

ORIGINAL ARTICLE

Mega sporting events and their socio-economic impact: Case study of the 2022 FIFA World Cup

Eirini Eleni Nikolaou, George Konteos, Stavros Kalogiannidis*, Dimitrios Syndoukas

Department of Business Administration, University of Western Macedonia, 50100 Kozani, Greece

ABSTRACT

Using as a case study the 2022 FIFA World Cup, the present research studied the social-economic consequences of major sport events management. The present study examined many researches that had to do with the concept of infrastructure growth as a result of major sport events, as well as offered statistics on evidence of infrastructure development as a consequence of major sport events. The data that were used for the research were collected via online survey questionnaires, and they were analyzed using descriptive statistics and multiple regression analysis. Event infrastructures employed in major sport events have a favorable social-economic impact. That comes as a result of the good impact that the audience at major sporting has on the social-economic development in general, and also the beneficial impact that the degree of organization at major sport events has on the social-economic welfare. The 2022 World Cup has been shown to have a significant influence on the country's infrastructural development. As a result, it was established that major sport events are critical for a country's infrastructure development. It is suggested that the present research is used on the future as a source in the investigation of infrastructure changes caused by major sporting events.

KEYWORDS

2022 FIFA World Cup; major sport events; audience of world cup; infrastructural developments; social-economic impact

1. Introduction

The most prominent football competition in the world is the FIFA (Federation of International Football Association) World Cup, which was first held in 1930. Following its victory in the voting procedure, Qatar was named the host nation for the 2022 FIFA World Cup in 2010. The world cup in particular has shown to be a significant event throughout time. Due to this, the majority of nations have worked to improve their economic state, making an effort to attract more international athletic events (Rusmane and Kudinska, 2021). The United States, one of the nations that submitted a proposal to host the 2022 FIFA World Cup, was reportedly seen to recruit top sports teams by constructing stronger sports infrastructure facilities. Countries that are viewed as making

ARTICLE INFO

Received: 25 May 2023

Accepted: 11 July 2023

Available online: 18 August 2023

*CORRESPONDING AUTHOR

Stavros Kalogiannidis, Department of Business Administration, University of Western Macedonia, 50100 Kozani, Greece;
stavroskalogiannidis@gmail.com

CITATION

Nikolaou EE, Konteos G, Kalogiannidis S, Syndoukas D (2023). Mega sporting events and their socio-economic impact: Case study of the 2022 FIFA World Cup. *Journal of Infrastructure, Policy and Development* 7(2): 2158. doi: 10.24294/jipd.v7i2.2158

COPYRIGHT

Copyright © 2023 by author(s). *Journal of Infrastructure, Policy and Development* is published by EnPress Publisher LLC.

This work is licensed under the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0). <https://creativecommons.org/licenses/by-nc/4.0>

improvements to host major sport events include those in Europe. By emphasizing their urban redevelopment in their main cities, countries like Croatia were considered capable of participating heavily in hosting the UEFA Champions League, a big sporting event. As industrialized nations have increasingly hosted the FIFA World Cup, the need for national equality has increased (Chutiphongdech and Kampitak, 2022).

Being the most-watched sporting event on the planet, this international competition is expected to attract more than 2 billion viewers around the world, with a massive economic impact of US\$31 billion dollars in 2022 alone (FIFA, 2022). The World Cup is an iconic sporting event that has been held every four years since 1930. In order to host this major competition, countries have to undergo a rigorous process of preparations including technical infrastructure and hosting training camps for the international visitors on their national soil. Taks (2020) studied the economic scope of major sport events with reference to their social impact and the result of this research would be a comprehensive analysis of what it would cost governments and how much income they could expect to generate through this investment. Ramasamy et al. (2022) looked at the social and economic impact of this major sporting event held every four years, coming to the conclusion that its success rely heavily on how well it meets local demands, such as creating a better quality of life for residents across host cities and nations (Silva, 2022).

Luerdi (2022) indicated that from the outset, the choice of Qatar as the host country for the 2022 FIFA World Cup has been under scrutiny for its potential social, political, and economic impacts that range from displacement to restrictive labor laws. The decision to use Doha as a location for 2022 FIFA World Cup has sparked debates across the globe with opposition revealing deep-seated pros and cons in all 3 spheres. The FIFA World Cup is a prestigious event that attracts many visitors, media coverage and investments. It has become a reference for the level of football games in the international stage (Taks, 2020). In large cities, new airports as well as new several public transportation systems have been built. In addition, public spaces were transformed completely, and the areas surrounding the world cup stadiums were turned into a fan zone for the locals. After emerging from the oppressive apartheid era, South Africa's infrastructure witnessed significant development, an incident which follows that Qatar should be able to make considerable infrastructural improvements as well (Wikarya et al., 2022). Better monitoring facilities are also required in Qatar due to the FIFA World Cup's demand on the nation to beef up security, taking into consideration that Qatar had a lengthy period with no well-known international football events. In addition to that in Qatar there aren't many stadiums that meet FIFA's high standards due to football's inefficiency. Despite being the most popular sport in the nation, football is played without adequate athletic facilities. There is a need to create better facilities in order to make up for the shortcomings of hard weather during major sport events since the country's terrible heat conditions cannot be ignored (Chankuna, 2022). However, Qatar benefits from producing oil and having a big GDP capacity, something that means that Qatar could be able to redesign its infrastructure easily. Therefore, the research investigated the social-economic impact of major sport events management using as a case study the 2022 FIFA World Cup which was held in Qatar.

1.1. Objectives of the study

This study majorly investigated the social-economic impact of major sport events management using the 2022 FIFA World Cup as a case study. The study was also based on the following specific

objectives.

To assess the social-economic influence of event infrastructures used in major sport events.

To find out how the audience of major sport events affects the social-economic development of a region.

To establish a high level of organization when it comes to major sport events and social-economic wellbeing.

1.2. Research questions

What is the influence of event infrastructures in major sport events on social-economic influence of the host country?

What is the influence of the audience of major sport events on social-economic development of the host country?

What is the level of organization of major sport events and social-economic wellbeing of the host country?

1.3. Research hypotheses

Hypothesis one (H1): There is a positive social-economic influence of event infrastructures used in major sport events.

Hypothesis two (H2): The audience in major sport events has a positive influence on social-economic development of the host country.

Hypothesis three (H3): The level of organization of major sport events has a positive effect on social-economic wellbeing of the host country.

1.4. Significance of the study

Studies that are focused on the impact the major sport events are making on infrastructure are becoming more and more prevalent. As a result, this study extends previous researches by including the 2022 World Cup as a new variable. The importance of the present paper lies also on the fact that countries that are going to host the FIFA World Cup Tournament in the future can use the information provided by the present research as a source in order to continue studying this field. Research that has already been done hasn't been able to show how important major athletic events are to infrastructure. As a result, this study will be able to pinpoint Qatar as a novel case study and its relevance.

2. Literature

2.1. Theoretical review

According to a theory of infrastructure development examined by Khalifa (2020), effective infrastructure development combined with the reduction of pointless expenditures would lead to national economic expansion. It was discovered via this study that the modifications made in infrastructure development have relevance. A research on the expenses of infrastructure, the returns

on infrastructure modifications, and the long-term advantages for urban growth patterns was conducted by Lin and Lu (2018). Chutipongdech and Kampitak (2022) conducted a theoretical study and they based their results on the literature that was available by the time. In their research, they used the 2010 FIFA World Cup in South Africa as well as those held in the US, Korea, and Japan as a case study. In poorer countries, the benefits are considerably less generous. Sports infrastructure and non-sports infrastructure, such tourist and transportation infrastructure, are not clearly distinguished from one another. According to Dimitrovski et al. (2021), the money made from major sporting events would not be worth it because of the massive costs associated with infrastructure building.

Ramasamy et al. (2022) made research on the stadiums' and transportation systems' infrastructure in Beijing Olympic Games. According to Gulak-Lipka and Jagielski (2020), major athletic events are taken into account when a city's infrastructure is being changed. Jensen (2021) claims that in order to provide the foreign residents a positive impression of the city during the Olympics, transportation, housing, and stadiums' conditions are crucial. In order to convey athletes and visitors to the Olympic sites, the transportation system also has to be improved for dependability and efficiency. However, in their research, Wikarya et al. (2022) came to the conclusion that the economic effect of big athletic events depends on the type of the event, the time of year that it's being held, the nation's taking part in it, and the host nation's degree of infrastructure development. Huge sports events such as the World Cup should be hosted only by countries that have somewhat established economies, because in reality the results coming from the infrastructure-related national income models can differentiate.

