overcrowded streets & public transportation. (21)	491	4.01	0.94
...the Euro 2024 will restrict my freedom of movement. (22)	480	2.30	1.18
Grand mean		3.11	
Positive ecological legacies and impacts			
...the Euro 2024 will set new standards for climate-friendly events. (23)	460	2.28	1.07
...the Euro 2024 will take measures in the interests of environm. protection & sustain. (24)	461	2.31	1.04
...the Euro 2024 will raise awareness of environm. protection & sustain. in GER. (25)	481	1.95	0.93
Grand mean		2.18	
Negative ecological legacies and impacts			
...the Euro 2024 will lead to increased environmental pollution. (26)	486	4.03	0.96
...the Euro 2024 will lead to increased noise pollution in GER. (27)	485	3.67	1.14
...the Euro 2024 will lead to increased waste pollution in GER. (28)	486	4.17	0.92
Grand mean			
Grand mean of all positive legacies and impacts:		2.95	
Grand mean of all negative legacies and impacts:		3.43	

Regarding economic legacies and impacts, respondents primarily perceive positive effects for the tourism sector, with 88% (somewhat) agreeing that UEFA Euro 2024 will *benefit tourism*, followed by positive effects for German *companies* (68% agreement). Over all legacies and impacts the potential benefits for the tourism sector are agreed upon the most (mean=4.27, SD=0.79). The statement *the Costs of the Euro 2024 will be higher than expected* got the second highest (somewhat) agreement in the economic category and the third highest overall legacies and impacts (82% of respondents) which disclose existing concerns of potential excessive expenditures under most respondents. For the perception of social legacies and impacts 56% of respondents (somewhat) agree to believe that the Euro 2024 *will create a positive atmosphere in Germany*. Results also show an (somewhat) agreement of 58% of respondents for perceived *benefits for German (amateur) sport clubs* as positive social outcome. In general, the positive social legacies and impacts are not agreed upon on a high level with a grand mean of 2.92, indicating that most respondents don't think the Euro 2024 will have a notable beneficial impact on society. As strongest negative impact within the social legacies and impacts 76% of respondents anticipate *overcrowded streets and public transportation systems*. Especially environmental legacies and impacts of the event are perceived negatively. The *impacts increased pollution* (79%), *increased noise* (64%) and *increased waste* (84%) are all (somewhat) agreed upon on a high level. On top respondents seem to (somewhat) disagree with potential positive environmental event outcomes as these statements receive low agreement scores. 77% of respondents (somewhat) disagree with the statement »... *the Euro 2024 will raise awareness of environmental protection and sustainability in Germany*.« leading to the lowest mean value (mean=1.95, SD=0.93) over all legacies and impacts.

To assess whether respondents expected the positive or negative consequences of Euro 2024 to predominate, the grand means of the corresponding items were compared. Across all three dimensions, perceived negative legacies and impacts received higher agreement than perceived positive legacies and impacts (grand mean = 3.43 vs. 2.95). A more differentiated analysis by dimension reveals a mixed pattern. Only in the economic dimension did respondents expect positive outcomes to outweigh negative ones (3.50 vs. 3.21). In contrast, perceptions in the social (2.92 vs. 3.11) and environmental (2.18 vs. 3.96) dimensions were clearly dominated by expectations of negative consequences. Overall, these findings indicate a rather critical assessment of the potential consequences of Euro 2024.

To summarize respondents' overall perceptions, an individual legacy and impact perception score was calculated by subtracting each respondent's mean score for negative items from the corresponding mean score for positive items across all three dimensions. Positive values indicate that positive consequences were perceived to outweigh negative ones, whereas negative values indicate the opposite. The results show that 68% of respondents obtained a negative score, while only 32% achieved a positive score. Thus, more than two-thirds of the sample expected the negative legacies and impacts of Euro 2024 to outweigh its positive consequences.

4.3 Determinants of Spectator Interest

Despite the predominantly negative perceptions of the expected legacies and impacts of UEFA Euro 2024, spectator interest in the tournament was high. Only 15% of respondents indicated that they *did not intend to follow the tournament*, whereas 70% *planned to keep informed about match results*. Traditional forms of media consumption remained the most popular means of following the tournament, with 63% intending to *watch full matches* and 58% planning to *watch match highlights*. Interpersonal communication also appeared to play an important role, as 75% of respondents reported relying (somewhat) on their *social environment to stay informed about the tournament*. In addition, 56% (somewhat) intended to *follow*

UEFA Euro 2024 via social media, while public viewing events remained (somewhat) attractive to approximately half of the sample (50%). Interest extended beyond media consumption to on-site attendance. Overall, 58% of respondents expressed a willingness to attend at least one match in the stadium. On average, respondents were willing to travel 145 minutes (approximately ≈2h 25min, one way) and to pay €87.11 for a match ticket. To identify the determinants underlying spectator interest, respondents evaluated 13 potential motives and influencing factors. Table 2 presents the descriptive statistics for these determinants.

Table 2: Determinants of Spectator Interest in the UEFA Euro 2024

What are your reasons for following the Euro 2024?	N	Mean	SD
I follow the Euro 2024 because of the special importance of the matches (no friendly matches). (1)	459	3.42	1.44
I follow the Euro 2024 because of the quality of certain nations. (2)	456	2.99	1.40
I follow the Euro 2024 because of the quality of certain nations. (3)	458	2.81	1.48
I follow the Euro 2024 to »have my say«. (4)	458	2.81	1.24
I follow the Euro 2024 because it's surely going to be exciting (5)	460	3.73	1.18
I follow the Euro 2024 to get distraction from everyday life. (6)	459	2.43	1.28
I follow the Euro 2024 to spend time with family and friends. (7)	459	3.44	1.22
I follow the Euro 2024 because I think it's an event that I need to be informed about. (8)	462	3.13	1.30
I follow the Euro 2024 purely for entertainment. (9)	459	3.47	1.15
I follow the Euro 2024 because my social environment does. (10)	461	3.10	1.24
I follow the Euro 2024 because it feels good when my team wins. (11)	456	3.42	1.33
I follow the Euro 2024 to win money through betting or betting games. (12)	444	1.34	0.85
I follow the Euro 2024 to root for my nation. (13)	459	3.59	1.33

Comparing the mean scores of the 13 determinants reveals that spectator interest is primarily associated with psychological and sociological motives rather than sport-economic factors. The highest agreement was observed for the statement *I follow UEFA Euro 2024 because it is going to be exciting*, reflecting the importance of the eustress motive. The second-highest mean was found for *rooting for the national team*, a motive that can be linked to both eustress and self-esteem. Similarly high levels of agreement were observed for *entertainment*, *spending time with family and friends*, and the opportunity to experience self-esteem benefits through the *success of one's national team*.

Among the sport-related determinants, *match importance* emerged as the most influential factor, whereas the *economic motive* received by far the lowest level of agreement across all items.

Gender differences were examined using Mann-Whitney U tests and revealed significant differences for several determinants of spectator interest. Male respondents reported significantly higher agreement with sport-related determinants, including match importance ($p < .001$, $z = 6.188$), team quality ($p < .001$, $z = 7.712$), and player quality ($p < .001$, $z = 6.356$). They also assigned greater importance to excitement ($p < .001$, $z = 5.139$) and supporting the national team ($p < .003$, $z = 2.972$).

By contrast, female respondents expressed significantly stronger agreement with the statements *I follow UEFA Euro 2024 because my social environment does* ($p < .001$, $z = -4.669$) and *I follow UEFA Euro 2024 to have my say* ($p < .001$, $z = -3.506$).

Interpreted within the proposed model of determinants of spectator interest in tournament competitions, these findings suggest that men's spectator interest is more strongly associated with direct quality components within the match specific factors as well as from sport-related motives like

excitement and rooting for your nation. Women's interest is more closely linked to social motives, including group affiliation and the social experience surrounding the tournament.

4.4 Factor and Regression Analysis Results: Factors Influencing Event Support

Given respondents' predominantly negative perceptions of the expected legacies and impacts of Euro 2024 alongside their high level of spectator interest, the next step is to examine the determinants of EVENT SUPPORT. To reduce the dimensionality of the dataset, an exploratory factor analysis (EFA) was conducted prior to estimating the regression models.

