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Assessing the Economic Impact of Sporting Events: A Review of Analytical Approaches

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ABSTRACT
Background. Sporting events are widely recognized as catalysts for economic growth and tourism development, attracting substantial academic interest in evaluating their economic impacts. Although numerous studies have assessed these impacts, a thorough review of the analytical methods employed remains lacking. **Objectives.** This paper seeks to address that gap by reviewing and critically analyzing the various analytical approaches used to evaluate the economic impacts of sports events. **Methods.** Drawing on existing review articles and empirical studies indexed in Scopus from 1992 to 2023, this study provides a narrative discussion of the objectives, strengths, and limitations of each method, highlighting the commonly used assessment tools. **Results.** The findings offer valuable insights for scholars, practitioners, and policymakers by providing practical guidelines for selecting appropriate evaluation techniques and enhancing the methodological rigour of future assessments. **Conclusion.** Ultimately, this review contributes to the refinement of economic impact evaluation studies, supporting more informed and evidence-based decision-making in the planning and management of sporting events.

INTRODUCTION

Sporting events have long been utilised as strategic instruments to stimulate economic growth and promote tourism, particularly through the hosting of iconic mega or major events (1, 2). However, staging such events necessitates substantial financial and non-financial resources. Opposition frequently arises due to the high costs involved and the uncertainty regarding long-term post-event benefits (3). Given the intensive resource demands, particularly in areas such as sport infrastructure construction and facility enhancement, financial support from governments and related organisations is crucial to ensure that the benefits of hosting a mega-sport event are retained within the host country (3, 4).

The question of whether the economic impacts of sports events truly benefit host cities remains a subject of ongoing debate (5). Unsurprisingly, the economic impact of sporting events has attracted scholarly attention over the decades, given its significance in policy-informed decision-making (3, 6). This body of research provides critical insights for policymakers, particularly in guiding decisions related to sport policy formulation, public budget allocation, and sport infrastructure development.

Although a few review articles have examined the economic impact assessment of sports events, the present review distinguishes itself through its critical evaluation of the methodological

approaches employed in such assessments. For instance, Zourgani and Ait-Bihi conducted a systematic review examining the state of research on sport event impacts; however, their primary aim was to identify the most common research topics and types of events studied in the literature, rather than to provide a discussion on the use of economic impact assessment tools (3). Similarly, O'Reilly et al. offered a broad overview of impact studies and proposed a process model for conducting economic impact assessments. Their study specifically aimed to draw lessons learned in order to present a more inclusive methodology for sporting events (7).

Likewise, Ranjan reviewed the methods used to evaluate the impacts of sport events across several dimensions but did not offer an in-depth, critical discussion of the economic impact assessment techniques (8). Relatedly, Andersson developed a framework for a more balanced analysis of sport event sustainability by examining the scope and methodology of impact assessments across several dimensions, with particular emphasis on the importance of considering direct and indirect effects, opportunity costs, and the integration of economic, social, and environmental dimensions (9). Notably, Li and Jago provided an overview of the approaches used to assess the economic impact of major events. However, only some key methods for evaluating impacts were discussed in detail (10).

While all these studies yielded valuable findings, they were limited either to a relatively narrow selection of assessment methods or to broad discussions of multi-dimensional evaluations, leaving several analytical approaches unexamined, particularly those specific to the economic impact assessment of sporting events (5, 10). Consequently, a gap remains in the literature for a review that offers a thorough and critical synthesis of the full range of analytical methods employed in assessing the economic impact of sports events.

Therefore, to bridge this knowledge paucity and contribute to the literature on sport event impact evaluation, this study aims to review the analytical approaches employed in assessing the economic impacts of sporting events. Using a narrative review approach, this study provides a critical analysis of the objectives, strengths, and limitations of each method, while also highlighting the key assessment tools utilised. Ultimately, this paper seeks to provide an evidence-based academic overview of analytical methods and to serve as an initial guide for researchers and practitioners interested in evaluating the economic impact of sporting events.

This review article is organized as follows: the next section provides a brief overview of the narrative review approach used in this study and simultaneously presents the tools for evaluating the economic impacts of sports events identified through the literature review. The subsequent section presents a critical analysis that discusses the advantages and limitations of each method. Furthermore, a summary of the tools used to evaluate the economic impacts of sports events is also included. The paper concludes with a discussion of the study's limitations and outlines a future research agenda.