Hosting major sports events facilitates short-term economic growth advantages as a consequence of investment in related facilities and infrastructure. According to Preuss (2004), these large athletic events' organizing committees generally announce host nations 6–7 years in advance. Once the host country's name is released, the newly selected host country will begin preparing for the event by building sporting facilities and infrastructure throughout the country's cities that will host the event. Construction and material firms gain significant money during this preparatory phase through projects developed in preparation for the event. According to Blake (2005), 61.5% of the entire cost of organizing the 1992 Barcelona Summer Olympics was spent on new construction and development of roads, hotels, sporting facilities, and so on. Investment in construction businesses in major sports events began to surge three years before the 1996 Atlanta Summer Olympics. A similar pattern was found at the Summer Olympics in Sydney in 2000. From 2002 to 2008, Li and Blake (2009) analyzed Olympic-related investment in the 2008 Beijing Summer Olympics and discovered that 46% of total investment spending was linked to the building of sports facilities and transportation infrastructure. According to research by Brunet (1995) that looked at the projected effect of the 2012 London Summer Olympics, the Olympics brought GBP 500 million to the construction industry. In a more thorough analysis, Brunet (1995) used panel data from 188 nations from 1950 to 2009 to analyze the macroeconomic consequences of Olympic bids. They concluded that economies responded to news shocks by increasing investment, consumption, and production nine to seven years before the actual occurrence in bidding nations. Furthermore, according to Preuss (2004), five to two years before the games, host countries enjoyed considerable increases in investment, consumption, and output. In regard to this study, the infrastructure development theory offers theoretical guidance in how major sports events contribute to the infrastructural development

of host countries which in the long-run leads to social-economic development (Kalfas et al., 2023).

2.2. Effective major sports events' management

Athletic events management is the process of organizing and staging large, often broadcasted globally, sporting events. It includes a wide range of tasks which can incorporate among others: venue sourcing, venue negotiations, sponsorship acquisition and administration, ticketing and distribution, television production logistics management and coordination (Chanaron, 2014; Nordin, 2008). Events management personnel typically have experience in marketing or broadcasting and they can also understand the way that different types of events work. There are a lot of jobs involved in running an athletic event, and those jobs usually fall under the purview of different people or teams (Bohlmann and Van Heerden, 2005; Li and Jago, 2013). Sometimes, it's just one person doing everything on their own, but most often there will be a large team with many players (Crespo Sogas et al., 2021; Jack and Suri, 2011). The way a well-managed event takes care dividing up responsibilities can make all the difference when it comes to success or disaster. There are so many facets to an event such as a marathon, from the location to the logistics, not to mention the immense number of participants and spectators. With little time for preparation, it can be overwhelming for even experienced event organizers (Azzali, 2019; Irshad, 2011).

Jensen (2021) revealed that organizing and managing large-scale events is a unique skill that not every event planner has. One of the primary reasons these events are so successful is the deep knowledge and experience of those who plan them, which can only be achieved through practice and training. The first step for every successful event is planning everything ahead (Crespo Sogas et al., 2021; Dimitrovski et al., 2021). Numerous major sport events may provide financial gains that greatly outweigh their expenditures. In order to create or expand its sport and hospitality infrastructure, host towns often need to spend heavily in order to prepare for major athletic events (Lin and Lu, 2018; Silva, 2022). A city's intended natural expansion may coincide with certain investments; but the expenses associated with such expenditures may be much greater for taxpayers, taking into consideration that most cities that bid to host mega-events already have substantial infrastructure in place to make the event possible. It seems sense that host cities wouldn't take on many brand-new, significant projects (Chatzitheodoridis and Kontogeorgos, 2020; Department of Culture Media & Sport [DCMS], 2015; Matheson and Baade, 2004; Perić and Vitezić, 2019). Even so, careful planning is necessary to avoid funding infrastructure initiatives that won't add much value, won't be accessible to local communities, and won't offer taxpayers long-term economic benefits (Barajas et al., 2016; Kalogiannidis, Kontsas, et al., 2022a; Lin and Lu, 2018).

The Olympic host cities have made significant investments in projects related to the improvement of the condition of transportation, roads, neighborhoods, parks, waterfronts, and airports over the past 30 years in addition to building or renovating sports facilities. By reducing traffic congestion and making great investments in ring roads, cities that hosted sports events became much more livable and accessible. Cities that are going to host the Olympic Games, due to having to accommodate tens of thousands of competitors as well as staff members from all around the world, they have to build an Olympic Village in the most convenient location possible in order for them to stay. The goals of appointed host cities typically include transportation enhancements, investments in underprivileged areas, and city beautification (Giraud, 2014; Mair et al., 2021; Malfas et al., 2004). The buildup of Olympic Parks, as well as the revitalization of underprivileged neighborhoods

and post-industrial areas have a significant impact on the host cities while helping them to define the city's contemporary image. The Olympics have many positive effects, including increasing international investment and tourism to the majority of host cities (Baker, 2019; Chankuna, 2022; Maennig, 2017).

A variety of economic impact assessment approaches have been created and put to use in order to justify the public subsidies for staging the events and to confirm the good social effects for the hosting location (Matheson and Baade, 2004; Theodoraki, 2016). The assessments, however, are often limited to straightforward economic impact studies that examine how much money event attendees spend locally while ignoring movements of public and private funds, particularly during the event's planning stages 2016. In addition, the majority of economic impact assessments now in use ignore indirect and intangible social costs and benefits that are hard to measure, such as effects on area reputation, public health, or environment (Khalifa, 2020; Li and Jago, 2013).

2.3. World championships

The German Commerzbank studied the probable economic effects of nine football world championships up to 1974. Foreign investments in the construction sector fell by 1% in the host nations the year before the competition, grew by 0.4% during the competition, and rose by 1.5% the following year. Since the bulk of the preparatory work had been started at that time, they had anticipated that the investments would rise before the championship. The anticipated pattern is better supported by data that indicate GDP growth per person: in the host nations, GDP per capita climbed on average by 2.1% the year before the championship, 0.9% during the tournament, and 1.7% the following year (Bohlmann and Van Heerden, 2005). However, the macroeconomic facts of the nations who took home these titles varied somewhat. The average rise in GDP per capita was lower (0.9%) prior to the championship. It was 1.6% in the year of the world cup and 1.8% the following year (Etiosa, 2012). However, we shouldn't disregard the fact that 4 of the 9 world championships were held during economic downturns, which had a significant impact on the macroeconomic statistics cited above. The structural or economic impact of these competitions or the Olympics is said to be less the more robust the economy is, according to economists, since the proportion of investments made in connection with sporting events to the nation's GDP is relatively low (Young, 2022).

An 800-million-euro stadium investment and a 330-million-euro airport investment were realized in 2004 when Portugal hosted the European Football Championship. According to calculations made by a Portuguese commercial bank, the GDP expanded by 0.2% between 2000 and 2003 and by 0.25% in 2004 (Bohlmann and Van Heerden, 2005). Together, Austria and Switzerland served as the hosts of the 2008 European Football Championship. Since Austria and Switzerland are among the best-prepared countries in Europe when it comes to accommodation, expenditures were virtually solely made in sports infrastructure. The 4–5 star hotels were able to accommodate the increased demand since the fundamental infrastructure is well-developed (Bas et al., 2020; Papanikos, 2015). Austria's GDP rose by 0.15% as a result of the investments in sports infrastructure. Switzerland's equivalent date was 0.2%. Switzerland invested 1.3 million Swiss francs in different infrastructure projects, with stadium renovations accounting for slightly more than one third of the total. 50 billion HUF (190 million EUR) were spent in stadiums in Austria. All of them resulted in an increase of 321 million EUR in Austria's revenue, whereas 527 million EUR went to Switzerland (Barajas et al., 2016).

