

Sport Economics Research: New Perspectives on the Demand for Sport

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Introduction

All papers considered in this section of the digest come from the issues dated in the first half of 2023 and were published in the pre-selected journals. Of these journals, two are exclusively dedicated to sport economics related research, the *Journal of Sports Economics* (JSE), which is the official Journal of the *North American Association of Sports Economists* (NAASE) and the *International Journal of Sport Finance* (IJSF), which is the official journal of the *European Sport Economics Association* (ESEA). Furthermore, sport economics research is regularly published in either of four sport management journals, i.e., the *European Sport Management Quarterly* (ESMQ), the *Journal of Sport Management* (JSM), the *Sport Management Review* (SMR) and the *Journal of Global Sport Management* (JGSM). The following list provides a summary of overall forty-eight identified papers covering sport economics related research that have been published in either of these seven journals, from January to June 2023:

JSE (V24 Issues 1-5): 26 papers, with all 26 covering sport economics related research,

IJSF (V18 Issues 1 & 2): 9 papers, with all 9 covering sport economics related research,

ESMQ (V 23 Issues 1-3): 46 papers, with 7 covering sport economics related research,

JSM (V37 Issues 1&2): 25 papers, with 2 covering sport economics related research,

SMR (V26 Issues 1 -3): 22 papers, 2 covering sport economics related research,

JGSM (V8 Issues 1 & 2): 25 papers with 2 covering sport economics related research.

The forty-eight sports economics related papers are classified in seven categories:

Labor markets (such as league restrictions on player mobility; player and coach hiring, dismissal and contracts, performance and incentives; transfer markets; salary determinants; discrimination): 4 papers.

Performance Analysis (such as home advantage, tournament effects, and behavioral sport economics such as the effect of travel, home field, etc. on performance): 11 papers.

Demand for Sport (the determinants of stadium attendance, TV viewing): 9 papers.

Sport and Vice (financial analysis of sports gambling markets, effects of law and policy on sports wagering, doping and sport outcomes): 8 papers.

Finance & Ownership (such as the financial returns to investment sport, sport and financial markets, public finance and economic impact): 12 papers.

Miscellaneous: (other not classified topics such as the impact of the COVID Pandemic on various aspects of sport): 4 papers.

New assessments on finance and ownership in sports

Given financial assessments, it is clear that sport leagues clubs franchises and organizations are becoming increasingly sophisticated as we move into the century's third decade. Once rather insular and archaic in terms of finance, sport has opened to more disparate investment, including foreign investors. In turn we have seen modernized financial approaches to sport, from applications to ticket sales and media contracts to opening the doors to private equity investment. In turn the value of investing in sports appears to be growing at record rates and the existing major sport leagues and organizations are the beneficiaries. Advanced finance from private equity investment in sports to innovative pricing for sport tickets reflect some of the recent research in sport economics discussed in this report.

The past two years have seen several blockbuster transactions for sports clubs and franchises, with sales price record seemingly broken with every transaction. In June 2022, the English Premier League (EPL) club Chelsea FC sold for a record \$3.1 billion to a group led by PE investor Clearlake Capital. In August 2022, a group of investors led by Walmart heir Rob Walton acquired the

Denver Broncos of National Football League (NFL) for a new record price of \$4.65 billion. In February 2023, NBA owners approved Matthew Ishbia's acquisition of the Phoenix Suns for a league-record \$4 billion, nearly double the prior mark for an NBA sale, which was \$2.35 billion that Joe Tsai paid for the Brooklyn Nets in 2019. In July 2023, an investor group led by the owner multiple professional clubs, Josh Harris, finalized the purchase of the NFL's Washington Commanders for just over \$6 billion, a nearly 30% increase over the Broncos sale price, which had been the high-water mark for a team in any sport. The 2020s have also seen an increased interest in sports leagues, clubs and organizations seeking funding from nontraditional sources, including Private Equity (PE) funders and Saudi Arabia's Public Investment Fund (PIF), which invests funds on behalf of the Government of Saudi Arabia.

The NFL and NBA, for example historically had only allowed individuals to own shares in teams, have now come to embrace a wider range of investors. In 2021 the NBA changed ownership rules so that PE providers may acquire up to 20 per cent of an NBA club. The PIF meanwhile invested significantly in professional golf so as to force a merger with the PGA. Additionally, the Saudi PIF have made major investments in Formula 1 racing, football and golf. They have attempted major investments at the highest levels of world football (soccer) as shown in the 2021 purchase of the EPL's Newcastle FC and a 2023 contract offer at record value to superstar Lionel Messi. The latter transaction was not completed as Messi signed with the MLS Miami club.