The EFA yielded a nine-factor solution explaining 60.66% of the total variance. Internal consistency was acceptable to high for most factors, as indicated by Cronbach's alpha. The factors were labelled as follows: (1) Positive social legacies and impacts ($\alpha = .90$), (2) Sport competition and entertainment ($\alpha = .82$), (3) Environmental and financial concerns ($\alpha = .77$), (4) Positive economic legacies and impacts ($\alpha = .78$), (5) Positive environmental legacies and impacts ($\alpha = .83$), (6) Social motives for following the event ($\alpha = .69$), (7) National team identification ($\alpha = .87$), (8) Negative social legacies and impacts ($\alpha = .55$), and (9) Negative economic legacies and impacts ($\alpha = .32$). The Kaiser-Meyer-Olkin measure of sampling adequacy was .892, indicating that the data were well suited for factor analysis.

Following Kaiser's criterion (Kaiser, 1974), only factors with eigenvalues greater than 1.0 and items with factor loadings above .50 were retained for interpretation. Consequently, two legacy and impact items (...everyone, including socially disadvantaged groups, will benefit from Euro 2024 and ... Euro 2024 will lead to overcrowded streets and public transport) and one spectator interest item (I follow Euro 2024 because I think it is an event I need to be informed about) were excluded from the factor solution. In addition, the betting motive formed a single-item tenth factor explaining only a negligible proportion of variance and was therefore not retained. Nevertheless, all four excluded variables were included as individual predictors in the subsequent regression analyses.

Table 3 presents the regression results across three model specifications. Model (1) estimates a binary specification of EVENT SUPPORT as a robustness check. Models (2) and (3) employ the original five-point ordinal dependent variable and differ only in their specification of the independent variables: Model (2) includes the individual questionnaire items, whereas Model (3) incorporates the factor scores derived from the EFA. The results are highly consistent across all three models, indicating the robustness of the findings. The following discussion focuses primarily on Model (3), while significant results from Model (2) are used to corroborate the interpretation where appropriate.

Table 3: Regression Results for Event Support

	(1) Logit factor model	(2) Ordered Logit item model	(3) Ordered Logit factor model
	<i>binEVENTSUP</i>	<i>EVENT SUPPORT</i>	<i>EVENT SUPPORT</i>
Factor 1: Positive social legacies and impacts	n.s.	-	n.s.
...the Euro will strengthen the cohesion of society.	-	n.s.	-
...GER will improve its image abroad as a result of the Euro.	-	n.s.	-
...GER will spread its cultural values through the Euro.	-	n.s.	-
...the Euro will increase my national pride for GER.	-	n.s.	-
...the Euro will strengthen my sense of belonging to society.	-	n.s.	-

...sports clubs in GER will benefit from the Euro.	-	n.s.	-
...the Euro will promote exchange between European citizens.	-	n.s.	-
...the Euro will create a positive atmosphere in society.	-	n.s.	-
...prejudices and stereotypes against other nations will be broken down as a result of the Euro.	-	n.s.	-
...the Euro will make a contribution to building peace in Europe.	-	n.s.	-
Factor 2: Sport competition and entertainment	2.895**	-	1.186**
I follow the Euro because of the special importance of the matches (compared to friendly matches).	-	n.s.	-
I follow the Euro because of the quality of certain nations.	-	n.s.	-
I follow the Euro because of the quality of certain players.	-	n.s.	-
I follow the Euro because it's surley going to be exciting.	-	1.026***	-
I follow the Euro to get distraction from everyday life.	-	n.s.	-
I follow the Euro purely for entertainment.	-	n.s.	-
Factor 3: Environmental and financial concerns	n.s.	-	n.s.
...the costs of the Euro will be higher than planned	-	n.s.	-
...the Euro will lead to increased environm. pollution in GER.	-	n.s.	-
...the Euro will lead to increased noise pollution in GER.	-	n.s.	-
...the Euro will lead to increased waste pollution in GER.	-	-0.575*	-
Factor 4: Positive economic legacies and impacts	n.s.	-	n.s.
...companies in GER will benefit from the Euro.	-	n.s.	-
...the tourism industry in Germ. will benefit from the Euro.	-	n.s.	-
...new jobs will be created in GER as a result of the Euro.	-	n.s.	-
...GER will benefit fr. infrastr. improvem. as a result of the Euro.	-	-0.317*	-
...the Euro will lead to increased investments in GER.	-	0.410*	-
Factor 5: Positive environmental legacies and impacts	n.s.	-	n.s.
...the Euro will set new standards for climate-friendly events.	-	n.s.	-
...the Euro will take many measures in the interests of environm. protection & sustain.	-	n.s.	-
...the Euro will raise awareness of environm. protection & sustain. in GER.	-	n.s.	-
Factor 6: Social motives for following the event	n.s.	-	0.334*
I follow the Euro to »have my say«.	-	n.s.	-
I follow the Euro to spend time with family and friends.	-	0.359*	-
I follow the Euro because my social environment does.	-	n.s.	-
Factor 7: National team identification	1.223*	-	0.586***
I follow the Euro because it feels good when my team wins.	-	n.s.	-
I follow the Euro to root for my nation.	-	n.s.	-

Factor 8: Negative social legacies and impacts	n.s.	-	n.s.
...the Euro will be a security risk in GER.	-	n.s.	-
...the Euro will restrict my freedom of movement.	-	n.s.	-
Factor 9: Negative economic legacies and impacts	n.s.	-	n.s.
...prices and rents in GER will rise as a result of the Euro.	-	n.s.	-
...newly built infrastructure will have no use after the Euro.	-	n.s.	-
I do sport myself (active sport).	n.s.	n.s.	n.s.
I am generally interested in spectator sports (passive sport).	n.s.	0.316*	0.291*
I think that GER, as a great footb. nation, deserves to host the Euro.	n.s.	0.649**	0.468**
I trust GER to organize the Euro well.	n.s.	0.056*	0.448*
GER should bid for other major sporting events in the future (e.g. European Championships, Olympics).	1.018*	0.808***	0.770***
My anticipatory excitement for the Euro depends on the GER team's chances of sporting success.	n.s.	-0.28*	-0.342**
I trust the German team to play a successful Euro.	n.s.	n.s.	n.s.
I feel well informed about the Euro by event organizers and politicians.	n.s.	n.s.	n.s.
I think the costs that GER is spending for the Euro are well spent.	n.s.	0.531*	0.380*
I associate professional football and its associations (e.g. DFB, UEFA, FIFA) with a positive image.	n.s.	n.s.	n.s.
I am critical of major events in professional football.	-0.844*	-0.449**	-0.410**
For me, profess. footb. stands for the values of respect & fair play.	n.s.	n.s.	n.s.
I follow the Euro because I think it is an event that I need to be informed about.	n.s.	n.s.	n.s.
I follow the Euro to win money through betting (games).	n.s.	-0.328*	-0.338*
...everyone, including the socially disadvantaged, will benefit from the Euro.	n.s.	0.283*	n.s.
...the Euro will lead to overcrowded streets and public transport.	n.s.	n.s.	n.s.
GENDER	n.s.	n.s.	n.s.
AGE	n.s.	n.s.	n.s.
EDUCATION	n.s.	n.s.	n.s.
N	221	257	257
Pseudo R ²	0.737	0.424	0.372

Note: Significance levels: * p < 0.10, ** p < 0.05, *** p < 0.01

The first key finding is that perceived event legacies and impacts explain only a small proportion of variation in EVENT SUPPORT. In the preferred factor-based model (Model 3), none of the legacy and impact factors identified through the exploratory factor analysis reached statistical significance. Consistent with this finding, the item-based specification (Model 2) identified only four significant legacy and impact items. Perceived increases in investment associated with Euro 2024 were positively related to EVENT SUPPORT, whereas perceived increases in waste pollution and perceived infrastructural improvements were negatively associated with support. In addition, the expectation that

the tournament would benefit all members of society, including socially disadvantaged groups, showed a weak positive association ($p < .10$). Overall, these findings suggest that residents' perceptions of the tournament's expected legacies and impacts play only a limited role in explaining event support. Instead, event support is primarily associated with variables related to the sporting competition itself. The strongest positive predictor in the preferred model is the factor (2) Sport Competition and Entertainment, which comprises excitement, match importance, team quality, player quality, distraction, and entertainment. The item-based model indicates that anticipated excitement is the principal contributor within this factor. Together, these findings highlight the importance of the sporting product and its entertainment value for explaining residents' support for Euro 2024. Two additional factors also contributed positively to EVENT SUPPORT: (7) National team identification was positively associated with support at the 5% significance level, while (6) Social motives for following the event reached marginal significance ($p < .10$). The item-based specification further indicates that spending time with family and friends was the most influential component of the latter factor. Beyond the factor solution, several individual variables emerged as significant positive predictors of EVENT SUPPORT. Respondents who believed that *Germany, as a great football nation, deserves to host the Euro 2024* and those who trusted *Germany to organize the Euro 2024 well* expressed significantly higher levels of support. The strongest positive predictor overall was agreement with the statement that *Germany should bid for future major sporting events*. In addition, accepting the financial costs associated with hosting the tournament and a general interest in spectator sports were both positively related to EVENT SUPPORT. Three variables were negatively associated with EVENT SUPPORT. The strongest negative predictor was a generally critical attitude towards major events in professional football. Furthermore, respondents whose anticipation of Euro 2024 depended on the expected sporting success of the German national team expressed lower levels of support. Finally, following the tournament primarily for sports betting purposes was also negatively associated with EVENT SUPPORT.

