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Unlocking Economic Dynamics: A Comprehensive Study of Major Sporting Events and Their Impact on Host Cities

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Abstract: *This research investigates the economic impact of major sporting events on host cities, analysing both the advantages and challenges associated with hosting such events. Through a comprehensive literature review and methodological approach combining quantitative and qualitative analysis, the study examines age and gender dynamics in perceptions of economic benefits derived from these events. Findings reveal that age and gender influence attitudes towards the economic impact of major sporting events, with a significant interaction effect observed. While age and gender differences contribute to variations in support for hosting such events, the effect sizes remain modest. The study underscores the importance of tailored approaches that account for demographic nuances in event planning and policy formulation.*

Keywords: *Major Sporting Events, Economic Impact, Age Dynamics, Gender Dynamics*

Introduction

There are large number of mega-sports events that have gained the attention of billions worldwide for decades, and have even become more popular by the audience which is not from the same languages, borders, and cultures. Either it is the incomparable atmosphere of the soccer FIFA World Cup or the panoramic Olympic Games that have taken their place as dedicated parts of global culture or the heady rush that follows a Super Bowl, all these events have become indispensable parts of global culture. The impact of large-scale sporting events on host cities and provinces goes beyond the exhibition and entertainment they represent. The economic clout of these events is equally enormous. Major sporting events exhibit a complex economic armature, which undoubtedly brings positive and negative effects on the host city. Thus, this research will concentrate on the economic consequences of such events on the cities that organize them.

The economic advantages that event hosting might bring are undeniable but there is a need to be critical in terms of their real economic implications in order to ensure proper decision-making by policymakers, stakeholders and event organizers. The economic contribution of major sporting events is diverse, covering a wide range of industries, including tourism, infrastructure improvement, employment, and local commerce. Host cities make considerable investments in the form of infrastructure development, venue

construction and urban regeneration in compliance with the demanding specifications given by the event organizers.

The purpose of these investments is twofold: first, the effective organization of the event which secondly, creates a legacy that remains long after the event is over. The most commended economic effect of housing major sporting events according to their proponents is the arrival of many tourists and consumers that end up spending on accommodation, food, transportation and souvenirs. The hike in tourist traffic can add weight to the local economy in general, with enterprises from different spheres increasing their turnover due to enhanced consumer activity.

On top of it, mega sport events provide host cities with an exceptional chance to highlight their culture, landmarks, and friendliness to an world-wide audience that could lead more tourists and direct investors. However, major sport events' economic impact is not without a complicated and demanding side. Many critics tend to focus on the high financial cost of organizing such activities which consists of the investment in infrastructural facilities, security expenses, and the operational cost. Additionally, there is a possibility of economic benefits not materializing in the way they were expected and makes it difficult to calculate the return on investment and the process where public funds are allocated. Besides, the economic influence of multi-sport games does not stop at the cash earned/spent in the first round.

Furthermore, it can affect a society’s broader socio-economic factors like labor market, income distribution, and community connection. To grasp these dynamics we should look not only at direct economic activities, but also we should have in my view a more complex vision of social and cultural aspects. To illustrate these, this research paper is going to explore the economics of major sporting events, concentrating on the impact of hosting them on the host cities. This study aims to break down the complex situation of hosting such sporting events and to explore the ways to achieve the highest possible benefits and limited risks through the evaluation of the case studies, theoretical frameworks and practical experience. In the chapters to come, we will delve into the central economic features of such sporting events, discuss the indicators used for estimation of their effects, and showcase the stories of past host cities. This project focuses on an interdisciplinary investigation which aims to contribute to the constant and never-ending discussion about the economics of big sports events and hence inform future decision-makers in this area

Preuss (2005) examines the economic impact of large multisport programs on affected populations, emphasizing theoretical differences in individuals' movements and developing a model for local economic impact analysis. The paper addresses challenges in considering eligibility and cost, particularly focusing on the opportunity costs of outdoor mobilization during events. It underscores the importance of closely examining cases affected by multisport programs and discusses conclusions regarding the concept of "timelessness" and people avoiding host cities due to bidding competition for major sporting events. Li and Jago (2013) recognize the potential economic impact of major sporting events in attracting tourists and investing in event-related infrastructure. They provide basic methods for measuring economic impact, summarize events of the past two

decades, and conduct a meta-analysis to identify key patterns in economic research. The study is divided into three phases, progressively increasing the coverage, depth, and breadth of research. Recommendations for future research agendas are provided based on the major developments observed.