Due to their hosting of the European Football Championship, Poland and the Ukraine witnessed a surge in investments in 2012 (Li and Jago, 2013). The number of investments significantly grew by 9% in Ukraine and 8.5% in Poland thanks to investments totaling 30.2 billion EUR in infrastructure and sports facilities. In addition to that the effects of the economic crisis also lessened at the same period. The fact that one million visitors visited the countries in order to attend the events and stayed on an average of three nights at least, brought in 800 million EUR for both countries. Forecasts indicate that EURO 2012 will boost Poland's GDP by 2% between 2008 and 2020 (Khalifa, 2020).

2.4. 2022 FIFA World Cup

The Qatar Football Association (QFA) and Qatar National Olympic Committee (NOC) jointly confirmed that the 2022 FIFA World Cup will be hosted in Qatar. This decision was based on their full commitment to comply with strict requirements set by FIFA (FIFA, 2022). However, with hosting a mega football event like the one described already, come also four new challenges, that should not be underestimated. The awarding of 2022 World Cup has led an increased interest in professional football leagues around the world among fans and media alike, as well as a boost in popularity of international games between national teams of different countries held annually from September till December. 2022 FIFA World Cup is a major sports event that is going to create vast social and financial impact. With the new location of Qatar, this blog post aims to provide insights on the event by discussing its impacts and the potential challenges it presents (Wikarya et al., 2022). In November 2010, FIFA announced that Qatar will host the World Cup Tournament in 2022, a decision that was met with mixed reactions from governments, fans, players and from countries with strong ties to football such as England. Despite these reactions there are significant advantages for hosting country Qatar—namely investment opportunities for infrastructure as well as potential for urban development based upon increased tourism activities that will take place during this time period (FIFA, 2022).

The successful hosting of the 2022 FIFA World Cup in Qatar is going to be the result of the right collaboration between local and international organizations, as well as with governmental bodies. The country has been successfully securing foreign investments in infrastructure and other projects with a high social and economic impact since 2004. With an expected profit of US\$200 billion for Qatar, the event can be considered profitable for both incoming visitors and residents of Qatar. This past summer, it was announced that the 2022 FIFA World Cup would be organized by Qatar, taking place between 21 November and 18 December in Doha—this decision was made on 12 December 2010, during a voting process that was held among FIFA members at Zurich's Hallenstadion building (Chankuna, 2022).

2.5. Social-economic impact

The country has more clout thanks to the last three FWCs (FIFA World Cups) that South Africa, Brazil, and Russia hosted. In 2010, South Africa successfully hosted the 19th FIFA World Cup, making it the nation's most lucrative FIFA event to date (Maennig, 2017). The World Cup brought in around ZAR 29 billion for FIFA, which is an increase of 2% from the 2006 FIFA World Cup that was hosted in Germany. The bulk of the money made from the tournament went to FIFA, although South Africa also received a sizeable amount. More than ZAR 10 billion was made directly by the sports business via ticket sales, broadcast rights, sponsorship deals, and marketing (United Nations Alliance of Civilizations [UNAOC], 2021). The aforementioned number does not include revenue

from non-sports activities like foreign tourists or any television commercials or other media linked to the event. During the significant event, foreign tourists that traveled to South Africa because it spent almost ZAR 11 billion. The provinces who hosted it benefited from the infrastructural projects that were sparked by the 2010 event. The authorities also preferred to put foreign tourists and spectators in handy areas that had less crimes (Müller et al., 2016; Papanikos, 2015). As a consequence, the towns that sponsored the event profited as well. Therefore, despite the fact that all South African taxpayers paid for the cost of hosting 2010 FIFA World Cup, areas that were not linked directly to the event itself, were left out from the infrastructure improvements. However, holding the world cup was economically beneficial for the whole nation (Bas et al., 2020; EY, 2021).

Major sport events such as the Olympics and Paralympics, World Cup, and Commonwealth Games can be a catalyst for economic development in the host nation. The country has the opportunity to increase investment into facilities and infrastructure in order to attract future sporting events (Chankuna, 2022). The benefits of hosting major sport events for a country's economy are typically associated with increased expenditure and tourism during event periods but there are possible costs that should also be assessed. There are many reasons for which people enjoy attending sporting events and other social events. However, there is one key component to these major sport events that most forget about: the economic impact it has on the host city. While venues such as stadiums, arenas, or sports bars are built with the intention of hosting a single event at any given time, they still require upkeep throughout years to come (Barajas et al., 2016).

It is important to recognize the contribution of major sport events when it comes to sustainable development. It is a sector with unmatched global influence and strength. 3% of all economic activity worldwide is tied to sports globally. For instance, in the United Kingdom, the sports sector's revenue is comparable to that of the food and car sectors. Global audiences watch major events like the Formula One Grand Prix and the World Cup of soccer. The International Olympic Commission alone makes close to US\$2 billion from sponsorships and television rights due to the enormous popularity of cricket in South Asia. The business activities of this global sector may and do have a significant influence on society and the environment (Etiosa, 2012; Ramasamy et al., 2022).

Preuss (2006) investigated the effects of eight big sports events on inbound tourism and found out that four big sports events had a substantial influence on visitor arrivals from participating nations. Amponsah et al. (2018) demonstrated the enormous economic impact athletic events have on businesses other than sports, such as transportation, lodging, and manufacturing, as well as on indirect taxes, which are a key source of revenue for many nations. OECD (2017) (The Organization for Economic Co-operation and Development) addressed the effect of mega-events on touristic development and showed that mega events have a positive impact on social, political, and environmental well-being in the community and that they also play an important part in improving tourism. Economic Impact Analysis (EIA) and Cost-Benefit Analysis (CBA) were the two techniques used by Taylor et al. (2015) to assess the effects of events. According to the results, it was crucial to employ a reliable approach to calculate the economic effect of events, and going forward, a way to close the method gap has to be identified.

2.6. Infrastructural development from major sports events

Jack and Suri (2011) revealed that the development of the infrastructure is significantly impacted by the planning of hosting major athletic events. Jack and Suri (2011) emphasized the social effects of hosting major athletic events and the need for big events to spur economic growth beyond just tourism, job creation, and infrastructure improvement. Jack and Suri (2011) found that most nations hold major sporting events not for the infrastructure advantages involved, but rather for the political successes they bring. According to the research by Hover et al. (2016), governments will ignore the greater costs of infrastructure projects, due to the benefits in their political careers and the subsequent increase in foreign cash for the nation. This research points out both the advantages and disadvantages of major athletic events, paying however more attention on the advantageous effects, such as the US\$24.8 billion benefit to Japan from the 2002 World Cup (Hover et al., 2016).

Perić and Vitezić (2019) noted that the advantages of hosting a FIFA World Cup, like as the World Cup in Russia, are said to be enhanced by the political advantages. Perić and Vitezić (2019) claim that the 2018 FIFA World Cup in Russia was the costliest World Cup ever, despite the fact that the government still decided to hold it. The government provided a funding for the majority of the infrastructure enhancements, including advancements in stadiums and transportation. However, the contractors from whom they were able to win these bids were firms under Vladimir Putin's influence. According to the analysis, the World Cup's visitor inflow was similar to the previous ones. The country's transportation revenue slightly increased only by 3%. Due to the high maintenance costs that will follow though, the economy may not be able to sustain the changes to the infrastructure. A study by Gulak-Lipka and Jagielski (2020) with 155 participants sought to determine the economic impacts of major sporting events on nearby communities. They gathered information through the use of questionnaires and developed participant opinions on the benefits and drawbacks of the major sporting events (MSE). Gulak-Lipka and Jagielski (2020) concluded that MSEs benefit host cities by bringing in more tourists, advancing infrastructure, and enhancing the country's reputation.

OECD (2017) advised that anyone organizing big athletics events must think about whether doing so would be a benefit or a burden. This is due to the fact that after analyzing the literature evaluations, they discovered countries like the US, where the 1994 World Cup host cities suffered losses ranging from US\$5.5 billion to US\$9.3 billion. Contrary to estimates of US\$4 billion in benefits and the building of infrastructure prior to the World Cup.