5. Discussion and Conclusion

5.1 Main Findings and Insights

The purpose of this study was to examine (1) German residents' perceptions of the potential positive and negative legacies and impacts of Euro 2024 during the pre-event stage, (2) the determinants of their spectator interest in the tournament, and (3) the factors influencing residents' support for Euro 2024. The following main findings emerge:

(1) The majority of respondents (68%) perceived the potential legacies and impacts of Euro 2024 as predominantly negative. Only in the economic dimension did perceptions of positive legacies and impacts outweigh negative ones, primarily because the expected benefits for the German tourism sector were perceived as particularly strong. By contrast, respondents expected the negative social and environmental consequences of the event to outweigh the positive ones.

These findings are surprising for several reasons. First, economic research has long been sceptical about whether major sporting events generate tangible and measurable economic benefits (e.g., GDP growth), as many previous studies have found no significant positive effects for the host economy following such events (Kobierecki & Pierzgalski 2022; Preuss & Solberg 2006). Likewise, long-term benefits for the tourism sector cannot be taken for granted, as they depend on several factors, including substantial investments in tourism infrastructure and services (Solberg & Preuss 2007) as well as the host nation's overall image (Rojas-Méndez et al. 2019). This highlights the potential discrepancy between perceived and actual event outcomes, which should be examined in future post-event studies of Euro 2024. The comparatively low agreement with positive social legacies and impacts further suggests that respondents did not perceive Euro 2024 as a window of opportunity for social change. It would

therefore be valuable for future post-event studies to investigate whether perceptions of social legacies change over time, as demonstrated by Kaplanidou (2012), Kaplanidou et al. (2013), and H. J. Kim et al. (2006), who reported more positive perceptions of social legacies after sporting events. The highly negative perception of environmental outcomes is also noteworthy. Respondents not only expressed strong agreement with potential negative environmental consequences but also rejected the proposed positive environmental outcomes. This finding is somewhat surprising given that both UEFA and the German organizing committee promoted Euro 2024 as the most sustainable European Championship to date by introducing measures such as a climate fund, match scheduling designed to reduce travel by teams and supporters, and close cooperation with Deutsche Bahn as the official mobility partner (UEFA, 2023). This may indicate that event organizers and political stakeholders either failed to communicate these sustainability measures effectively or that respondents perceived them as insufficient, ineffective, or merely examples of greenwashing. Future research should therefore investigate the reasons underlying this discrepancy.

(2) Despite respondents' predominantly negative perceptions of the tournament's expected legacies and impacts, spectator interest in Euro 2024 was remarkably high. Respondents intended to follow the tournament through a variety of channels, with most relying primarily on their social environment to stay informed. Overall, spectator interest was driven mainly by psychological motives, including eustress, self-esteem enhancement, entertainment, and family-related motives. Furthermore, the analyses revealed significant gender differences. Whereas male respondents' interest was primarily driven by motives directly related to the sporting competition itself, female respondents placed greater emphasis on the social aspects surrounding the tournament. These findings are consistent with the previous literature reviewed in this study.

(3) Regression analyses identified several determinants of the aggregated EVENT SUPPORT variable. Legacy and impact perceptions were found to play only a limited role in explaining event support, as none of the legacy and impact factors identified through the exploratory factor analysis significantly predicted the dependent variable. Although four individual legacy and impact items (out of 28) showed significant effects, the overall influence of legacy and impact perceptions on EVENT SUPPORT appears to be rather limited.

This finding contrasts with much of the previous literature, in which perceived event legacies and impacts have consistently been identified as significant predictors of event support. Nevertheless, it cannot be excluded that additional legacy and impact perceptions not captured in this study may also influence residents' support for major sporting events. Instead, the present study demonstrates that determinants of spectator interest play a much more prominent role in explaining EVENT SUPPORT. In particular, the sporting competition itself – especially the excitement and entertainment it generates – as well as the opportunity to support the national team together with family and friends emerged as the strongest predictors of event support.

These findings suggest that, in the run-up to Euro 2024, respondents focused primarily on the sporting competition and its associated social experience rather than on broader political issues such as the tournament's economic, social, and environmental consequences.

Respondents also expressed strong agreement that Germany deserved to host Euro 2024 and confidence in the country's ability to organize the tournament successfully, both of which further increased EVENT SUPPORT. One possible explanation for these findings is that residents have become fatigued by the increasing politicization of major sporting events, as exemplified by the 2022 FIFA World Cup (Lammert et al., 2022). Furthermore, recent representative surveys indicate growing uncertainty, increasing concerns about the future, and comparatively low levels of life satisfaction among the German population (Germany ranks second lowest among EU countries) (Eurostat 2024). After the 2006

FIFA World Cup in Germany, respondents may long for the light-heartedness, excitement, and shared enjoyment that major sporting events can generate. This may help explain why their predominantly negative perceptions of the tournament's expected legacies and impacts appear to have had little influence on their support for the event.

5.2 Theoretical and Practical Implications

Numerous studies have examined event legacies and impacts and their effects on residents' event support across a wide range of sporting events, providing valuable insights for both research and the sport event industry. Since every sporting event represents a unique research context, however, standardizing research methodologies and the operationalization of variables remain challenging. Furthermore, existing studies differ with respect to the timing of data collection (e.g., pre-bidding, pre-event, event, or post-event phases, or combinations thereof), the operationalization of variables, questionnaire design (taking cultural, local, and event-specific differences into account), survey methods (e.g., telephone interviews or online questionnaires), and research questions.

To improve the comparability of future studies and strengthen quality criteria such as objectivity, reliability, and validity, a minimum degree of methodological standardization should be considered. A first step could be the development of a universal definition and operationalization of the construct of event support, which could be adapted to different event contexts and stages of the event lifecycle. Moreover, the findings of this study suggest that future research on event support should broaden its focus beyond the well-established concept of legacy and impact perceptions by considering additional determinants, such as spectator interest, which proved to be a strong predictor of event support in the present study.

The literature review on spectator interest, the second major construct examined in this study, identified a broad range of potential determinants of spectator interest in tournament competitions. Future studies should therefore adopt a more holistic perspective by integrating determinants derived from sport economics alongside sociological and psychological motives. The universal model proposed by Reichel (2020) provides a useful conceptual framework that can be adapted to different research contexts. It may therefore help identify determinants of spectator interest as well as additional predictors of event support across different settings, ranging from small-scale amateur events to major international sporting events.

The findings also provide several practical implications for sport governing bodies, organizing committees, event planners, and policymakers. Decision makers and organizers of UEFA Euro, as well as future major sporting events, can benefit from the insights generated regarding German residents' perceptions of event legacies and impacts, their spectator interest, and the determinants of their event support. It should be noted that not all determinants contribute equally to the formation of event support. Consequently, event planners and public authorities should prioritize those factors that exert the strongest influence on residents' support. At the same time, it is important not only to strengthen positively perceived determinants but also to identify and address residents' concerns and perceived problem areas (Karadakis & Kaplanidou 2012).