Sterken (2006) evaluates the impact of mega sports events on economic growth, comparing the Winter Olympics and FIFA World Cup. The Winter Olympics shows a positive effect on per capita GDP growth rate, while the World Cup does not. The study considers the impact of event timing on regular growth factors. Lin and Lu (2018) utilize event study methodology with dynamic and event panel data to analyze the economic impacts of events like the Olympics and Asian Games from 1950 to 2014. They challenge the notion of inherent economic benefits associated with hosting such events.

Jones (2001) examines the role of sports factors, including attendance, expenditure, and infrastructure development, on the growth of tourism. Although the statistical tool is unspecified, it is likely that the study will demonstrate these events as significant drivers of increased tourist activity and infrastructure development.

Bohlmann and van Heerden (2005) utilized econometric modeling techniques, including computable general equilibrium modeling and regression analysis, to assess the macro-level effects of sports events on the economy. Their research likely provides concrete figures on the financial impacts, offering valuable insights for policy-making. Perić (2018) likely provides a comprehensive analysis of the social and economic impacts of hosting sports events, focusing on community cohesion, employment levels, and investment activity. Although the statistical tool is unspecified, the study likely delves into intricate details of these impacts. Dobson (2000) probably conducts an analysis of the financial implications of hosting major games, considering factors such as employment effects, infrastructure investment, and tourism. While the statistical tool is not specified, the study likely reveals both short-term and long-term costs and benefits.

Amponsah et al. (2018) likely investigate how major athletic events contribute to local companies' and industries' revenue growth and overall economic development. Their study probably examines the economic impact on company revenues, employment levels, and industry growth rates, although the statistical tool used is unspecified. Pop et al. (2016) may explore the influence of hosting large-scale athletic events, such as the Olympics, on the local economy's well-being. The study likely analyzes data related to GDP, employment, tourism earnings, and infrastructural investments to assess the impact, albeit without specifying the statistical tool. Mondello and Rishe (2006) probably focus on the effects of sports competitions on employment, revenue generation, and regional development. Although the statistical tool is not mentioned, the study likely reveals the economic impact on local economies, considering variables such as firm earnings and employment levels.

Bull and Lovell (2007) likely delve into the fiscal implications of hosting major athletic events in host communities, potentially resulting in infrastructure enhancements and increased tourism. Their research probably involves analyzing various factors such as tourism revenues, infrastructure projects, and employment opportunities to gauge the overall economic impact. However, the specific mathematical tools used in their analysis

are not specified. Daniels (2007) presumably examines the influence of mega events on economic activities within host cities, considering impacts on infrastructure usage and local businesses. The study likely investigates metrics such as tourist arrivals, expenditure, and hotel occupancy rates to evaluate the economic effects of tourism on host destinations. Nonetheless, the statistical techniques employed in this analysis remain unspecified.

Crompton (1995) might discuss the financial challenges associated with hosting major athletic competitions, highlighting the strain placed on local governments and economies. His research may involve examining factors like job creation, tax revenues, and tourism earnings to assess the overall economic condition of host cities. However, the specific statistical methods used to analyze these factors are not mentioned. Nair (2021) probably explores how large-scale sports events impact various economic indicators in developing countries, potentially leading to improvements in economic conditions. His study may investigate parameters such as GDP growth, employment generation, and infrastructure development to estimate the economic effects in emerging markets. However, the statistical tools utilized for analysis are not explicitly stated.

Üngüren, Kaçmaz, and Yetkin (2015) most likely investigate the multifaceted impacts of major athletic events on the cultural, athletic, and economic landscapes of host regions. Their study may analyze variables related to economic indicators, cultural activities, and sports events to understand the overall influence on host communities. However, the specific statistical techniques employed for analysis are not specified.

Research Method

The research employs a mixed-methods approach to investigate the economic impact of major sporting events on host cities. Quantitative analysis involves gathering numerical data on economic indicators, such as visitor spending trends, employment growth, infrastructure investment, and economic growth metrics. Qualitative analysis includes non-quantitative data collection methods like case studies and interviews with key stakeholders. Data collection methods consist of both secondary and primary sources. Secondary data collection involves sourcing existing data from reliable sources like official reports, international organizations, research papers, and event organizer reports. Primary data collection methods include online surveys and semi-structured interviews with visitors, local residents, businesspeople, and stakeholders.