2.7. Spectators/audience in the major sport events

Taylor et al. (2015) looked at participants' expectations for the event and the satisfaction levels when it comes to the South Pacific Masters Games 2000 in one of the earlier investigations. Taylor et al. (2015) identified two distinct participant groups based on the expectations and motivations of the participants: while one group was highly motivated by competitive aspects, the other segment saw social interaction and companionship as the primary drivers of participation as well as a framework for physical challenge and self-expression. Nana et al. (2002) established a paradigm, categorizing competitors in big sports competitions, in parts based on these data. Three types of participants are highlighted by the authors: serious competitors, game aficionados, and novices/dabblers. While serious competitors are primarily driven by competition, game lovers are also significantly driven by the social components of the games in addition to being very interested in

their sport (Etiosa, 2012; Irshad, 2011; Papaevangelou et al., 2023).

Additionally, Gillett and Kelly (2006) examined the reasons why competitors from outside Australia travelled to the country in order to compete in the Australian National Masters Games in 2005. The authors discovered via semi-structured interviews that attending master sports activities were often motivated by the competition or by social and identity-related factors. Additionally, Gillett and Kelly (2006) found that among the traveling participants, factors like the competition itself, goal achievement, and athletic identity dominated motives, whereas the category of local participants was more likely to include a larger number of participants primarily interested in fun and experiences.

Many towns and regions now consider spectators and participants in sporting events to be essential to their tourist strategy, and as a result, they are prepared to spend a significant amount of tax dollars to bid for and host these major sport events (Bohlmann and Van Heerden, 2005; Walo et al., 1996). Even if sporting events have the ability to generate “new money” flows that boost economic activity in the local areas, the overall advantages are far from clear-cut (Amponsah et al., 2018; Barajas et al., 2016; Chanaron, 2014). For instance, the subsidies needed to support the event’s bid and staging sometimes involve cutbacks to public expenditure in other sectors or tax hikes that might reduce economic activity elsewhere (Hover et al., 2016; Wikarya et al., 2022). Therefore, hosting cities and event organizing committees perform economic impact analyses in order to gauge the event’s economic return to the local community so that they can justify the significant public expenditure made in sporting events (Hover et al., 2016). But the economic effect studies often include unsupported assumptions, which produces outcomes that are incorrect or even dubious (Kalogiannidis, Loizou, et al., 2022; Nana et al., 2002).

Since they tend to draw more wealthy participants who often travel with their families and friends, major sport events may have comparatively significant economic consequences for the hosting cities compared to lesser events, according to some experts (Almeida, 2019; Li and Jago, 2013; Müller et al., 2016). Few published academic studies have particularly looked at the economic effects of major sport events, even though elder players traveling with children observably tend to spend more at sport related touristic events (Coalter and Taylor, 2009; Lintumäki et al., 2020; Walo et al., 1996). In one of the few studies on the financial effects of masters sports competitions, Jensen (2021) examined distinguished between in-region and out-of-region attendees of a sports event and came to the conclusion that the event had a beneficial economic impact on the area. Jensen (2021) advised choosing sports that attract the greatest number of players from outside the area in order to optimize the economic output.

2.8. Research gap

The section reviewed studies on the numerous impacts of major sport events. It also notes the variations in infrastructure alterations that occur in various host nations. Additionally, the research illustrates the importance of the infrastructure impacts both before and after the major sport events. Matheson’s (2012) research does not distinguish between the many infrastructure advancements impacted by major sports events. According to this research, the negative effects of major sport events on the infrastructure of the host city exceed their benefits. This concurs with the study done in 2011 by Walo et al. (1996), on the staging of major sport events in Serbia and Croatia. Even with significant infrastructural expenses, the research by Silva (2022) and Irshad (2011) demonstrated

the benefits of infrastructure development. This study presents a case study of the 2022 FIFA World Cup held in Qatar and it will analyze how the event impacts social-economic factors in this region. It will study factors such as how many new job positions were created because of the event, what type of infrastructure is required for constructing stadiums for this event, how much revenue does it generate for government bodies and organizations, and what general socio-economic impact is brought by these major sport events (Kalfas et al., 2023; Kalogiannidis, Savvidou, et al., 2022; Papadopoulou et al., 2021).

3. Methodology

3.1. Research design

The study utilized the cross-sectional survey design which was based on quantitative research approach. The cross-sectional survey design was very essential in deeply investigating the social economic impact of major sports events on the host country with major focus on the 2022 FIFA World Cup. The design chosen recognized the improvements in Qatar's infrastructure brought on by the news that the country will host the FWC in 2022. The quantitative approach was adopted since it was simpler to make judgements for comparable future scenarios when using numerical data. The 2022 FWC was used in the research to utilize the case study approach. With the cross-sectional survey design, the researcher was able to do the study using a range of sources and to expand on what was already known about the topic. The research gave a comprehensive knowledge of the relevance of the 2022 FIFA World Cup on its host nation, Qatar, using the cross-sectional survey design.

3.2. Sample size

The researcher adopted a basic formula to compute the sample sizes provided by Yamane (1967). The researcher used 95% confidence level and $P = 0.5$ which was assumed for maximum variability. Yamane (1967) formula can be expressed as seen in Equation (1) below:

$$n = \frac{N}{1+N(e^2)} \quad (1)$$

where,

n is the sample size

N is the total number of target participants

e is the degree of precision (10%) which corresponds with 90% confidence level.

$$n = \frac{175.494}{1+175.494(0.12)} = 133.9987 \approx 133$$

3.3. Sampling techniques

The simple random method of sampling was used due to the fact that it gives every respondent in the population an equal chance of being selected and also avoids bias.

3.4. Data collection

Data for this study gathered for the research using online survey-questionnaires. In particular during this COVID-19 outbreak and the necessity for social-distancing, this technology was used

since it is simple to apply and may reach a greater geographic region. It takes less time since it may be sent to participants very quickly. Due to its secrecy and anonymity, the strategy also aided in obtaining thorough and in-depth comments from the participants. The ambiguity and conformability of the questions were first tested in a pilot study. The study questionnaire didn't need to be altered since the results turned out to be dependable and unproblematic. Participants were selected from a diverse group of demographics as a sample. Construction workers, skilled laborers, project managers, community volunteers, and representatives from the government were among the participants selected. The questionnaire is one of the most convenient and popular methods of data collection. This is because it is less expensive as it covers a large number of respondents in a short time and it encourages respondents to easily reply to sensitive questions without fear of criticism or disapproval from the researcher. A questionnaire was used to gain insight into the major sport events management and their social-economic impact. The surveys were sent to 133 chosen respondents on multiple channels with the support of omni-channel website survey platform and one week was required for the complete design and data gathering procedure, and the data's quality, validity, and dependability were all guaranteed. On a Likert scale of 1 to 5, with 5 representing strongly agree, 4 for agree, 3 for not sure, 2 for disagree, and 1 for strongly disagree, the survey asked questions to gauge the level of infrastructure development. Key ethical requirements most especially obtaining informed consent were ensured to avoid any issues of bias or causing harm to the study participants.

3.5. Measurement of variables

Table 1. Measurement and description of variables.

Type of variable	Variable	Measurement scale
Dependent variable	Social-economic wellbeing of the host country	Nominal scale
	Event infrastructures in major sport events	Likert scale
Independent variables	Audience of major sport events	Likert scale
	Level of organization of major sport events	Likert scale

3.6. Data analysis

The quantitative data analysis process involved editing and coding the data and after which data was entered into the computer with the facilitation of Statistical Package for Social Sciences (SPSS) version 20.0 for analysis. Descriptive statistics that provide frequencies and percentages were used to examine the data in **Table 1**. Regression analysis and significance levels were performed using the ANOVA statistics of adjusted R^2 and beta values. In order to determine the general predictive potency of the various independent factors on the study's dependent variable, regression analysis was carried out. A multiple regression model was crucial in this situation for calculating various predictive values.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

where,

Y = Social-economic wellbeing

β_0 = Constant (coefficient of intercept)

X_1 = Event infrastructures used in major sport events

X_2 = Audience in major sport events

X_3 = Level of organization of major sport events

ε = The error term in the multiple regression model

$\beta_1 \dots \beta_3$ = The three independent variables' regression coefficients, which were used to calculate how much effect each independent variable had on the dependent variable. Based on the assumption that there was no autocorrelation, the error term in this research investigation. It seems that the feature of autocorrelation was not taken into account in this research investigation. The study's hypotheses were tested at the 5% level of significance (0.05).

4. Results

The results on characteristics of the study participants are presented in **Table 2**.