In the context of Euro 2024, the regression analyses revealed that the strongest predictors of event support during the pre-event stage were related to spectators' interest in the sporting competition itself, particularly the excitement and entertainment generated by the tournament as well as identification with the national team. Event planners should therefore focus their marketing efforts on the core product – the sporting competition itself – well before the tournament begins. This could include highlighting participating teams and players in marketing communications in order to stimulate spectator's interest. Although organizers cannot influence what happens on the field, they can provide

the best possible conditions for residents and visitors to experience the tournament in stadiums, fan zones, and other public viewing locations, thereby encouraging national identification and creating opportunities for shared experiences with family and friends.

No significant relationship was found between overall legacy and impact perceptions and event support. However, this should not be interpreted as suggesting that event planners can neglect legacy and impact planning. Residents' perceptions of event outcomes – and their influence on event support – may change over time. Consequently, legacy and impact planning should remain a central component of event management to ensure that the event and its long-term consequences are regarded as successful by the host community. In the case of UEFA Euro 2024, particularly the negative perceptions of environmental and social legacies and impacts indicate considerable room for improvement. Although the present study cannot explain the underlying reasons for these perceptions, event planners should develop strategies to communicate their efforts in these areas more effectively and convincingly while demonstrating their commitment through tangible and measurable outcomes.

5.3 Limitations and Research Outlook

As with any empirical study, several limitations should be acknowledged. First, the questionnaire was administered exclusively online, which may have unintentionally excluded a considerable number of German residents who are either unfamiliar with or less active on online platforms. Second, the sample size may be regarded as relatively small. Moreover, the distribution of key sociodemographic characteristics, such as age, gender, income, and education, does not fully correspond to that of the German population. Consequently, the generalizability of the findings beyond the present sample is limited.

Furthermore, it should be noted that residents' perceptions and event support may change over time. Therefore, the findings of this study are valid only for the specific period during which the survey was conducted. Future research should therefore compare the present pre-event findings with data collected during and after UEFA Euro 2024 to examine how residents' perceptions and event support evolve over time.

The findings of this study give rise to several directions for future research. In light of the predominantly negative perceptions of the expected legacies and impacts of UEFA Euro 2024, as well as the failed referendums on hosting the Olympic Games in several German cities, it is somewhat surprising that 74% of respondents expressed support for Germany hosting additional major sporting events. Moreover, the remarkable success of the 2024 European Men's Handball Championship, which was also hosted in Germany and achieved record-breaking stadium attendances and television audiences, suggests that support for major sporting events among German residents may be more widespread than commonly assumed.

Against this background, three avenues for future research appear particularly promising.

First, future studies should examine the underlying reasons for residents' perceptions of positive – and especially negative – event legacies and impacts. Qualitative approaches, such as focus group interviews, could provide a deeper understanding of these perceptions and thereby contribute to improving legacy and impact planning for future sporting events while strengthening residents' event support.

Second, future research should investigate whether residents' support varies depending on the sporting event itself and the nature of its sporting competition. Comparative studies involving residents of cities such as Los Angeles and Milan could provide valuable insights, as both cities will host multiple major sporting events within a relatively short period (Los Angeles: FIFA World Cup 2026 and Olympic Games 2028; Milan: Olympic Winter Games 2026 and UEFA Euro 2032).

Third, in an era characterized by ongoing armed conflicts, geopolitical tensions, climate change, and energy crises, fundamental questions arise concerning the long-term viability and societal relevance of major sporting events. Future editions of the Olympic Games, the FIFA World Cup, and continental championships will need to respond to the evolving expectations of an increasingly globalized, yet simultaneously fragmented, world in which public concerns about the economic, social, and particularly environmental consequences of such events continue to grow. Consequently, an important question for future research is how major sporting events can secure and maintain residents' event support under these changing conditions. Addressing this challenge will require continued contributions from academic research, effective communication by policymakers, and responsible action by event organizers to ensure that major sporting events fulfil their promises of creating positive legacies and lasting benefits for host communities.

Acknowledgement

The authors declare no conflict of interests.

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The Hidden Hand: Analyzing the Market of Player Agents in Professional Football

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DOI: 10.24403/jp.1563767

Abstrakt: Diese Studie analysiert den Markt für Spielerberater im professionellen Fußball, indem sie sekundäre Marktdaten mit internationalen Befragungsdaten kombiniert. Unter Verwendung eines Datensatzes zu den Top-200-Spieleragenturen sowie einer einzigartigen Befragung von 285 individuellen Spielerberatern untersuchen wir sowohl die Marktkonzentration als auch die Heterogenität der Intermediäre. Eine hierarchische Clusteranalyse identifiziert drei unterschiedliche Vermittlertypen: vollständig professionalisierte Agenten, vereinsorientierte Vermittler sowie netzwerkbasierend agierende Teilzeit-Insider. Die Ergebnisse zeigen, dass der Markt für Spielervermittler sowohl hoch konzentriert als auch strukturell divers ist und liefert damit wichtige Implikationen für Governance, strategische Positionierung und Entscheidungsprozesse der Stakeholder im professionellen Fußball.

Schlüsselwörter: Vermittlermärkte, Spielerberater, professioneller Fußball, Clusteranalyse

Abstract: This study analyzes the market for player agents in professional football by combining secondary market-level data with original international survey data. Using data on the top 200 agencies and a unique survey of 285 individual agents, we examine both market concentration and intermediary heterogeneity. A hierarchical cluster analysis identifies three distinct agent types: fully professionalized agents, club-oriented brokers and relationally embedded part-time insiders. The findings show that the player agent market is both highly concentrated and structurally diverse, with important implications for governance, strategic positioning and stakeholder decision-making in professional football.

Keywords: Intermediary markets, Player agents, Professional football, Cluster analysis

1. Introduction

Intermediaries play an essential role in modern professional football. By facilitating player transactions, they contribute to the efficiency of transfer markets characterized by uncertainty, multiple stakeholders, and complex bargaining environments (Rossi et al. 2016; Poli et al. 2012). In recent decades, the economic relevance of such intermediaries has further increased due to the globalization and commercialization of the game, the rise of international competitions, and the growing financial stakes for clubs and players alike (Franck & Lang 2014). As a prototypical superstar economy, the professional football market is characterized by extreme income differentials, global mobility of talent, and highly skewed distributions of visibility and reward, such that even small differences in perceived quality or access can translate into substantial economic returns (Rosen 1981; Szymanski 2003).

Within this environment, player agents have become indispensable actors in contract negotiations, career management, and market access. They reduce search costs, broker relationships between players and clubs, and help coordinate multi-party interactions under conditions of profound information asymmetry (Demazière & Jouvenet 2013; Rossi et al. 2016). Existing research documents the economic and institutional importance of agents for transfer dynamics and the governance of labor markets in football, as well as the emergence of »super-agencies« with substantial market power (Poli et al. 2012). At the same time, qualitative studies highlight the centrality of trust, reputation, and discursive practices in sustaining agent-player relations in an opaque industry (Kelly & Chatziefstathiou 2018; Green & Ghaye 2023). While these contributions provide important insights, they largely treat player agents as a conceptually homogeneous category and pay comparatively little attention to the micro-level heterogeneity of intermediaries themselves. In particular, we know little about how player agents differ in their market positioning, role conception, and strategic orientation within the broader ecosystem. Anecdotal evidence suggests that the occupation is characterized by low entry barriers, heterogeneous career paths, and diverse business models, ranging from globally operating, full-service agencies to specialized brokers and part-time advisers embedded in local networks (Shropshire & Davis 2004; Rossi et al. 2016). However, the field still lacks a systematic, data-driven classification of agent types at the individual level that would allow us to analyze how these different forms of intermediation map onto market structure, power, and governance.

This study first draws on secondary data on the upper segment of the agency market to outline the overall market structure, before providing a comprehensive, micro-level perspective on the player agent market in professional football based on an original international survey of individual agents. We identify and characterize distinct types of player agents based on their professional profiles, market roles, and strategic orientations. Specifically, we apply hierarchical cluster analysis to a set of theoretically motivated indicators capturing professionalization, portfolio scale, relational embeddedness, and network orientation, and derive an empirically grounded typology of intermediaries. By providing a systematic classification of player agents, this study makes several contributions. First, it advances the literature on sports economics by offering a novel, micro-level perspective on intermediary markets. Second, it contributes to the broader literature on labor market intermediation by highlighting the importance of agent heterogeneity in shaping market outcomes. Third, it responds to calls for more practice-oriented research by generating actionable insights into the structure and functioning of the player agent market.