MATERIALS AND METHODS

Study Design. To ensure the rigour of the current review, the author followed the guidelines for narrative reviews as suggested by Sukhera (11). A narrative review is deemed suitable for this study as it enables a rapid, non-systematic, and iterative synthesis of up-to-date knowledge, aimed at generating insights relevant to the research domain (12, 13). In this study, Scopus was used as the primary database for sourcing literature, with grey literature excluded, as it provides extensive coverage of peer-reviewed papers in the social sciences (14). The key search terms, combined using Boolean operators (Table 1), were employed in August 2024 to retrieve articles relevant to the research domain. During the inclusion stage, both review and empirical studies pertaining to the topic were considered. In total, 34 papers published between the inception year (1992) and 2023 were included in the review, reflecting thematic sufficiency in accordance with the recommendations of Sukhera (11). Table 1 presents the search string used to obtain the set of papers, while Figure 1 illustrates the data collection process for the current narrative review.

According to the review, several approaches exist for assessing the economic impacts of sporting events. These analytical approaches include quantitative methods such as multiplier analysis (MA), input–output analysis (IOA), computable general equilibrium (CGE) modelling, cost–benefit analysis (CBA), tourism impact

analysis (TIA), and survey-based methods. Some studies also combine these with other quantitative tools or integrate qualitative methods, such as document analysis or interviews, to offer a more comprehensive understanding of the economic impacts of sporting events.

Table 1. Full Boolean search string

Main keywords	Keyword combinations
economic impact and sports event	(“sport event*” OR “sports event” OR “sporting event”) AND (economi* OR “impact” OR “economic impact”)

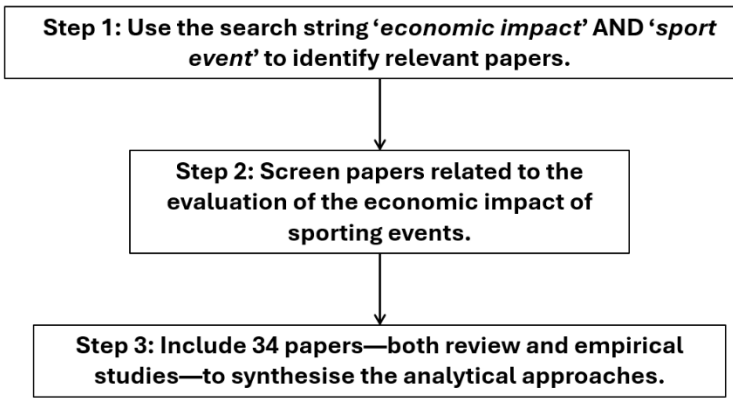

Figure 1. Data collection for narrative review.

RESULTS

One of the quantitative analytical tools is multiplier analysis. ***Multiplier analysis (MA)*** examines the cascading effects of sporting events on the local economy by estimating the multiplier impact of visitor expenditure, which measures the additional income generated in the host community as a result of the event (15, 16). This approach quantifies the ripple effects of spending within the host economy, evaluating the impact on output, income, and employment (17, 18). It calculates the amount of additional economic activity generated from each unit of initial spending, helping to understand the overall economic benefits and potential for revenue generation (19). The analysis also considers the indirect and induced effects of the event on various sectors (20).

Multipliers estimate how changes in one economic variable, such as gross domestic product (GDP) or employment, are influenced by changes in another variable, such as event-related expenditure (21). These tools play a pivotal role in estimating the broader economic benefits beyond direct spending. Together, they contribute to a comprehensive understanding of the economic ramifications of sporting events by assessing both the direct and indirect impacts on the regional economy and quantifying the cascading effects of expenditure within the locality. These tools are particularly valuable for policymakers and scholars engaged in the field of sport economics.

Multiplier analysis utilizes macroeconomic indicators, including changes in unemployment, local income levels, taxable sales, and fluctuations in product sales. These assessments also involve measuring attendance and visitor expenditure associated with the event (5). Methods such as synthetic control and benchmarking are used to compare the economic indicators of the host region with those of similar regions that did not host such events (15). Supplementary variables include growth in GDP, unemployment rates, investment levels, and employment growth. Studies have examined the effects of sport mega-events on these variables both prior to and during the events.