Table 2. Background characteristics of the study participants.

Item	Categories	Frequency	Percent
Gender	Male	111	83.4
	Female	22	16.6
Age of respondent	26 years and below	1	0.8
	27–37 years	54	40.6
	38–48 years	71	53.4
	60 years and above	7	5.2
Education	Certificate	3	2.3
	Diploma	10	7.5
	Bachelor	62	46.6
	Masters	53	39.8
	Doctorate	5	3.8
Occupation	Below 1 year	12	9.0
	Between 2 and 4 years	34	25.6
	Between 4 and 7 years	76	57.1
	Over 7 years	11	8.3
Total		133	100.0

Source: Primary data (2023).

4.1. Demographic characteristics

Results of the study in **Table 2** revealed that slightly more than half of the participants were males 11 (83.4%) and only 22 (16.6%) were females. Concerning the age of respondents. Majority (53.4%) were in the bracket of 38–48 years followed by 40.6% in the bracket of 27–37 years and only 0.8% were 26 years and below. Concerning the years spent in business, most respondents (57.1%) had spent between 4 and 7 years in business followed by 25.6% that had spent between 2 and 4 years in business and 8.3% had spent over 7 years in international business.

4.2. Descriptive statistics

The study evaluated the different effects of big athletic events of and the results are presented in **Table 3**.

The results in **Table 3** show that majority of the study participants (62.3%) agreed that sporting venues draw tourists to the neighbourhood and encourage private developers to invest money locally. Most respondents (64.9%) agreed that Events infrastructure such as stadiums generate billions to local economies, and also boost tax revenue. Concerning whether advanced road networks are easily achieved with hosting big sports events, majority of the participants (50.8%) agreed. Relatedly, most respondents (47.3%) agreed with the notion that to hosting countries are always forced to construct new hotels and leisure parks which are important for economic growth. Finally, it was agreed upon by 54.2% that development of new infrastructure during sports events creates many jobs for the locals.

Table 3. Social-economic influence of event infrastructures used in big athletic events.

Statement	1 %	2 %	3 %	4 %	5 %
Sporting venues draw tourists to the neighbourhood and encourage private developers to invest money locally	1.3	7.8	11.7	62.3	16.9
Events infrastructure such as stadiums generate billions to local economies, and also boost tax revenue	2.6	11.7	9.1	64.9	11.9
Advanced road networks are easily achieved with hosting big sports events	7.8	7.7	22.1	50.8	11.6
Hosting countries are always forced to construct new hotels and leisure parks which are important for economic growth	9.1	9.9	22.1	47.3	11.7
Development of new infrastructure during sports events creates many jobs for the locals	4.2	14.2	16.6	54.2	10.9

Note: 5 = strongly agree, 4 = agree, 3 = not sure, 2 = disagree, 1 = strongly disagree.

The study also explored the influence of the audience in big athletic events on social-economic development and the results are presented in **Table 4**.

Table 4. Results on the influence of the audience in big athletic events on social-economic development.

Statement	1 %	2 %	3 %	4 %	5 %
Sports fans utilize big events to promote political and health ideologies	6.3	8.2	10.4	53.5	21.6
Audience in big athletic events can help in enhancing foreign exchange in the host country	2.6	6.5	15.5	75.2	10.2
Audience in big sports events can increase disturbance by engaging drunkenness, hooliganism, disorder, and vandalism	2.6	6.5	10.4	76.6	3.9
Sporting venues draw tourists to the neighbourhood and encourage private developers to invest money locally.	10.0	13.4	5.2	15.6	55.8
People sometimes use athletic events to spread a propaganda	1.3	2.6	11.7	72.7	11.7

Note: 5 = strongly agree, 4 = agree, 3 = not sure, 2 = disagree, 1 = strongly disagree.

From **Table 4**, most participants (53.5%) agreed with the notion that sports fans utilize big events to promote political and health ideologies. The results show that 65.2% of the study participants agreed that audience in big athletic events can help in enhancing foreign exchange in the host country. Majority of the participants (76.6%) agreed that audience in big sports events can increase disturbance by engaging drunkenness, hooliganism, disorder, and vandalism. Majority of the participants (55.8%) strongly agreed that sporting venues draw tourists to the neighborhood and

encourage private developers to invest money locally. It was agreed by most respondents (72.7%) that people sometimes use athletic events to spread a propaganda.

The study established the influence of organizing big athletic events on social-economic wellbeing and the results are presented in **Table 5**.

Table 5. Organization of big athletic events and social-economic wellbeing.

Statement	1 %	2 %	3 %	4 %	5 %
Organizing a big sports event provide an increase in spending and injection of money into the local economy	0.0	7.8	22.1	58.4	11.7
Reputable country's image and pride of local residents is easily achieved through organizing big sports events	2.6	15.6	10.4	48.1	23.4
Well organized events are good for enhancing trade for local business	2.6	5.2	24.7	55.8	11.7
Hosting events like world cup may expose a country to high risk of terrorism	3.4	5.7	13.0	66.2	11.7
Having a successful sports event requires hiring experts in the vents and sports management	1.3	1.3	3.9	51.9	41.6
Hosting big sports events helps to secure inflows of foreign capital	21.3	11.9	1.9	61.3	4.6

Note: 5 = strongly agree, 4 = agree, 3 = not sure, 2 = disagree, 1 = strongly disagree.

The results in **Table 5** regarding whether organizing a big sports event provide an increase in spending and injection of money into the local economy, majority of the participants (58.4%) agreed. Majority of the study participants (48.1%) agreed that reputable country's image and pride of local residents is easily achieved through organizing big sports events. Concerning well organized events are good for enhancing trade for local business (55.8%) agreed and only 5.2% disagreed. The results show that 66.2% of participants agreed that hosting events like world cup may expose a country to a high risk of terrorism. Finally, most participants (51.9%) noted that having a successful sports event requires hiring experts in the vents and sports management. Finally, more than half of the respondents agreed that hosting or organizing big sports events helps to secure inflows of foreign capital.

The study also found out the aspects of social-economic wellbeing relating to big events and results are presented in **Figure 1**.

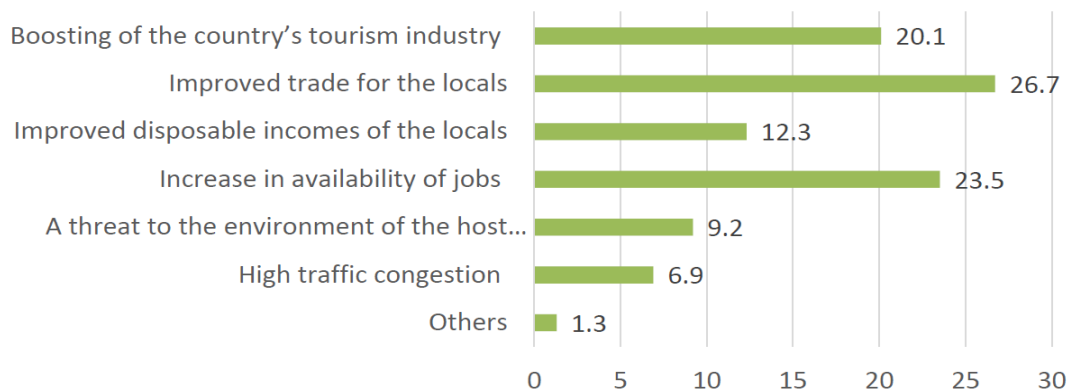


Figure 1. Showing aspects of social-economic wellbeing relating to big events.

Source: Primary data (2023).

Majority of the respondents (26.7%) revealed that one of the social-economic aspects relating to big events is improved trade for the locals, followed by increase in availability of jobs (23.5%), followed by boosting of the country’s tourism industry (20.1%), and then improved disposable incomes of the locals (12.3%). However, a section of respondents indicated the negative social-economic aspects associated with big events and these included; a threat to the environment of the host country (9.2%) and then high traffic congestion (6.9%). Finally, least number of participants (1.3%) mentioned other aspects such as: enhancing urban development, and a negative aspect of potential increase in crime.

4.3. Multivariate analysis

The results of the analyses were presented in tables as shown below. The hypotheses were to singly test the social-economic impact of major sport events management. **Table 6** below presents results on correlation analysis and coefficient of determination.