Moreover, there is renewed interest on the impact and associated controversies surrounding the public finance of sport facilities. The NFL Buffalo Bills, in November 2022, earned a pledge of \$850 million from the state of New York to fund a new stadium which will have a total price tag of over \$1.5 Billion. The state's share represented the largest public contribution ever for an NFL facility. However, in April 2023, the city of Nashville, Tennessee upped the public spending record with a promise of \$1.26 billion toward a new stadium for the hometown NFL Titans. This will represent the largest public subsidy for a stadium in U.S. history.

The fundamental reshaping of finance and investment in sport in the 2020s is not lost on sports economics researchers. Though none of the papers published this year directly address these most recent sport transactions more articles, a total of

twelve, published in the most recent six months were focused on finance and ownership that any other of the above listed sport economics categories.

Selected Article Reviews

From the *IJSF*, Spanish economists Cordero, Corral, Gomez-Gonzalez, and Polo ask in the title: Does Foreign Investment Affect Sporting and Managerial Efficiency? The authors point out that foreign investment in European football clubs has increased in recent years, and that more than half of the clubs in England's top two divisions (EPL and Championship League) are now managed by foreign owners. The accepted hypothesis the test is that foreign owned clubs perform worse than their domestically owned rival clubs. For this paper the test is both a sporting performance evaluating how well the club performs on the field relative to expectations. And an evaluation of the club's financial performance measures (managerial efficiency). Ultimately and employing cutting edge analytical and econometric techniques the findings reveal results suggest rejecting the null hypothesis; there are not significant differences between domestic- and foreign-owned clubs in either on-field or managerial performance.

The financial tool of option pricing, well-known if not notorious in financial and commodity markets, but not until very recently familiar in sport is addressed in the February 2023 issue of *JSE*. Berkowitz and Rotthoff apply financial options theory to sports ticket markets. In this case the option is that the consumer purchasing an event ticket has the option to resell that ticket at fair market value rather than be limited to the "face value" of the ticket. This options practice has become more common with the development of the secondary ticket resale market. The more flexible pricing option for buyers increases the value of tickets at the primary sale and gives the primary buyer a more valuable asset if they choose a secondary sale. The empirical results find that the use of pre-sale options in the primary market increases club profits, as they increase primary prices for the more valuable commodity. However, they also find that this strategy also increases consumer utility—making both parties to the transaction better off. Thus, the efficiency gains and profit gains make *incorporating options* with selling, as opposed to just selling, an optimal strategy.

To segue from private to public finance we consider the *JSM* article The Utility of Including Regular Sport Team Events in Event Portfolios by Australian researchers Sobral, Fairley, and O'Brien. The authors put forth that *event portfolios* are used by local destination managers manage their community's collection of events. However, sport events such as those played by professional sport teams in a sport league are not typically included in event portfolios. Employing qualitative methods, the authors find that teams and events (asset components) can and may well contribute to achieving the local event portfolio's objectives. They assert that sport teams and events provide content and regular communications with key target markets.

The economic impact of stadiums and sport events, or the lack thereof, has been a staple of sports economic research since the 1990s. Routinely the economic analysis finds little evidence that sports stadiums or events drive economic development in a city or region. Nonetheless, the topic continues to receive attention as evidenced by Salgado-Barandela, Barajas, and Sanchez-Fernandez article in the *IJSF*. They consider a novel facet to this research by studying whether economic impact of a sport event is different in small cities. It has been deliberated that a major event in a small city may put that location "on the map" and result in greater than normal economic impacts for smaller cities hosting events. But is this actually true? A key component of economic impact is that money earned at an event is the spent and then re-spent within the host community creating the important multiplier effect (also known as indirect spending) of economic impact. Leakages— that is the money earned at an event that is re-spent outside the host city or region— are a critical factor in EI analysis, as leakages, especially first round leakages, reduce the multiplier's value. The authors suggest that small population cities are more susceptible to leakages, because they have less commerce and thus spending opportunities than larger cities. Using a case study as the analytical tool, a comparison was made between a small city that hosted basketball and kickboxing events, and an adjacent larger city. The results confirmed the hypothesis and identified higher-than-average attendee expenditure in the larger and more developed city which is adjacent to the host city. Overall, the current case study highlighted the importance of considering the existence of leakages thus multipliers may be overstated and the idea that smaller cities may have an economic development advantage in hosting events, may in fact be exaggerated.

Last, Geoffrey Propheter offers a paper somewhat more favorable to the development potential of stadiums. He tests the *facility amenity theory*, which suggests when a team or club moves to a new facility real estate values (home prices) rise near the new facility and likewise drop in the vicinity of the former venue. Increasing real estate values are positive in that they may increase property tax revenue for the city. A case study in the San Francisco Bay area where the NBA's Warriors moved from Oakland to a new arena in the Mission Bay neighborhood in the city of San Francisco was employed. Propheter found some evidence, when Euclidean not walking distance is used to determine proximity to the stadium. He found that with that specification of distance, home values did rise in near the new arena Mission Bay. This his results though hardly overwhelming, to support the facility amenity theory. Oakland neighborhoods near the former arena, The Oakland Coliseum were not examined to see if home prices fell in those neighborhoods. All in all his results are not a particularly convincing argument for the benefits of public stadium finance.