Input-output analysis (IOA) serves as a valuable tool for assessing the direct and indirect economic impacts of sport events (22). It examines the interconnections among various sectors of the economy and evaluates the effects of event-related expenditure, including multiplier

impacts on employment and income (3, 23). This approach offers a comprehensive perspective on the economic value generated by such events (15). The use of input–output tables facilitates the estimation of economic implications by providing a framework to analyse the interdependencies between different economic sectors, thereby helping to assess the ripple effects of event-related spending (10, 24). IOA enables the quantification of the direct, indirect, and induced effects of such expenditure on a range of economic variables (21). As such, IOA offers valuable insights into the multifaceted economic impacts of sports events, making it a critical resource for researchers and policymakers in this field.

Furthermore, IOA enables a comprehensive quantitative assessment of economic impacts, scenario analysis, and applicability across various industries and sectors (25). By quantifying the cascading effects throughout the economy, input–output analysis can be employed to estimate the economic impact of events or policy changes. It also helps identify key sectors that have a significant impact on the broader economy and can serve as a guide for informed decision-making related to resource allocation and policy development. Additionally, this approach can be used to evaluate the efficiency and effectiveness of different sectors and to identify opportunities for growth and development (23).

Computable general equilibrium (CGE) modelling involves simulating the impact of sporting events on the entire economy, taking into account changes in production, consumption, and trade. This model offers a comprehensive framework for evaluating the economic implications, including changes in employment, income, and welfare (26). According to Li and JagoLi and Jago (10), simulating the effects of an event across the whole economy requires consideration of such changes to reflect the full scope of its impact (10). CGE modelling is considered a more suitable approach due to its ability to incorporate more realistic assumptions and to capture the interdependencies among various sectors within the economy.

Furthermore, CGE is a methodological approach used to evaluate the economic consequences of events, including sporting events. It considers a range of economic variables and their interconnections within the economy, such as changes in employment, income, and output. Additionally, CGE models can assess the costs and benefits associated with hosting a sports event, taking into account factors such as infrastructure investment, tourism revenue, and social benefits (26).

Cost–benefit analysis (CBA) is used as a tool for assessing the economic value of hosting sports events. It involves comparing the costs incurred with the benefits generated, encompassing both financial and non-financial outcomes. Specifically, Zourgani and Ait-Bihi highlight the role of CBA in evaluating the financial investment and economic returns of hosting sports events (3). At the same time, Kobierecki and PierzgalskiKobierecki and Pierzgalski (15)emphasise the inclusion of both tangible and intangible benefits, such as increased tourism and infrastructure development (15). CBA serves as a decision-making tool for policymakers and event organizers, enabling them to make informed judgments regarding economic development, as noted by Crespo Sogas et al. (24). Additionally, it plays a key role in assessing the socio-economic and economic impacts on the host city, as discussed by Jiménez-Naranjo et al. (19).

The primary aim of CBA is to calculate the ratio of benefits to costs, which reflects the contribution made by participants and attendees of the sporting event (27). This ratio helps determine the economic impact and value generated by the event. These ratios compare the increase in consumption value among the local population (benefits) with the production factors required to organise the event (costs) (19). CBA also facilitates the calculation of measures such as the internal rate of return, which is used to assess the socio-economic impact of the event. By comparing different alternatives, this measure helps identify options that yield the greatest social benefits. Furthermore, CBA evaluates the economic value of a sports event by calculating the net present value (NPV) of its costs and benefits, taking into account the time value of money to determine the event's overall profitability.

Tourism impact analysis (TIA) focuses on assessing the economic consequences of sports events on the tourism sector, with particular emphasis on changes in visitor expenditure, employment, and tax revenues resulting from the event (28). It serves as a comprehensive framework for evaluating the economic contribution of tourism, including sports events,

to a specific region or country, accounting for both direct and indirect economic effects (29). This tool is also used to estimate the potential increase in tourism and visitor spending resulting from hosting a sports event, considering factors such as travel costs, accommodation, and recreational activities (23). Furthermore, it targets explicitly tourism-related impacts by evaluating the number of individuals affected, their consumption patterns, and the primary economic impact on the region (20).