Table 6. Model summary table.

Model	R	R square	Adjusted R square	Std. error of the estimate
	0.733 ^a	0.724	0.715	0.37061

a. Predictors: (constant), event infrastructures, audience in major sport events, organization of major sport events.

In view of the results in **Table 6** above, the *R*-value of 0.733 indicates a strong positive correlation between big athletic events management and social-economic wellbeing. In view of the coefficient of determination (*R*-square) of 0.724, the three independent variables account for 72.4% in variability in social-economic wellbeing of the host of the major sport events. **Table 7** below presents results on the goodness of fit with respect to the model overall.

Table 7. ANOVA table.

Model	ANOVA ^a				
	Sum of squares	Df.	Mean square	F	Sig.
Regression	21.589	3	7.196	21.795	0.000 ^b
Residual	11.887	36	0.330		
Total	33.476	39			

a. Dependent variable: social-economic wellbeing.

b. Predictors: (constant), event infrastructures, audience in major sport events, organization of major sport events.

The findings in **Table 7** show that the model was statistically significant overall, with an *F*-statistic of 21.795 and a *p*-value of 0.000 (less than the significance threshold of 0.05). So, social-economic wellbeing in countries hosting big athletic events is significantly impacted by event infrastructures, audience in major sport events, and level of organization of these events.

According to the regression model, the amount to which event infrastructures, audience in major sport events, organization of major sport events, influence social-economic wellbeing may be inferred from the betas and *p*-values. The model also showed that a positive performance of 0.249 would still exist even if all the predictors were kept constant. If all other factors remained unchanged, a one unit change in event infrastructures would result in a 0.039 unit change in social-economic wellbeing of the host country. If all other factors remained unchanged, a change in

Audience in big athletic events would result in a shift of 0.024 in social-economic wellbeing of the host country. If all other factors remained equal, a one unit change in organization of big athletic events would result in a 0.031 unit change in social-economic wellbeing of those organizing major sport events.

The statistical significance of each aspect of major sport events management on social-economic wellbeing was equally tested. The results are presented in **Table 8** as follows.

Table 8. Regression coefficients

Model	Unstandardized coefficients		Standardized coefficients	<i>t</i>	Sig.
	B	Std. error	Beta		
(Constant)	0.249	0.607		0.410	0.684
Event infrastructures	0.039	0.213	0.001	0.013	0.003
Audience in big athletic events	0.024	0.092	0.669	5.934	0.000
Organization of big athletic events	0.031	0.167	0.246	2.247	0.013

a. Dependent variable: social-economic wellbeing.

b. Predictors: (constant), event infrastructures, audience in major sport events, organization of major sport events.

Event infrastructures were found to be statistically significant in influencing social-economic wellbeing of those organizing major sport events since the *p*-value was 0.003 (which is lower than the significance level of 0.05). Therefore, *hypothesis H1* was accepted meaning that there is a positive social-economic influence of event infrastructures used in major sport events.

Audience in big athletic events was found to be statistically significant in influencing social-economic wellbeing of those organizing major sport events (*p*-value of 0.00). This led to acceptance of *hypothesis H2* that the audience in major sport events has a positive influence on social-economic development of the host country.

Finally, Organization of major sport events was found to have a significant effect on social-economic wellbeing of those organizing major sport events since the *p*-value is 0.013). This led to acceptance of *hypothesis H3* that the level of organization of major sport events has a positive effect on social-economic wellbeing.

5. Discussion

This study was aimed at investigating the social-economic impact of major sport events management using the 2022 FIFA World Cup as a case study. The findings show that there is a positive social-economic influence of event infrastructures used in major sport events. It was revealed that the audience in major sport events has a positive influence on social-economic development of the host country. Furthermore, the level of organization of major sport events has a positive effect on social-economic wellbeing. The host nation benefits economically from the major athletic events such as the 2022 FIFA World Cup. The most noticeable effects during the planning stage are those that stimulate the economy, increase tourism demand, or have multiple tourism-related effects (Khalifa, 2020; Luerdi, 2022; Wikarya et al., 2022). Let's take the London Olympic

Games in 2012 for example, which had a total economic impact of £9.5 billion dollars. This figure was up from an initial estimate of £7 billion dollars, even though the UK had to share hosting rights with Locog and Paris. The cost for the local authorities to stage this event came in at US\$2 billion as well as a commitment from the government to invest billions into infrastructure like transport and housing but all these costs were recouped quickly via ticket sales and sponsorships. In the years following the games, hosting has the effect of forming an economy by luring in foreign investment or business (DCMS, 2015; Lintumäki et al., 2020). As regulation changes tend to make the event faster and more dynamic, so it can be sold by TV broadcast as it adds to its entertainment character, commercialization of sport today also applies to specific sports branches (Matheson, 2012). The event must be exceptional, spectacular, and entertaining. The major sport events and the values they promote through the example of sports heroes have a profound effect on the younger generations as well as the way of life and level of physical activity in society. The World Cup is a great formal and informal educational tool because of its emphasis on values like peace and the symbolic body of nations coexisting (Chatzitheodoridis et al., 2023; Lin and Lu, 2018; Perić and Vitezić, 2019; Kalogiannidis, Kontsas, et al. 2022b).

The study showed that there is a positive social-economic influence of event infrastructures used in major sport events. The contrast between social impacts that directly affect people and those that have knock-on effects and unintended consequences that may not have been expressly acknowledged as social impacts has also been highlighted by this research (Ramasamy et al., 2022). Studies on how locals view major sport events are becoming more and more in-depth, highlighting the need for a more nuanced evaluation that takes into account locals' willingness to trade off momentary inconveniences for long-term gains and an analysis of the costs and advantages of hosting on both a personal and a collective level (Coalter and Taylor, 2009; Dolles and Söderman, 2008; Gruneau and Horne, 2015). Recent studies have shown how difficult it is to account for both the good and negative effects of these experiences, which may even result in resident ambivalence (Bas et al., 2020; Jensen, 2021; Mair et al., 2021). Given that residents' opinions have been shown to change and vary over time, it is obvious that temporal and contextual factors need to be taken into account in assessment. In particular, when commonly viewed through a political lens of government financing and, thus, taxpayer support, social impact evaluation has to take both individual and collective effects into account.

The study shows that hosting such major sports events might signal institutional progress as well as infrastructural development, which relates much to the aspects of the infrastructure development theory. Before making judgments, the committee that awards such events to a country evaluates a variety of issues, including social, political, and economic institutional quality. The hosting of sports events such as FIFA World Cup indicates that the nation already has high-quality institutions or that these institutions are improving. Hosting major sports events sends a powerful signal to nations about past and prospective institutional quality improvements (Bohlmann and Van Heerden, 2005). Numerous studies in the economic development literature suggest that social, political, and economic institutional features are important predictors of economic growth. Given the importance of high-quality institutions in politics, society, and the economy to economic growth, the announcement of major sports events, which is a signal of institutional quality improvement for host countries and which in the long-run enhances the social-economic development of the country (Crompton, 2016). Again, nations on a road to fast economic development or institutional reform

may benefit from these declarations.

6. Conclusion

This study investigated the social-economic impact of major sport events' management using the 2022 FIFA World Cup as the case study. The citizens of Qatar where 2022 World Cup was held initially felt fewer negative effects than those of other non-host cities. Second, positive effects of hosting 2022 FIFA World Cup Qatar have had a greater influence on locals' perceptions than negative effects. It was revealed that well organized events are good for enhancing trade for local business and that having a successful sports event requires hiring experts in the major sport events management. This study also filled a research vacuum by providing the first indication of how inhabitants of far-off non-host cities perceive FWC. The economic effects of major sport events have been extensively studied, but the intangible, social effects of these events on host locations have received less attention. This study offers an up-to-date summary of the state of the art for identifying, conceptualizing, and quantifying the social impacts connected to competing for and hosting major sport events. This has emerged in response to a growing need to acknowledge short-, medium-, and long-term tangible and intangible impacts on the larger destination ecosystem, including both positive and negative effects. Major sport events may also greatly boost commerce, tourism, and destination branding, as well as more tangential benefits on diplomacy, local pride, and social connectedness. Policymakers and stakeholders in sports have an edge in adopting practical consequences for growing that community. Major sport events have a significant influence on the areas and cities that host them. They are resource-intensive, often a financial and social burden on locals who foot the bill as taxpayers, and cause a great deal of disturbance.