2. Theoretical Framework

Football player agent markets exemplify intermediary ecosystems under extreme information asymmetries, where agents bridge players and clubs. Akerlof's (1970) foundational »market for lemons« framework illuminates this dynamic. Agents possess private information on their negotiation efficacy, network reach, and loyalty, while principals confront opacity in assessing true quality, risking adverse selection where low-competence »lemons« crowd out superior providers. Signaling theory (Spence 1973) posits that costly observables such as licensing, full-time commitment, or extensive experience enable separation of high-quality »peaches« from »lemons«, fostering efficient exchange. Yet, in football's superstar labor market (Rosen 1981), stakes amplify. Mismatches forfeit millions in transfer value or career longevity, rendering intermediaries not merely facilitators but structural solutions to pervasive market failures. This asymmetry logic extends naturally to search frictions and matching imperfections, as formalized by Mortensen & Pissarides (1994) and Jovanovic (1979a, 1979b). Frictional labor markets feature costly bilateral searches and ex post fit revelation, yielding equilibria with unemployment and suboptimal allocations. Agents internalize these frictions by pre-screening opportunities, thickening networks, and economizing on transaction costs. Jovanovic's turnover model adds dynamism. Matches survive if productivity exceeds outside options, with agents' learning rates (proxied by experience) determining mismatch resolution speed. In football, global transfers amid short careers heighten these forces. Agents with insider ties or club relationships reduce search times, but heterogeneous capabilities imply varied friction-reduction efficacy. Consequently, agents are not neutral actors because they actively shape matching processes, influence bargaining outcomes, and affect the allocation of resources in markets with severe uncertainty (Benassi & Di Minin 2009; Demazière & Jouvenet 2013).

Without a systematic understanding of the types of intermediaries operating within a market, it is difficult to fully capture how these mechanisms play out in practice, as they are not unique to professional football but characterize intermediation more broadly. The general theory of intermediation conceptualizes intermediaries as agents who coordinate transactions and reduce search and information costs across markets (Spulber 1996). This logic is particularly well documented in executive search and recruitment, where headhunters act as triangular matchmakers between client firms and candidates and are themselves heterogeneous in scale, specialization, and network orientation (Finlay & Coverdill 2002; Bonet et al. 2013). Similarly, research on real estate brokerage demonstrates how information asymmetries between agents and their principals shape transaction outcomes and create incentives for opportunistic behavior (Levitt & Syverson 2008; Broxterman & Zhou 2023). These parallels suggest that the heterogeneity documented for player agents in this study reflects a more general feature of intermediary markets under conditions of information asymmetry, rather than a sport-specific peculiarity.

Most empirical sports economic work focuses either on macro-level outcomes, such as salary effects and transfer volumes (e.g., Krautmann et al. 2018; Sage & Prinz 2024), or on specific behavioral issues such as opportunism, monitoring, and service quality from the players' perspective (Gohritz et al. 2022a). Regulatory analyses, in turn, emphasize the challenges of designing effective frameworks for licensing, self-regulation, and transparency in a rapidly evolving intermediary landscape (Parrish 2007; Ioannidis 2019; Yilmaz 2018). The existing literature on player agents provides important but fragmented insights into their roles and behavior. Studies such as Rossi et al. (2016) highlight the economic significance of agents in shaping transfer markets and contract outcomes, while Krautmann et al. (2018) examine agency behavior in the context of incentive structures and portfolio management. Similarly, Yilmaz (2018) discusses the institutional and regulatory dimensions of player agency within the broader

framework of sports governance. More recent contributions, including Gohritz et al. (2022a, 2022b), emphasize the relational aspects of player-agent interactions, focusing on service quality, client satisfaction, and opportunistic behavior. These studies underscore the importance of trust, monitoring, and relational dynamics in intermediary relationships. In parallel, Sage and Prinz (2024) provide evidence on the impact of representation structures on player salaries, highlighting that different forms of representation may yield comparable outcomes. While these studies offer valuable insights, they share the limitation that they primarily focus on outcomes at the player or agency level, rather than systematically analyzing the heterogeneity of individual agents. As a result, the underlying structure of the intermediary market remains largely unexamined. This limitation is particularly relevant in light of the diverse entry pathways and professional backgrounds of player agents. Some agents enter the profession through prior experience as players or coaches, while others come from legal, financial, or managerial backgrounds. Additionally, the degree of professionalization varies widely, ranging from full-time agents managing large portfolios to part-time actors operating within local networks. These observations suggest that the player agent market is inherently segmented, with different types of agents fulfilling distinct roles. However, to date, no study has provided a systematic, data-driven classification of these types at the individual level. Addressing this gap is essential for advancing both theoretical and empirical research in this field as well as practical sport management implications.

3. Method

3.1 Sampling Procedure and Survey Design

To provide a comprehensive perspective on the structure of the player agent market, this study combines secondary market-level data with original survey data at the individual level. In a first step, we collected secondary data from the online platform *transfermarkt.de* to approximate the upper segment of the global player agency market. Specifically, we compiled data on the top 200 player agencies ranked by the aggregated market value of their client portfolios, drawn from a total population of 13,195 listed agencies. This dataset is used for descriptive purposes to illustrate the degree of concentration and the distribution of market power among leading agencies. By focusing on the upper tail of the distribution, the analysis enables an assessment of whether the representation market exhibits structural characteristics consistent with the notion of »superstar markets« (Rosen 1981), in which a small number of actors capture a disproportionate share of total market value.

The second part of the empirical analysis is based on original survey data collected from individual player agents worldwide. A key methodological challenge in this context is the identification and recruitment of respondents, as no comprehensive and up-to-date global registry of player agents exists. While partial contact information is publicly available through national football associations, these records are often incomplete or outdated. To overcome this limitation and ensure a broad and internationally diverse sample, contact information was systematically compiled from multiple sources, covering agents across all major football regions.

The online survey was conducted over a period of ten weeks, from August 19 to October 31, 2024. To maximize participation and ensure cross-country comparability, the questionnaire was distributed in four languages (English, Spanish, French, and German). Invitations to participate were sent via email, followed by a reminder four weeks after the initial contact. The timing of both the initial distribution and the reminder was carefully aligned with international transfer windows in order to mitigate potential non-response due to peak workload periods in the profession. In total, more than 9,000 email invitations containing a link to the online questionnaire were distributed. As

expected, given the nature of the sampling frame, a substantial number of messages could not be delivered due to outdated or invalid contact details. Following standard data cleaning procedures, incomplete or inconsistent responses were excluded from the analysis. This resulted in a final sample of $N = 285$ fully completed questionnaires, which forms the basis for the subsequent empirical analyses. The survey instrument was designed to capture both objective characteristics and subjective assessments of player agents, thereby enabling a multifaceted analysis of intermediary roles and market structures. The item construction was motivated by prior research on player agents, particularly the survey design of Poli et al. (2012), and complemented by more recent contributions (e.g., Green & Ghaye 2023). This approach ensures both content validity and comparability with existing studies, allowing for the identification of potential structural developments in the profession over time. The questionnaire primarily consists of closed-ended questions to facilitate standardized data collection and statistical analysis. Participation in the survey was entirely voluntary and anonymous, and no financial incentives were provided. This design minimizes social desirability bias and encourages candid responses. Overall, the dataset constitutes a unique and comprehensive source of information on player agents, offering an unprecedented level of detail on both structural characteristics and individual-level heterogeneity in this market.

3.2 Operationalization

In order to analyze the market structure on the individual level, this study applies a hierarchical cluster analysis based on binary indicators encompassing characteristics of the player agents' work profiles. The clustering variables include whether the individual works full-time as a player agent or alongside another full-time job, whether they hold an official *FIFA Football Agent License*, high weekly workload (40 or more hours), extensive professional experience (five or more years), large portfolio size (ten or more players represented), football insider background, previous relationship to players, business service-related professional background, and club-first network orientation. Several indicators were constructed from the survey responses. A football insider is defined as a respondent who had either played professional football or had been active elsewhere in professional football. Previous relationship refers to respondents with prior personal ties to players, including friendship or family. Service background captures previous professional experience in law, finance, tax advisory, or related business-oriented service fields. Club-first orientation is derived from the rank-order question on network priorities and identifies respondents who ranked clubs as their most important network. Given the binary and asymmetric nature of the indicators, pairwise dissimilarities were computed using the *Jaccard coefficient*. Hierarchical cluster analysis was then performed using *Ward's linkage* on the resulting dissimilarity matrix. In this context, *Ward's linkage* is used as a pragmatic agglomeration rule to obtain compact and interpretable clusters. The resulting cluster solution is therefore understood primarily as an exploratory and descriptive typology. To determine the appropriate number of clusters, solutions from $K = 3$ to $K = 6$ were compared with regard to within-cluster heterogeneity and minimum cluster size. Although higher-cluster solutions further reduced within-cluster heterogeneity, the three-cluster solution offers the best balance between interpretability and cluster size. Therefore, the final typology is based on three clusters.