Survey and interview-based approaches (SIA) involve assessment methods that require the primary collection of data related to specific sporting events. It plays a crucial role in collecting data from businesses, residents, visitors, participants, spectators, and local communities. These approaches focus on areas such as expenditure patterns, employment, and perceptions of the event's impact (18, 23). These methods offer valuable insights into visitor spending, job creation, and the overall economic benefits generated by sporting events. Moreover, survey research and expenditure estimation surveys distinguish between event tourists and non-event tourists to gauge economic impact by collecting data on their spending behaviours (16, 30). Furthermore, qualitative interviews involve in-depth conversations with local businesses and opinion leaders, providing qualitative evaluations of both the short-term and long-term consequences of sporting events (25).

For example, the reverse contingent valuation method (RCVM) is a survey-based technique that aims to determine individuals' preferences after an experience rather than beforehand (27). Its primary purpose is to directly elicit individuals' willingness to pay for goods or services not traded in the market, following their participation in or exposure to the event. This approach enables individuals to assign value to an event once they have had the opportunity to experience or host it, making it particularly valuable for researchers seeking to investigate residents' engagement with, and the outcomes of, major sporting events on a large scale. This method is often measured using monetary assessment approaches. In contrast, monetary value refers to the quantification of a product or service's economic worth in terms of currency. Thus, it aims to convert intangible factors, such as personal experiences or social value, into monetary units to support decision-making processes (31).

Likewise, *the direct expenditure approach (DEA)* is a methodology used to quantify the economic impact of sport events, with a particular focus on the direct spending by visitors and participants within the host region (4, 26, 32). The DEA emphasizes factors such as accommodation, transportation, and food expenses as key components in its calculations. Surveys conducted with event attendees are used to gather data on their spending patterns and the economic impact of the event on the host area. These surveys are further supported by a classification system that helps identify different groups of attendees based on their economic significance for the host region (33).

The ordinary least squares (OLS) method is also employed to examine the relationships between variables related to the economic impacts of sporting events. It can be applied across various time frames following the conclusion of an event. For instance, ex-post analysis, panel regression, and difference-in-differences analysis are commonly used to assess the effects of major sports events on different economic indicators (34). Econometric techniques can also be employed to test the determinants of economic impact (35). Furthermore, event study methodology, which examines the impact of a significant catalyst or occurrence, is also commonly used in conjunction with regression analysis (17).

While numerous approaches exist for evaluating the economic impacts of sporting events, there is currently no consensus on the most suitable method. The choice of approach often depends on the researchers' perspectives and whether the impacts are examined at the macro or micro level. Consequently, as seen in the work of Taks et al., researchers often employ multiple methods within a single study, likely due to the limitations inherent in each approach and the availability of data (27).

Moreover, hosting the same sporting event in different countries may yield varying economic outcomes depending on the approach used. This variability can present challenges for both scholars and practitioners. Therefore, to support a clearer understanding of current economic impact assessment tools, Table 1 provides a summary of the main methods used to evaluate the economic impacts of sport events. It outlines each tool's objectives, variables used, limitations, key features, and examples of studies that have employed these methods.

DISCUSSION

As the previous section outlined the objectives, applications, and advantages of each approach, this section focuses on discussing their underlying assumptions as well as their respective limitations.

While ***multiplier analysis (MA)*** captures the cascading effects of sporting events on the economy by estimating the multiplier effect of visitor expenditure, which reflects the additional income generated within the host community as a result of the event, its underlying assumptions may lead to potential inaccuracies and overlook key economic linkages (18). There is a risk of overestimating the actual economic impact, as multiplier analysis often fails to account for factors such as leakages, which reduce the retained benefits within the local economy (20, 36).

Furthermore, multipliers have faced criticism for their potential misuse and lack of accuracy in some cases (26). The method may oversimplify economic analysis, leading to a less nuanced understanding of the true impact (19). To illustrate this point, estimating the actual economic consequences of sport mega-events remains challenging due to several theoretical shortcomings, including the substitution effect, crowding out, and leakages. Moreover, the use of economic indicators is complicated by the fact that such events constitute only a small fraction of the broader economies of host cities or countries, rendering them highly vulnerable to external factors that may influence or distort economic conditions. In addition, objectively measuring the outcomes of hosting sports mega-events from the perspective of a state, city, or region presents inherent difficulties. Most research studies on the economic impact of these events have reported either negligible positive effects or only modest and limited benefits (15).