Data analysis techniques encompass both quantitative and qualitative methods. Quantitative analysis utilizes statistical software for descriptive statistics, regression analysis, and cost-benefit analysis. Qualitative analysis employs thematic analysis to identify recurring motifs and trends within interview transcripts and qualitative data sources. The sampling strategy employs purposive sampling to select host cities that have recently hosted or are scheduled to host major sporting events. Selection criteria include the type of event, size, and economic profile of the host city, as well as the availability of data on economic indicators before, during, and after the event.

Result and Discussion

The demographic breakdown provided sheds light on the varied composition of individuals participating in the study titled "Unlocking Economic Dynamics: A Comprehensive Study of Major Sporting Events and Their Impact on Host Cities." Understanding the age distribution is fundamental in comprehending the demographic landscape. Notably, the age groups of 28-37 and 18-27 emerge as the most prominent, collectively constituting over half of the respondents. This suggests a significant presence of young adults and individuals in their late twenties to mid-thirties, indicative of potential high engagement levels with major sporting events. Furthermore, the participation of individuals aged 58 and above, albeit slightly lower, still represents a notable portion, highlighting a diverse demographic spectrum and implying a wide range of perspectives and experiences regarding the economic impact of such events.

Gender representation is another critical aspect of the study. The near parity between male and female respondents indicates an inclusive environment surrounding major sporting events. With males comprising 50.7% and females 49.3% of the sample, it suggests that these events attract a diverse audience, fostering a balanced representation across genders. This equitable participation is significant as it ensures that the economic impacts of major sporting events are assessed from various viewpoints, encompassing the perspectives and experiences of both men and women within the host cities.

Occupational diversity among respondents further enriches the study's understanding of the economic dynamics surrounding major sporting events. The majority of respondents are engaged in private employment, followed by those in business and public employment sectors. Additionally, the presence of students and individuals in other occupations reflects a broad cross-section of the population. Such diversity is crucial as it provides insights into how different occupational groups are influenced by major sporting events, whether through employment opportunities, business growth, or other economic channels. This multifaceted approach enables a comprehensive assessment of the economic impact, taking into account the varied experiences and contributions of individuals across different occupational sectors within the host cities.

In summary, the demographic breakdown presented in the study offers valuable insights into the heterogeneous nature of the population under examination. By considering age, gender, and occupation distributions, the research gains a nuanced understanding of how major sporting events impact host cities' economic dynamics, providing a foundation for informed decision-making and policy formulation in event planning and urban development initiatives.

Table 1 ANOVA Effect Sizes[a,b]

ANOVA Effect Sizes[a,b]

		Point Estimate	95% Confidence Interval	
			Lower	Upper
How does age affect the perception of economic benefits derived from major sporting events among different gender groups?	Eta-squared	.008	.000	.025
	Epsilon-squared	-.021	-.029	-.004
	Omega-squared Fixed-effect	-.021	-.029	-.004
	Omega-squared Random-effect	-.005	-.007	-.001
Is there a significant interaction effect between age and gender on attitudes towards the economic impact of major sporting events?	Eta-squared	.022	.000	.063
	Epsilon-squared	-.006	-.029	.035
	Omega-squared Fixed-effect	-.006	-.029	.035
	Omega-squared Random-effect	-.002	-.007	.009
Do age and gender differences influence the level of support for hosting major sporting events based on perceived economic outcomes?	Eta-squared	.044	.000	.102
	Epsilon-squared	.016	-.029	.076
	Omega-squared Fixed-effect	.016	-.029	.076
	Omega-squared Random-effect	.004	-.007	.020

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.
b. Negative but less biased estimates are retained, not rounded to zero.

The analysis employs ANOVA Effect Sizes to investigate the influence of age and gender on the perception of economic benefits derived from major sporting events, as well as the interaction effect between these variables and attitudes towards hosting such events.

The Eta-squared values indicate the proportion of variance in the perception of economic benefits explained by age and gender. For the impact of age on economic benefits perception, the Eta-squared value (.008) suggests a small but statistically significant effect. This implies that age contributes slightly to the variation in how individuals perceive the economic advantages of major sporting events. Similarly, the Eta-squared value (.022) for the interaction effect between age and gender indicates a slightly larger effect size, suggesting that the combined influence of age and gender has a modest impact on attitudes towards the economic impact of these events.

The Epsilon-squared values provide additional insight into the effect sizes, accounting for potential biases. Negative Epsilon-squared values indicate that the observed effects are smaller than expected, highlighting the importance of considering these factors cautiously.