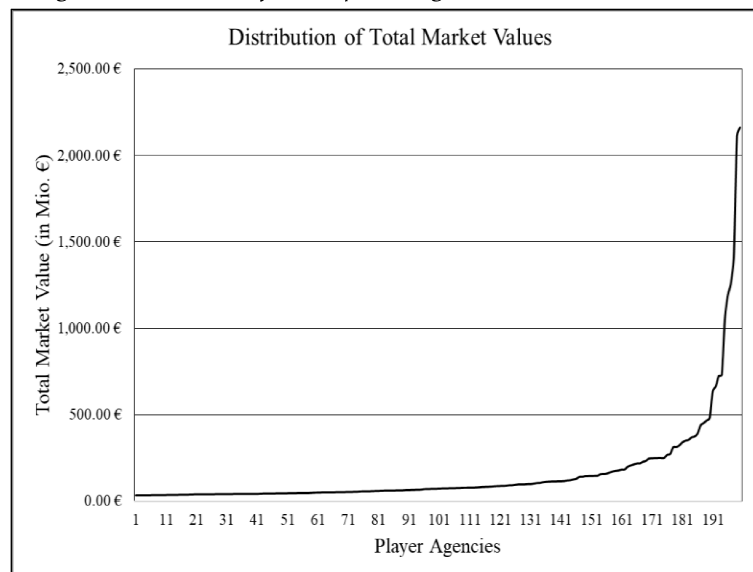
4. Results

4.1 General Market Overview

We begin by providing a descriptive overview of the upper segment of the player agency market in order to assess its structural characteristics (Fig. 1). Drawing on secondary data from *transfermarkt.de*, our analysis focuses on the 200 largest player agencies ranked by the aggregated

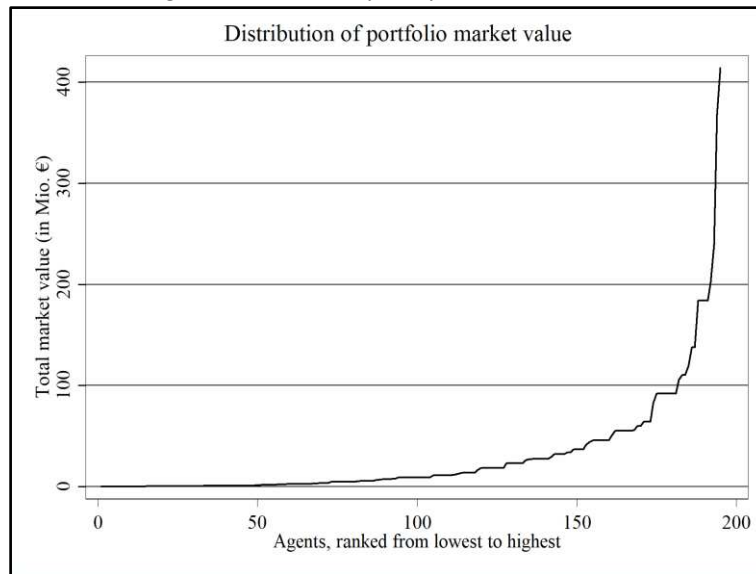
market value of their client portfolios. As of April 18, 2025, these agencies collectively represent 16,455 professional football players worldwide, thereby covering a substantial share of the globally organized representation market. A central question in this context is whether the player agency market exhibits characteristics consistent with highly concentrated »superstar markets« (Rosen 1981). The distribution of total market value is highly skewed, with a small subset of agencies controlling a disproportionate share of the overall market. This pattern is visually illustrated by the characteristic »hockey-stick« shape of the distribution, where a long tail of smaller agencies contrasts with a steep increase among the top-ranked actors. This suggests that a limited number of highly professionalized organizations dominate the market, while a large number of smaller or less specialized agents operate in the periphery.

Fig. 1. Distribution of the Top 200 Agencies (Total Market Value)



Importantly, however, aggregate concentration measures alone provide only a partial picture of market structure. While they highlight the dominance of top agencies, they do not capture the underlying heterogeneity at the level of individual agents. In particular, it remains unclear whether the observed concentration is driven by a homogeneous group of highly similar actors or by fundamentally different types of intermediaries operating under distinct business models and strategic orientations. To address this limitation, the following sections shift the focus from the agency level to the individual level, providing a more granular perspective on the structure of the intermediary market. Fig. 2 shows a distribution of total market value similar to that in Fig. 1.

Fig. 2. Distribution of Portfolio Market Value



The descriptive statistics for the individual-level sample, providing a first overview of the characteristics of player agents in the dataset are given in Table 1. The reported values represent within-sample means of binary indicators and can therefore be interpreted as shares in percentage terms. The results reveal a high degree of heterogeneity across multiple dimensions. With respect to professionalization, approximately 62% of agents report working full-time in the profession, while the average weekly working time amounts to roughly 39 hours. At the same time, the large standard deviation in working hours indicates substantial variation in labor supply, suggesting the coexistence of highly intensive full-time engagement and more flexible or part-time involvement. The sample is characterized by a relatively high level of experience, with agents reporting an average of over 14 years in the profession. However, the dispersion around this mean is considerable, reflecting diverse career trajectories and entry pathways. Similarly, the number of represented players varies widely, with an average portfolio size of approximately 15 players and a standard deviation exceeding the mean. This pattern is indicative of a market in which a small number of agents manage large portfolios, while many others operate on a significantly smaller scale. In terms of formal institutionalization, a large majority of agents (88%) hold an official FIFA license, suggesting a relatively high level of regulatory compliance within the sample. Nevertheless, the presence of unlicensed agents points to continued variation in formal entry barriers and professional standards. Turning to relational embeddedness and professional background, the data further underline the diversity of the intermediary landscape. Approximately 41% of agents report prior experience as professional players or in other roles within professional football, highlighting the importance of industry-specific knowledge and insider access. At the same time, a substantial share (63%) has a background in fields such as law, finance, or tax advisory, indicating that the profession also attracts individuals with more formalized, service-oriented skill sets. The role of personal relationships is equally noteworthy. Around 31% of agents indicate that they had prior friendship or family ties with at least one of their clients. This suggests that informal networks and social embeddedness continue to play a significant role in market entry and client acquisition.

Finally, the reported network priorities provide additional insights into the strategic orientation of agents. A majority of respondents (54%) identify clubs as their most important network, followed

by players (35%), while connections to other agents are mentioned only rarely. This distribution points to a strong demand-side orientation within the market, with many agents focusing primarily on relationships with clubs rather than on horizontal cooperation with peers. Taken together, these descriptive statistics highlight the substantial heterogeneity of player agents across dimensions such as professionalization, experience, portfolio size, and network orientation. This heterogeneity provides a strong empirical motivation for a more systematic classification of agents, which we develop in the following section.

Table 1: Descriptive statistics

Characteristics	Mean	SD	N
Professionalization and activity			
Works full-time as player agent (%)	62.11	48.60	285
Weekly working hours	38.95	27.98	285
Years of experience as player agent	14.16	8.23	285
Number of represented players	14.83	18.92	285
Holds official FIFA license (%)	88.07	32.47	285
Relational embeddedness and background			
Professional playing or other activity in professional football (%)	41.40	49.34	285
Previous experience in law, finance, tax advisory or related fields (%)	63.51	48.23	285
Prior friendship or family ties to represented players (%)	30.88	46.28	285
Ranked as most important network:			
Clubs (%)	54.39	49.89	285
Players (%)	35.44	47.92	285
Other Agents (%)	3.51	18.43	285

Notes: Reported values are within-sample means of binary indicators and can therefore be interpreted as shares in percent. The cluster analysis is based on the complete-case sample ($N = 285$).