Input-output analysis (IOA) has also faced criticism, as the method may fail to capture all externalities and intangible effects associated with events, potentially overlooking significant aspects (24, 36, 37). Intangible effects refer to the non-monetary repercussions that events have on host communities and individuals. These are often difficult to assess using traditional economic statistical methods. Examples of such effects include the development of social networks and cohesion within communities, the promotion of social unity and community growth, increased international recognition, and the sense of civic pride and excitement generated by hosting major events (4, 31, 38). These intangible outcomes significantly contribute to the overall societal impact and well-being of individuals (3). As such, complementing IOA with alternative approaches, such as the reverse contingent valuation method (RCVM), could enhance its comprehensiveness.

Moreover, the application of IOA can be complex and relies on several assumptions and simplifications, which may lead to misuse or reduced accuracy (18, 20, 26, 30, 39). It often oversimplifies complex economic interactions and may fail to reflect the unique characteristics of mega sporting events (16, 23). The effective use of IOA also requires access to detailed data and expertise in economic modelling, which are not always readily available (10). In support of these limitations, IOA is based on assumptions such as fixed production coefficients and constant input–output relationships, which may not accurately capture the complexities of real-world economic systems. The analysis typically focuses on the immediate and static economic effects of an event, thereby neglecting long-term or dynamic impacts. While IOA does account for indirect and induced effects, accurately quantifying and attributing these to a specific sporting event can be challenging, potentially leading to either underestimation or overestimation of its economic value (10, 24). Furthermore, IOA predominantly addresses economic dimensions and often does not fully consider the social, cultural, or environmental impacts of sports events, factors that are essential when evaluating their overall significance (24).

Likewise, the assumptions underlying ***computable general equilibrium (CGE) modelling*** can limit the interpretability and implications of its results. The model's reliance on assumptions and the availability of high-quality data introduce a degree of uncertainty in economic impact assessments. There is a risk that CGE models may oversimplify the complexity of an economy or fail to capture the unique characteristics of specific events. As Li and Jago (10) argue, the accuracy of CGE outcomes is highly dependent on the quality of input data and the validity of the assumptions employed. While CGE modelling offers a comprehensive framework for evaluating economic impacts, its effectiveness hinges on careful alignment with the

research context and the robustness of the data used (40, 41).

To further illustrate this point, methodological inconsistencies remain a significant limitation across tools used for economic valuation. Some studies encounter difficulties in applying and calculating economic impacts, often resulting in inconsistent or unreliable findings. Additionally, political pressure can affect the objectivity of economic impact studies, potentially leading to biased or inflated results. In some instances, research may be undertaken with concealed motives, such as legitimising political decisions or garnering public support for event organisers, which may exaggerate economic benefits (42). Furthermore, a lack of clear reference materials and methodological guidance poses challenges for local decision-makers and students attempting to assess the direct economic impact of sporting events (26).

In the case of ***cost–benefit analysis (CBA)***, the method requires extensive data collection, making it a resource-intensive process (19, 26). It involves evaluating both the costs and benefits associated with the event. On the cost side, opportunity costs are often prioritised over direct financial expenditures. On the benefits side, the analysis must consider the increase in consumption value for local residents, including the public good value of the event and consumer surplus.

Furthermore, acquiring comprehensive data from all relevant stakeholders involved in the event can be a challenging task. There are also difficulties in selecting a suitable approach for conducting the analysis. Relying on financial expenditure alone as a proxy for profit may not accurately reflect the broader economic impact (5). In addition, assessing the impact becomes more complex when the resources used for the event originate from outside the host region. Finally, calculating value based on a selected multiplier effect can introduce further limitations, as the choice of multiplier significantly affects the outcome (19).

Also, ***tourism impact analysis (TIA)*** has notable limitations. It heavily relies on assumptions, which may introduce uncertainties and compromise the accuracy of the analysis. One key limitation involves the difficulty in precisely delineating the geographical area where economic effects are expected to occur (29). Additionally, TIA often fails to account for opportunity costs incurred by residents who are required to contribute funds through taxation, rather than being able to allocate those resources according to their own priorities within the community (37).

Another constraint is the potential for partial or skewed results, stemming from issues such as inaccurately defined impact zones and the inappropriate selection of multipliers (28). Moreover, there is often limited motivation for event organisers to conduct impact assessments unless public funding is involved, which contributes to a lack of critical review and scrutiny of published reports by researchers (29). These limitations underscore the importance of carefully considering the scope and methodology employed in tourism impact analysis to ensure accurate, objective, and reliable outcomes.