Finance is becoming increasingly important in sport. As the value of sport products escalates, so does the demand for more and better financing opportunities, and more sophisticated methods of finance. Doubtless the events of the past year including record sales transactions for clubs, surges in foreign investors, and stadium finance will continue to draw the attention of sports economics experts.

Annotated bibliography

1. Cordero, J.M., del Corral, J., Gomez-Gonzalez, C., and Polo, C. (2023) Does Foreign Investment Affect Sporting and Managerial Efficiency? The Case of English Football Clubs *International Journal of Sport Finance*. 18 (2) 71–83.

Abstract: The number of foreign owners in football clubs has recently increased in Europe and especially in England. This study aims to analyze whether clubs owned by foreign investors show different parameters of sporting and managerial efficiency. We use data on expected performance (from betting odds), wage costs, and the results of football clubs in the English Premier League (EPL) and English Football League Championship (EFL) over 13 seasons. We estimate different measures of efficiency using three alternative methods: expected vs. actual performance index, nonparametric conditional data envelopment analysis (DEA), and stochastic frontier,

while considering foreign ownership as an exogenous factor. Our results suggest that there are not significant differences between domestic- and foreign-owned clubs.

2. Berkowitz, J.P., and Rotthoff, K.W. (2023). Real Options Applied to Consumer Goods: Maximizing Profits and Fan Welfare. *Journal of Sports Economics*. 24 (2) 139-158.

Abstract: The use of pre-sale options for tickets is underutilized in sports. In this study, we show that the use of pre-sale options increases profits, but also increases consumer utility— making both parties better off. Thus, the efficiency gains and profit gains make incorporating options with advanced selling, as opposed to just advanced selling, an optimal strategy. Through this ticket pricing strategy, the organizer can realize a significant increase in profits from a separating equilibrium pricing strategy while simultaneously consumer welfare increases as fans know, with certainty, they have tickets to the game if their team participates. If these options were offered by participants instead of the organizer it also allows the participant to smooth their revenues over time.

3. Propheter, G. (2023). Sports Facilities as a Housing Amenity: Do Prices Follow Facilities? *Journal of Sports Economics*. 24 (4) 443-474.

Abstract: The sports facility amenity theory predicts that when facility sites change, home prices nearer the prior site decline while home prices nearer the new site increase. Using home sales data in the vicinity of two proposed facility sites for the Golden State Warriors in San Francisco, the data are generally supportive of the amenity theory. The study also shows that Euclidean and walking distance can yield dissimilar treatment effect sizes, thus compelling researchers to justify their distance measurement choice. Finally, the data provide weak support that home buyers respond to changes in facility re-designs towards increased public benefits.

4. Salgado-Barandela, J., Barajas, A., and Sanchez-Fernandez, P. (2023). Geographical Distribution of Economic Impact: Sporting Events in Small Cities. *International Journal of Sport Finance*. 18 (2), 45–53.

Abstract: There are limitations in determining the economic impact of sporting events that need to be considered. One of these is represented by first-round leakages. This work focuses on explaining first-round leakages in the economic impact of sporting events on small cities. Seeking to identify this type of leakage, we estimated the spatial distribution of the economic impact of two small-sized events organized in a town with a population of 24,248 inhabitants. The results showed a first-round leakage exceeding €300,000 and identified higher average attendee expenditure in a more developed city adjacent to the host city. Moreover, an exploratory analysis concerning the influence of leakage in final spending was performed. Finally, the elements that would increase the probability of leakage were studied. Overall, the current case study highlighted the importance of considering the existence of leakage.

5. Sobral, V., Fairley, S., and O'Brien, D. (2023) The Utility of Including Regular Sport Team Events in Event Portfolios. *Journal of Sport Management*. 37 (1). 15-26.

Abstract: Event portfolios are a useful way for destination managers to holistically manage their community's collection of events and, through strategic integration and common objectives, more effectively produce benefits. However, regular sport events such as those played by professional sport teams in a sport league have received little attention from event portfolio managers and researchers. Understanding the value and utility of sport team event assets can inform the successful integration of these events into event portfolios. This research used qualitative methods to examine how team asset components can contribute to achieving event portfolio objectives. The results have significance for event tourism researchers and practitioners and demonstrate that contributions are largely founded on the focal professional sport league structure, which provides constant content and regular communications with key target markets. Analysis of the findings led to the development of a model on the utility of including team events in an event portfolio.