4.2 Empirical Cluster Analysis: Typology of Player Agents

To move beyond purely descriptive heterogeneity, we next identify latent structures in the player agent market using a cluster-analytic approach. Rather than imposing predefined categories, this method allows us to uncover empirically grounded groupings that reflect systematic differences in how agents operate within the market. The analysis is based on the complete-case sample ($N = 285$) and incorporates key dimensions of intermediary activity, including professionalization, portfolio scale, relational embeddedness, and network orientation. The results (Table 2 and Fig. 3) reveal a stable three-cluster solution, pointing to a structurally differentiated intermediary market. Importantly, these clusters do not merely capture differences in scale or experience, but reflect distinct modes of intermediation in qualitatively different ways in which agents position themselves between players and clubs.

A first type can be characterized as fully professionalized market actors. These agents combine high labor input, formal qualifications, and comparatively large client portfolios with a broad service offering. What distinguishes this group is not only the intensity of their engagement, but also their ability to integrate multiple functional roles. Their comparatively balanced network orientation suggests that they operate as central coordinators in the matching process, rather than aligning exclusively with one market side. In this sense, they resemble »generalist intermediaries« who

internalize complexity and reduce transaction costs through comprehensive service provision.

A second type represents a more specialized brokerage model, characterized by a strong alignment with clubs as the primary counterpart in the market. While similarly experienced and professionalized, these agents differ fundamentally in their strategic orientation. Rather than acting as neutral coordinators, they appear to position themselves closer to the demand side, facilitating matches from a club-centric perspective. This is reflected not only in their network priorities, but also in their comparatively low reliance on personal ties and insider backgrounds. Instead, their role is more institutionalized and transaction-oriented, suggesting a form of intermediation that is embedded in formal market structures rather than relational proximity. Conceptually, this type aligns with classic brokerage functions in search and matching models, where intermediaries specialize in reducing frictions for one side of the market.

The third type captures a markedly different mode of intermediation, which can be described as relational and part-time embedded activity. These agents operate with significantly lower levels of time commitment and smaller portfolios, yet still exhibit substantial experience and notable integration into football-related networks. Their activities appear to be less formalized and more context-dependent, often relying on personal connections and insider knowledge rather than on standardized service provision or organizational scale. The absence of intensive labor input suggests that intermediation in this segment is not necessarily a primary occupation, but rather complements other professional activities. As a result, this group reflects a more decentralized and network-driven layer of the market, in which access and relationships substitute for scale and formalization.

Taken together, the three clusters reveal that the player agent market is not only heterogeneous, but structurally segmented along two key dimensions: degree of professionalization and mode of market access. While the first dimension differentiates between full-time, high-intensity engagement and more peripheral involvement, the second captures whether intermediation is primarily organized through formal market structures (e.g., clubs and agencies) or through informal relational networks. This distinction has important implications for how intermediary markets function. The coexistence of highly professionalized agents, specialized brokers, and relational insiders suggests that matching processes are shaped by multiple, coexisting coordination mechanisms. While large, full-service agents may dominate high-value transactions, relationally embedded actors may play a crucial role in access, scouting, and early-stage career management. At the same time, club-oriented brokers may act as gatekeepers on the demand side, structuring access to opportunities within institutional channels. Importantly, this micro-level heterogeneity complements the aggregate evidence presented before. The observed concentration of market value at the top does not imply a homogeneous elite of intermediaries, but rather coexists with a diverse ecology of agent types fulfilling different functions. In this sense, the player agent market can be understood as a layered system, in which different intermediary roles coexist and interact, each contributing to the overall functioning of the market. By uncovering these distinct modes of intermediation, the cluster analysis provides a novel empirical foundation for understanding how intermediary markets operate in high-asymmetry environments. It highlights that variation across agents is not merely a matter of scale, but reflects fundamentally different strategic positions and coordination roles within the market. This perspective is critical for advancing both theoretical and empirical research on labor market intermediation, as well as for informing regulatory and managerial practice in professional sports. The key differentiators are illustrated in Fig. 4.

Table 2: Cluster Analysis

Type	Share (N, %)	Core profile
Type 1: Full-blood Agents	83 (29.12%)	This type represents the most fully professionalized agents in the sample. Members of this cluster are universally full-time (100.0%), typically licensed (92.8%), work long hours (91.6% with at least 40 hours per week), and often manage comparatively larger portfolios (66.3% with at least 10 players). They also combine strong service-related professional backgrounds (75.9%) with relatively frequent football insider experience (53.0%) and prior kinship/friendship ties to represented players (50.6%). Club-first orientation is comparatively weak (21.7%).
Type 2: Club-oriented Brokers	94 (32.98%)	This cluster captures highly experienced, licensed, and strongly club-centered agents. Most members are full-time (77.7%), licensed (90.4%), and highly experienced (95.7% with at least five years of experience), while a large majority also manage broader player portfolios (77.7% with at least 10 players). Compared with the other types, football insider experience is less common (29.8%), and prior kinship/friendship ties to represented players are rare (6.4%). At the same time, this cluster shows by far the strongest club-first orientation (83.0%), suggesting a more formalized and market-embedded brokerage profile.
Type 3: Part-time Insiders	108 (37.89%)	This type consists of less fully professionalized agents in terms of time commitment and portfolio size. Only a minority work full-time (19.4%), none report working at least 40 hours per week (0.0%), and only 13.0% manage portfolios of at least 10 players. At the same time, a substantial majority still have at least five years of experience (81.5%), are licensed (82.4%), and show notable football insider experience (42.6%) as well as prior kinship/friendship ties to represented players (37.0%). Club-first orientation is present, but less pronounced than in Type 2 (54.6%).

Fig. 3. Log Total Portfolio Market Value by Agent Type

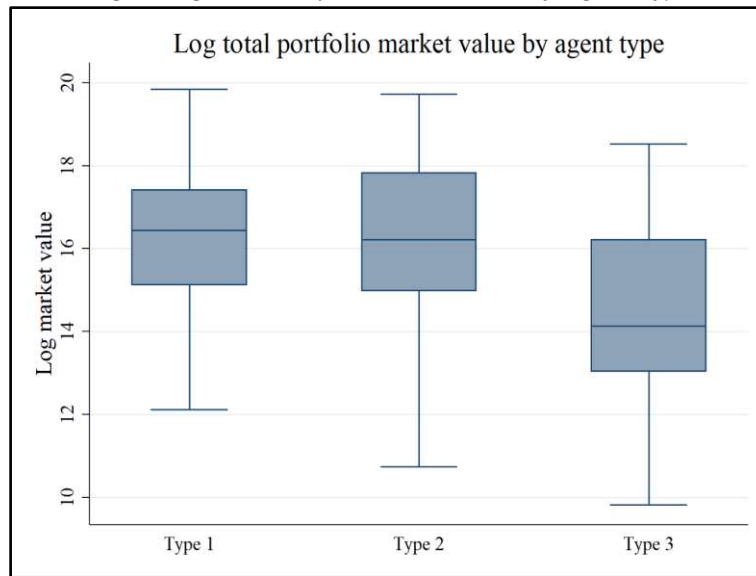
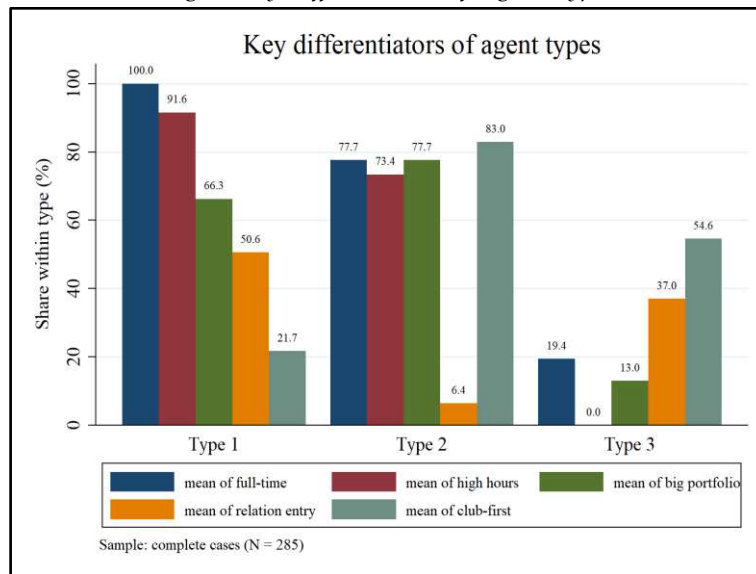


Fig. 4. Key Differentiators of Agent Types



5. Discussion and Implications

The identified clusters should not be interpreted merely as empirical groupings, but as distinct functional roles within the market. Each type reflects a specific configuration of professionalization, relational embeddedness, and market orientation, which in turn shapes how intermediaries contribute to matching processes. The first type – full-blood agents – represents a model of integrated intermediation. These agents internalize multiple functions, combining advisory, negotiation, and career management within a single, highly professionalized structure. Their role can be understood as reducing complexity for clients by bundling services and coordinating across different market interfaces. In theoretical terms, they act as multi-sided intermediaries who mitigate both information asymmetries and search frictions simultaneously.