Survey- and interview-based approaches (SIA) serve as effective methods for collecting empirical data on self-reported variables. However, these methods can be time-consuming and resource-intensive, particularly when involving large respondent samples. They are also prone to respondent bias and data collection errors (10, 23). Survey-based approaches may face limitations concerning the accuracy of self-reported data and the potential for biased responses (4). In particular, visitor expenditure surveys may fail to capture the full complexity of spending patterns, with respondents often underreporting certain expenses (43).

Moreover, qualitative interviews, if used in isolation, can be subjective and lack the quantitative rigour required for comparative analysis across studies (25). Such methods are susceptible to personal biases and subjective interpretations, which can introduce inaccuracies in the assessment of the economic value of sports events. The limited scope of surveys and interviews compounds this issue, as they often reflect the perspectives of only a small subset of individuals, potentially failing to represent the broader population (4, 31). Consequently, findings based on these limited samples may lack generalizability and risk overlooking significant variations in economic impact. Additionally, relying on self-perceived impacts presents another challenge: individuals' subjective perceptions of well-being and happiness linked to sport events may not correspond with objective economic indicators. This disconnect between perception and reality may result in discrepancies in the evaluation of economic value (23).

As noted by Zourgani and Ait-Bihi, the topic of economic impact assessment of sporting events remains an ongoing issue, as the findings serve as valuable inputs for policymakers and assist stakeholders in event planning. Evaluating the economic impact of sporting events is a complex task that requires the use of sophisticated and often challenging analytical tools (3). To support this process, the paper offers a critical analysis and synthesises a summary of current assessment tools to help researchers and practitioners gain a clearer understanding of the available analytical approaches.

To facilitate decision-making in selecting appropriate analytical approaches, Figure 2 presents the primary criterion based on the level of analysis. Furthermore, Table 2 provides a critical analysis of the suitability of each method and presents examples of past studies that have employed each approach, thereby guiding scholars in selecting appropriate tools relevant to their research interests in the field. For example:

- If the research question concerns short-term tourist spending and visitor survey data are available → use an IOA, but include sensitivity tests and leakage estimates.
- If the research question concerns long-term regional GDP and panel data across regions are available → use other methods such as the Synthetic Control (15, 44), Difference-in-Differences (DiD) (45, 46), or event study approach (47, 48) with robustness checks.

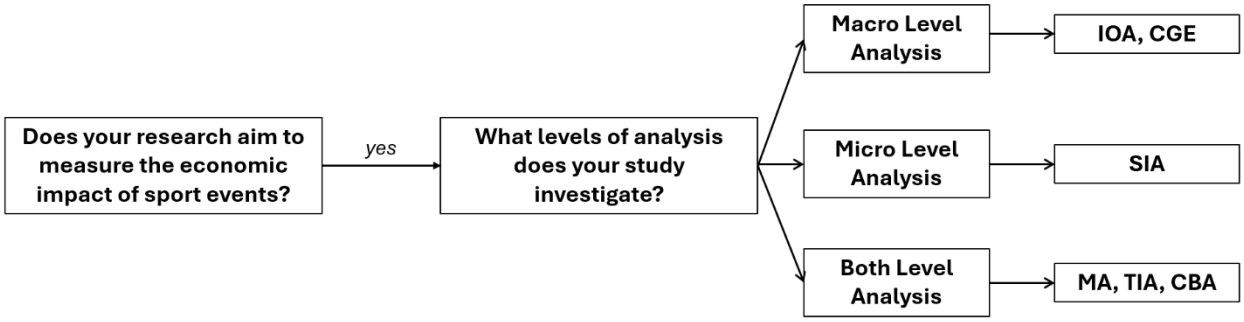

Figure 2. Decision flow for selecting tools to evaluate the economic impacts of sporting events.

In this paper, the author also concludes that each analytical method has its own advantages and limitations, which are primarily shaped by the assumptions upon which it is based. Notably, there is no single best practice for evaluating the economic impact of a specific sporting event. A range of factors should be considered when selecting the most appropriate method, including the expertise of the research team, the suitability of methodological assumptions for the given contextual setting, the availability of datasets, and resource constraints throughout the project.

Moreover, some methods may be interconnected, with certain approaches complementing one another and helping to validate the findings. Therefore, combining tools that align with the context may yield more comprehensive and meaningful results for stakeholders. It is also evident that quantitative analytical approaches have dominated the literature in this research domain. While this has generated broad findings, it has often overlooked more nuanced and in-depth insights into the economic impacts of specific sporting events. Future research may benefit from adopting a mixed-methods research design by integrating qualitative data analysis to complement quantitative findings, thereby enriching the field and providing a more holistic understanding of the economic impacts of sport events.