7. Recommendations

Based on the study findings, it is clear that organizing major sport events has both negative and positive influences on the social-economic wellbeing of the hosting country. It is therefore important for the organizers of big sports events to always put in place different mechanisms that can help prevent any negative impact of major sport events.

Author contributions

Conceptualization, EEN and GK; methodology, EEN and GK; software, DS; validation, EEN, SK and GK; formal analysis, EEN and DS; investigation, EEN; resources, EEN and SK; data curation, GK and DS; writing—original draft preparation, EEN; writing—review and editing, SK; visualization, DS; supervision, GK; project administration, EEN and GK. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

References

- Almeida AM (2019). Economic impact of sporting events—Evaluation criteria and indicators of interest in the case of Madeira. *Motricidade* 15(2): 6–10.
- Amponsah CT, Ahmed G, Kumar M, Adams S (2018). The business effects of mega-sporting events on host cities: An empirical view. *Problems and Perspectives in Management* 16(3): 324–336. doi: 10.21511/ppm.16(3).2018.26
- Azzali S (2019). Spaces of mega sporting events versus public spaces: Qatar 2022 World Cup and the City of Doha. *The Journal of Public Space* 4(2): 57–80. doi: 10.32891/jps.v4i2.1204
- Baker W (2019). *The Economic Impact of Mega Sport Event* [Bachelor's thesis]. Trinity College. Available online: <https://digitalrepository.trincoll.edu/theses/793> (accessed on 18 February 2023).
- Barajas A, Coates D, Sanchez-Fernandez P (2016). Beyond retrospective assessment. Sport event economic impact studies as a management tool for informing event organization. *European Research on Management and Business Economics* 22(3): 124–130. doi: 10.1016/j.iedee.2015.05.001
- Bas D, Martin M, Pollack C, Venne R (2020). The impact of COVID-19 on sport, physical activity and well-being and its effects on social development. Policy Brief No 73. Available online: http://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/05/PB_73.pdf (accessed on 22 March 2023).
- Blake A (2005). Economic impact of the London 2012 Olympics. Available online: <https://opus.lib.uts.edu.au/handle/2100/994> (accessed on 3 April 2023).
- Bohlmann H, Van Heerden J (2005). The impact of hosting a major sport event on the South African economy. Available online: <https://www.up.ac.za/media/shared/61/WP/wp-9.zp39542.pdf> (accessed on 28 March 2023).
- Brunet F (1995). An economic analysis of the Barcelona'92 Olympic Games: Resources, financing and impact. In: de Moragas M, Botella M (editors). *The Keys of Success: The Social, Sporting, Economic and Communications Impact of Barcelona '92*. Servei de Publicacions de la UAB. pp. 203–237.
- Chanaron J (2014). Technology and economic impacts of mega-sports events: A key issue? Exploratory insights from literature. *Megatrend Revija* 11(4): 9–30. doi: 10.5937/megrev1404009c
- Chankuna D (2022). Socio-economic impacts of FIFA World Cup Qatar 2022: A study in Chon Buri sports city residents. *Preprints* 2022120285. doi: 10.20944/preprints202212.0285.v1
- Chatzitheodoridis F, Kontogeorgos A (2020). Exploring of a small-scale tourism product under economic instability: The case of a Greek rural border area. *Economies* 8(3): 52. doi: 10.3390/economies8030052
- Chatzitheodoridis F, Melfou K, Kontogeorgos A, Kalogiannidis S (2023). Exploring key aspects of an integrated sustainable urban development strategy in Greece: The case of Thessaloniki City. *Smart Cities* 6(1): 19–39. doi: 10.3390/smartcities6010002
- Chutiphongdech T, Kampitak T (2022). A systematic review of the key success factors of sports event management: A resource-based view approach. *Annals of Applied Sport Science* 10(4). doi: 10.52547/aassjournal.1100
- Coalter F, Taylor J (2009). *Large Scale Sports Events: Event Impact Framework, Report to UK Sport*. Available online: <http://hdl.handle.net/1893/1942> (accessed on 8 April 2023).
- Crespo Sogas P, Fuentes Molina I, Araujo Batlle À, Raya Vilchez JM (2021). Economic and social yield of investing in a sporting event: Sustainable value creation in a territory. *Sustainability* 13(13): 7033. doi: 10.3390/su13137033
- Crompton JL (2016). Economic impact analysis of sports facilities and events: Eleven sources of misapplication. *Journal of Sport Management* 9(1): 14–35. doi: 10.1123/jsm.9.1.14
- Department of Culture Media & Sport (DCMS) (2015). *A Living Legacy: 2010–15 Sport Policy and Investment*. Available online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/417394/1580-F_Sport_Report_ACCESSIBLE_2.pdf (accessed on 6 March 2023).
- Dimitrovski D, Leković M, Đurađević M (2021). Economic impact of the sporting events as tourism niche

- product: A contemporary bibliometric analysis. *Ekonomika Preduzeca* 69(7–8): 422–437. doi: 10.5937/ekopre2108422d
- Dolles H, Söderman S (2008). Mega-sporting events in Asia—Impacts on society, business and management: An introduction. *Asian Business and Management* 7(2): 147–162. doi: 10.1057/abm.2008.7
- Etiosa O (2012). The Impacts of Event Tourism on Host Communities: Case: The City of Pietarsaari [Thesis]. Central Ostrobothnia University of Applied Sciences.
Available online: <https://urn.fi/URN:NBN:fi:amk-201205158430> (accessed 8 April 2023).
- EY (2021). The impact of major sport events. November. Available online: <file:///C:/Users/Steve/Downloads/211130%20MSE%20soft%20power%20TI.pdf> (accessed on 19 April 2023).
- FIFA (2022). Development of the sustainability strategy. Available online: <https://www.qatar2022.qa/sites/default/files/2022-08/FWC-2022-Strategy-Process-Development.pdf> (accessed on 14 April 2023).
- Gillett P, Kelly S (2006). ‘Non-local’ masters games participants: An investigation of competitive active sport tourist motives. *Journal of sport tourism* 11(3–4): 239–257. doi: 10.1080/14775080701400760
- Giraud T (2014). Economic impacts of hosting a major sporting event: Did the 1998 FIFA World Cup have positive impacts on employment? Available online: <https://www.diva-portal.org/smash/get/diva2:725280/FULLTEXT01.pdf> (accessed on 9 March 2023).
- Gruneau R, Horne J (2015). Mega-events and globalization: A critical introduction. In: *Mega-Events and Globalization*. Routledge. pp. 1–28.
- Gulak-Lipka P, Jagielski M (2020). Incorporating sustainability into mega-event management as means of providing economic, social and environmental legacy: A comparative analysis. *Journal of Physical Education and Sport* 20(5): 2859–2866. doi: 10.7752/jpes.2020.s5388
- Hover P, Dijk B, Breedveld K, et al. (2016). *Creating Social Impact with Sport Events*. Mulier Institute & Utrecht University Utrecht. Available online: <https://repository.uibn.ru.nl/handle/2066/159107> (accessed on 27 March 2023).
- Irshad H (2011). Impacts of community events and festivals on rural places. Government of Alberta, Agriculture and Rural Development Division. Available online: [https://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/csi13702/\\$FILE/Community-events-and-festivals.pdf](https://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/csi13702/$FILE/Community-events-and-festivals.pdf) (accessed on 13 April 2023).
- Jack W, Suri T (2011). Mobile money: The economics of M-PESA. NBER Working Paper Series, Working Paper 16721. Available online: https://www.nber.org/system/files/working_papers/w16721/w16721.pdf (accessed on 25 February 2023).
- Jensen CT (2021). Local sport event policies and sustainability: A puzzle approach. *Frontiers in Sports and Active Living* 3: 667762. doi: 10.3389/fspor.2021.667762
- Kalfas D, Kalogiannidis S, Chatzitheodoridis F, Toska E (2023). Urbanization and land use planning for achieving the sustainable development goals (SDGs): A case study of Greece. *Urban Science* 7(2): 43. doi: 10.3390/urbansci7020043
- Kalogiannidis S, Kontsas S, Konteos G, Chatzitheodoridis F (2022a). A small city rebranding: Another view of the territorial marketing. *Wseas Transactions on Environment and Development* 18: 686–701. doi: 10.37394/232015.2022.18.65
- Kalogiannidis S, Kontsas S, Konteos G, Chatzitheodoridis F (2022b). Investigation of the redesigning process of the development identity of a local government regional unit (city): A case study of Kozani regional unit in Greece. In: Tsounis N, Vlachvei A (editors). *Advances in Quantitative Economic Research*. Proceeding of the International Conference on Applied Economics; Springer. doi: 10.1007/978-3-030-98179-2_20
- Kalogiannidis S., Loizou E, Melfou K, Papaevangelou O (2022). Assessing relationship between entrepreneurship education and business growth. In: Sklias P, Polychronidou P, Karasavoglou A, et al. (editors). *Springer Proceedings in Business and Economics*. Proceeding of the Business Development and Economic Governance in Southeastern Europe: 13th International Conference on the Economies of the Balkan and Eastern European Countries (EBEEC); Springer; pp. 183–194. doi: 10.1007/978-3-031-05351-1_10
- Kalogiannidis S, Savvidou S, Papaevangelou O, Pakaki F (2022). Role of management in optimising the quality