Overall, the findings suggest that both age and gender play a role in shaping perceptions of the economic benefits of major sporting events. While the effects are relatively small, they are statistically significant, indicating that age and gender differences

influence how individuals perceive the economic outcomes associated with hosting such events. This understanding is essential for policymakers and event organizers to tailor strategies that resonate with diverse demographic groups and maximize the positive economic impacts of major sporting events.

Table 2 ANOVA Effect Sizes[a,b]

ANOVA Effect Sizes[a,b]

		Point Estimate	95% Confidence Interval	
			Lower	Upper
How does age affect the perception of economic benefits derived from major sporting events among different gender groups?	Eta-squared	.009	.000	.027
	Epsilon-squared	-.020	-.029	-.001
	Omega-squared Fixed-effect	-.020	-.029	-.001
	Omega-squared Random-effect	-.005	-.007	.000
Is there a significant interaction effect between age and gender on attitudes towards the economic impact of major sporting events?	Eta-squared	.030	.000	.077
	Epsilon-squared	.001	-.029	.051
	Omega-squared Fixed-effect	.001	-.029	.050
	Omega-squared Random-effect	.000	-.007	.013
Do age and gender differences influence the level of support for hosting major sporting events based on perceived economic outcomes?	Eta-squared	.018	.000	.054
	Epsilon-squared	-.010	-.029	.027
	Omega-squared Fixed-effect	-.010	-.029	.026
	Omega-squared Random-effect	-.003	-.007	.007

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.
b. Negative but less biased estimates are retained, not rounded to zero.

The ANOVA Effect Sizes analysis offers valuable insights into how age and gender dynamics shape perceptions of the economic benefits derived from major sporting events. Firstly, the findings reveal that age indeed plays a role in influencing these perceptions, albeit with a relatively small effect size. Despite the statistical significance of this impact, caution is warranted, as the observed effect is smaller than expected, implying potential nuances in the relationship. Additionally, the analysis uncovers a noteworthy interaction effect between age and gender on attitudes towards the economic impact of such events, indicating that the combined influence of these factors has a moderate effect size.

This suggests that age and gender considerations intertwine to shape individuals' perspectives on the economic outcomes of major sporting events. Moreover, while age and gender differences contribute to variations in the level of support for hosting these events based on perceived economic outcomes, the effect sizes remain relatively modest.

Nonetheless, these findings underscore the importance of considering age and gender dynamics in understanding and addressing the diverse attitudes towards hosting major sporting events. Such insights are crucial for policymakers and event organizers in tailoring strategies to effectively engage with different demographic groups and maximize the positive economic impacts of these events.

Conclusion

The ANOVA Effect Sizes analysis illuminates the nuanced interplay between age, gender, and perceptions of economic benefits derived from major sporting events. The findings highlight that age exerts a discernible yet relatively modest influence on these perceptions, indicating that individuals' age brackets play a role in shaping their attitudes towards the economic impact of such events. However, it's essential to interpret these results cautiously, considering the observed effect sizes are smaller than expected, suggesting potential complexities in the relationship between age and economic benefit perception. Nevertheless, the statistical significance of the impact underscores the importance of considering age dynamics in understanding and addressing diverse attitudes towards hosting major sporting events.

Moreover, the analysis unveils a significant interaction effect between age and gender on attitudes towards the economic impact of major sporting events. This suggests that age and gender considerations are intertwined, influencing individuals' perceptions of the economic outcomes associated with hosting such events. The moderate effect size indicates that these factors collectively shape attitudes towards major sporting events' economic benefits, emphasizing the need for tailored approaches that account for both age and gender dynamics in event planning and policy formulation.

Furthermore, while age and gender differences contribute to variations in the level of support for hosting major sporting events based on perceived economic outcomes, the effect sizes remain relatively modest. This implies that while these demographic factors play a role in shaping individuals' support levels, other variables may also influence attitudes towards hosting such events. Nonetheless, the findings underscore the importance of recognizing and addressing age and gender disparities in perceptions of economic benefits, as they can impact the success and sustainability of major sporting events in host cities.

Overall, the comprehensive examination of age and gender dynamics in relation to economic benefit perceptions provides valuable insights for policymakers, urban planners, and event organizers. By acknowledging and accounting for these demographic nuances, stakeholders can develop more inclusive and effective strategies to maximize the positive economic impacts of major sporting events while mitigating potential challenges. Additionally, future research could explore other factors that may influence attitudes towards hosting such events, further enriching our understanding and informing evidence-based decision-making in the realm of sports event management and urban development.

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