The second type – club-oriented brokers – embodies a more specialized and demand-side-oriented

intermediation logic. These agents do not primarily position themselves as neutral representatives of players, but rather as brokers embedded within club networks. Their function is to facilitate transactions by aligning closely with one side of the market, thereby reducing uncertainty and coordination costs for institutional actors. This suggests that intermediation is not necessarily symmetric, but can be strategically biased toward specific market participants.

The third type – part-time insiders – represents a relational and network-based form of intermediation. Here, access to opportunities is less driven by formal structures or scale, and more by personal ties and insider knowledge. These agents operate at the intersection of formal and informal market mechanisms, often acting as entry points into the system or as complementary actors in specific transactions. Their existence highlights that even in highly professionalized markets, informal coordination mechanisms remain highly relevant. These findings suggest that intermediary markets are best understood as multi-layered systems, in which different types of agents fulfill complementary roles. Rather than competing within a single homogeneous space, agents occupy distinct niches that contribute differently to the overall functioning of the market.

While this study focuses on professional football, the identified patterns are likely to extend beyond the specific context of sports. Many intermediary markets share core characteristics such as information asymmetries, search frictions, and the importance of networks, suggesting that similar forms of heterogeneity may emerge in other industries. For instance, in real estate markets, one can observe comparable distinctions between highly professionalized full-service agencies, transaction-oriented brokers focusing on specific client segments, and more informally embedded actors operating through personal networks. Similarly, in creative industries such as model agencies or talent representation in film and television, different types of agents coexist, ranging from large, globally operating agencies to specialized brokers and relationship-driven managers. The common denominator across these contexts is that intermediation is not a uniform activity, but rather a strategic positioning within a market characterized by uncertainty and imperfect information. The typology developed in this study therefore provides a conceptual template for analyzing intermediary markets more broadly. It suggests that differences in professionalization, network access, and market orientation are key dimensions along which intermediary roles can be systematically differentiated. At the same time, the relative importance of each type is likely to depend on industry-specific factors such as regulation, market transparency, and the degree of standardization in transactions. Future research could build on this framework to conduct comparative analyses across different intermediary markets, thereby advancing a more general theory of intermediation.

For player agents, the results highlight that there is no single »optimal« business model. Instead, success can be achieved through different strategic configurations, depending on how agents position themselves within the market. Highly professionalized agents may benefit from scaling their operations and offering integrated services, while others may leverage relational embeddedness or niche specialization. Importantly, however, each model requires internal consistency. For example, part-time engagement combined with large-scale portfolio ambitions is unlikely to be sustainable, just as a purely relational approach may be insufficient in highly institutionalized segments of the market.

For clubs, the typology provides a more nuanced basis for selecting and interacting with intermediaries. Understanding whether an agent operates as a full-service coordinator, a club-oriented broker, or a relational insider can help clubs better assess incentives, anticipate behavior, and design more effective negotiation strategies. In particular, the strong presence of club-oriented brokers suggests that clubs are not merely passive recipients of intermediation, but actively shape the structure of the intermediary

market. For players, the findings underscore the importance of choosing an agent whose profile aligns with their career stage and objectives. Early-career players may benefit from relationally embedded agents who provide access and personal support, while established professionals may require highly professionalized agents capable of managing complex, high-value transactions on a global scale. The typology thus provides a decision framework that goes beyond simplistic notions of agent quality. For governing bodies and regulators, the results highlight the structural diversity of the intermediary market, which has important implications for regulation. Uniform regulatory approaches may fail to account for the different roles and capacities of agents. For example, licensing requirements, transparency rules, or compensation structures may have heterogeneous effects across agent types. A more differentiated regulatory approach that acknowledges this diversity could improve both market efficiency and fairness. More broadly, the study demonstrates that effective management and governance of intermediary markets require an understanding of who the intermediaries are and how they operate. By making these structures visible, the analysis provides a foundation for more informed decision-making across all stakeholder groups.

Besides these insights, several limitations should be acknowledged. First, despite the international scope of the sampling frame, the final sample ($N = 285$) remains modest relative to the estimated global population of player agents, which constrains the statistical power of subgroup comparisons and the generalizability of the cluster solution. Second, because no comprehensive sampling frame of agents exists, participation was necessarily voluntary, raising the possibility of self-selection bias: agents who are more professionalized, more comfortable disclosing information about their business practices, or more favorably disposed toward academic research may be overrepresented, while more informally operating or peripheral actors may be underrepresented. This could lead to an underestimation of the true heterogeneity in the market, particularly at the lower end of professionalization.

The central contribution of this study lies in shifting the perspective on intermediary markets from aggregate outcomes to micro-level structures. While prior research has largely focused on what intermediaries do, this study emphasizes who the intermediaries are and how their heterogeneity shapes market functioning. From a scientific perspective, it demonstrates that ignoring intermediary heterogeneity risks oversimplifying the mechanisms through which markets operate. From a practical perspective, it shows that different types of intermediaries require different management, collaboration, and regulatory approaches. In highly asymmetric and complex markets such as professional sports, understanding these differences is not merely an academic exercise, but a prerequisite for effective decision-making. By providing a systematic and empirically grounded typology of player agents, this study offers both a conceptual framework and actionable insights that can inform future research, managerial practice, and policy design.

6. Conclusion

This study set out to provide a micro-level perspective on the structure of the player agent market by moving beyond aggregate outcomes and focusing on the heterogeneity of intermediaries themselves. Using a unique international dataset and a cluster-analytic approach, we identify three distinct types of player agents that differ systematically in their degree of professionalization, relational embeddedness, and market orientation. The findings demonstrate that the player agent market is not a homogeneous arena of functionally equivalent actors, but rather a structurally differentiated system in which distinct modes of intermediation coexist. Highly professionalized full-service agents, club-oriented brokers, and relationally embedded part-time insiders each occupy specific roles within the market and contribute differently to matching processes and transaction outcomes. This layered structure helps explain how

coordination is achieved in a context characterized by high information asymmetries, search frictions, and concentrated market power. By uncovering these micro-level structures, the study makes an important contribution to the literature on labor market intermediation and sports economics. It highlights that understanding market outcomes requires not only analyzing institutional frameworks and aggregate indicators, but also accounting for the diversity of intermediary actors and their strategic positioning. In doing so, the study provides a foundation for more nuanced theorizing on matching processes, bargaining dynamics, and the governance of intermediary relationships in high-stakes environments. At the same time, the results carry clear practical implications. For agents, they underline that different strategic models can coexist, but require consistent positioning and capability alignment. For clubs and players, the typology offers a framework for more informed partner selection and interaction with intermediaries. For regulators, the findings suggest that one-size-fits-all approaches may be insufficient in a structurally diverse market and that differentiated regulatory designs may be more effective.

Beyond the specific context of professional football, the study points to broader implications for intermediary markets in general as well as sport management. Similar patterns of heterogeneity are likely to emerge in other industries characterized by complex matching processes and relational coordination, such as real estate, talent management, or creative industries. Future research should therefore build on this framework to examine the role of intermediary types across different market settings and to analyze how these structures influence efficiency, equity, and market performance over time. In sum, this study shows that intermediary markets cannot be fully understood without considering the actors that constitute them. By providing a systematic and empirically grounded typology of player agents, it advances both academic understanding and practical decision-making, thereby contributing to a more comprehensive view of how modern labor markets function in the presence of powerful and heterogeneous intermediaries.

Acknowledgement

The authors declare no conflict of interests.

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