- of education in educational organisations. In: Tsounis, N, Vlachvei, A. (editors) *Advances in Quantitative Economic Research*. Proceedings of the International Conference on Applied Economics 26 August 2021. Springer. doi: 10.1007/978-3-030-98179-2_21.
- Khalifa NKAAD (2020). Assessing the impacts of mega sporting events on human rights: A case of the 2022 FIFA World Cup in Qatar. *International Journal of Sociology* 2(1): 25–51. doi: 10.47604/ij.s.1129
- Rusmane S, Kudinska M (2021). Long-term socio-economic impact of COVID-19 on sport sector. Available online: <https://dspace.lu.lv/dspace/handle/7/57100> (accessed on 2 April 2023).
- Li S, Blake A. (2009). Estimating Olympic-related investment and expenditure. *International Journal of Tourism Research* 11(4): 337–356. doi: 10.1002/jtr.694
- Li SN, Jago L (2013). Evaluating economic impacts of major sports events—A meta analysis of the key trends. *Current Issues in Tourism* 16(6): 591–611. doi: 10.1080/13683500.2012.736482
- Lin HW, Lu HF (2018). A longitudinal assessment on the economic effects of hosting major sporting events. *Applied Economics* 50(56): 6085–6099. doi: 10.1080/00036846.2018.1489117
- Nordin L (2008). Economic impacts of sport events: Case study of the European championships in figure skating Malmö City 2003. Available online: <https://www.diva-portal.org/smash/get/diva2:132480/FULLTEXT01.pdf> (accessed on 28 April 2023).
- Lintumäki P, Winner H, Scheiber S, et al. (2020). The economic impact of participant sports events: A case study for the winter world masters games 2020 in Tyrol, Austria. *Economies* 8(4): 94. doi: 10.3390/ECONOMIES8040094
- Luerdi L (2022). Qatar’s FIFA World Cup 2022: Sustainability and foreign policy. doi: 10.31219/osf.io/rqx47.
- Maennig W (2017). Major sports events: Economic impact. doi: 10.2139/ssrn.2990262
- Mair J, Chien M, Kelly SJ, Derrington S (2021). Social impacts of mega-events: A systematic narrative review and research agenda. *Journal of Sustainable Tourism* 31(2): 538–560. doi: 10.1080/09669582.2020.1870989
- Malfas M, Theodoraki E, Houlihan B (2004). Impacts of the Olympic Games as mega-events. *Proceedings of the Institution of Civil Engineers: Municipal Engineer* 157(3): 209–220. doi: 10.1680/muen.2004.157.3.209
- Matheson V, Baade RA (2004). Mega-sporting events in developing nations: Playing the way to prosperity? *South African Journal of Economics* 72(5): 1085–1096. doi: 10.1111/j.1813-6982.2004.tb00147.x
- Matheson V (2012). Assessing the infrastructure impact of mega-events in emerging economies. Economics Department Working Papers, Paper 8. Available online: https://crossworks.holycross.edu/econ_working_papers/ (accessed on 22 April 2023).
- Müller A, Bíró M, Ráthonyi-ódor K, et al. (2016). Economic impacts of sports events. *Studia Universitatis Babeş-Bolyai Educatio Artis Gymnasticae* 61(4): 85–95.
- Nana G, Sanderson K, Goodchild M (2002). Economic Impact of Sport. Available online: <https://www.hksi.org.hk/f/page/611/economicimpactofsportinhk.pdf> (accessed on 17 March 2023).
- OECD (2017). Global sports events and local development: Principles for leveraging local benefits from global sporting events. Available online: <https://www.oecd.org/cfe/leed/OECD-leed-principles-global-sporting-events.pdf> (accessed on 5 April 2023).
- Papadopoulou CI, Loizou E, Melfou K, et al. (2021). The knowledge based agricultural bioeconomy: A bibliometric network analysis. *Energies* 14(20): 6823. doi: 10.3390/en14206823
- Papaevangelou O, Syndoukas, D, Kalogiannidis S, et al. (2023). Information technology and human resource management in educational institutions. *Journal of System and Management Sciences* 13(2): 258–272. doi: 10.33168/JSMS.2023.0218
- Papanikos GT (2015). The economic effects of a marathon as a sport tourism event. *Athens Journal of Sports* 1(225): 225–240. doi: 10.30958/ajspo.2-4-3
- Perić M, Vitezić V (2019). Socio-economic impacts of event failure: The case of a cancelled international cycling race. *Sustainability* 11(18): 5028. doi: 10.3390/su11185028
- Preuss H (2006). Lasting effects of major sporting events. Available online: idrottsforum.org/articles/preuss/preuss061213.pdf (accessed on 19 April 2023).

- Preuss H (2004). Calculating the regional economic impact of the Olympic Games. *European Sport Management Quarterly* 4(4): 234–253. doi: 10.1080/16184740408737479
- Ramasamy B, Wu H, Yeung M (2022). Hosting annual international sporting events and tourism: Formula 1, golf or tennis? *Tourism Economics* 28(8): 2082–2098. doi: 10.1177/13548166211029053
- Silva S (2022). Sports tourism in rural communities: Small events, big impacts. *Journal of Tourism Insights* 12(1): 8. doi: 10.9707/2328-0824.1242
- Taks M (2020). Can sport events “service” sport participation? In: Roth S, Horbel C, Popp B (editors). *Perspektiven des Dienstleistungsmanagements: Aus Sicht von Forschung und Praxis*. Springer Gabler. pp. 557–569. doi: 10.1007/978-3-658-28672-9_28
- Taylor P, Davies L, Wells P, et al. (2015). *A Review of the Social Impacts of Culture and Sport*. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/416279/A_review_of_the_Social_Impacts_of_Culture_and_Sport.pdf (accessed on 9 March 2023).
- Theodoraki E (2016). The problem with sporting mega-event impact assessment. In: Transparency International (editor). *Global Corruption Report: Sport*. Routledge. doi: 10.4324/9781315695709
- United Nations Alliance of Civilizations (UNAOC) (2021). *Guide on the Security of Major Sporting Events: Promoting Sustainable Security and Legacies*. Available online: <https://www.unaoc.org/resource/guide-on-the-security-of-major-sporting-events-promoting-sustainable-security-and-legacies/> (accessed on 16 April 2023).
- Walo M, Bull A, Breen H (1996). Achieving economic benefits at local events: A case study of a local sports event. *Festival Management and Event Tourism* 4(3–4): 95–106. doi: 10.3727/106527096792195353
- Wikarya U, Widyasanti AA, Revindo MD, et al. (2022). Impact of international sports event on local businesses: Insight from the stallholders and official partners of the 2018 Asian Games. *JEJAK* 15(2): 336–353. doi: 10.15294/jejak.v15i2.36216
- Yamane T (1967) *Statistics: An Introductory Analysis*, 2nd ed. Harper and Row.
- Young H (2022). Using sport as a tool for sustainable development: International organizations and sustainability. *Independent Study Project (ISP) Collection*. Available online: https://digitalcollections.sit.edu/isp_collection/3444 (accessed on 2 May 2023).