CONCLUSION

Economic impact assessment of sporting events remains a subject of ongoing debate among scholars, practitioners, and policymakers, primarily due to the substantial resources required to host such events. Although numerous studies have explored this area, a comprehensive review of the literature is lacking, providing clear guidelines on the application of various economic impact assessment methods. This study contributes to the research domains by discussing the use of different economic impact analytical approaches to support scholars and practitioners in selecting appropriate

tools for economic impact evaluation. Its ultimate aim is to provide an evidence-based academic overview of these analytical methods and to serve as an initial guide for researchers interested in measuring the economic impact of sporting events. The limitations of this study should be acknowledged. While the narrative review enables a rapid and up-to-date synthesis of relevant literature, its methodological nature poses challenges in terms of reproducibility and comprehensiveness. Consequently, updating and refining the study over time may prove difficult.

Table 2. Summary of tools for evaluating the economic impacts of sports events

Tools	Purpose	Used Variables	Levels of Investigation		Limitations	Examples of Studies
			Macro	Micro		
MA	It examines the cascading effects of sporting events on the local economy by estimating the multiplier effect of visitor expenditure, which reflects the additional income generated within the host community as a result of the event.	Macroeconomic indicators / Additional interest variables	✓	✓	Theoretical deficiencies / Complex economic indicators	(49)
IOA	It examines the interconnections between different sectors of the economy and assesses the effects of spending associated with the events.	Direct effect variables / Indirect effect variables / Induced effect variable / Multiplier effects	✓		Difficulty in capturing indirect and induced effects / Limited scope of analysis	(24, 25, 27, 36)
CGE	It encompasses the impact of sporting events in their entirety by accounting for variations in production, consumption, and trade, and provides a framework for assessing economic ramifications such as changes in employment, income, and welfare.	Various interconnected economic variables	✓		Methodological inconsistencies / Overstating economic benefits	(42)
CBA	It calculates the ratio of benefits to costs, which helps determine the economic impact and the value generated by the event.	Financial expenditure variables	✓	✓	Challenges in obtaining data for stakeholders / Not accurate due to solely employing financial variables	(19, 24, 27)
TIA	It aims to assess the economic consequences of sporting events, with a specific focus on the tourism sector.	Macroeconomic indicators / Tourism-related variables	✓	✓	Limit to the tourism sector.	(4, 5, 16-18, 22, 23, 28-32, 34, 35, 37-39, 43, 50)
SIA	It aims to collect data from stakeholders who attended the event to examine the relationships between key variables, such as expenditure patterns, employment, and the overall impact of the event.	Variables of interest that researchers examine in relation to the economic impact of events.		✓	Lack broader applicability / Overlook variations in the economic impact of sports events.	

Source: Authors' own work

Furthermore, some economic assessment methods may have been omitted, such as the Synthetic Control Approach, the event study approach, or distributional and fiscal incidence analyses that enhance the depth of quantitative evaluation. To advance this line of research, given the absence of a universally accepted approach for assessing the economic impacts of sporting events, future studies may consider employing systematic literature reviews or meta-analyses using extended

databases, such as Web of Science and EconLit, among others. These methods provide a more structured and comprehensive evaluation of economic assessment tools, enhancing the potential for replicable and transparent analyses. Such studies would enrich the field by offering deeper insights and systematic detail into the sport event impact assessment literature. Furthermore, systematically exploring a wider range of assessment tools beyond the economic perspective would add substantial value to the literature, as hosting sporting events also generates significant social and environmental impacts.

APPLICABLE REMARKS

- This review offers a foundational guideline for scholars seeking to evaluate the economic impacts of sporting events.
- It presents a critical analysis of the advantages and limitations of the most commonly employed analytical approaches in prior research within this domain.

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AUTHORS' CONTRIBUTIONS

Study concept and design: Thanavutd Chutiphongdech. Acquisition of data: Thanavutd Chutiphongdech. Analysis and interpretation of data: Thanavutd Chutiphongdech. Drafting of the manuscript: Thanavutd Chutiphongdech. Critical revision of the manuscript for important intellectual content: Thanavutd Chutiphongdech. Statistical analysis: Thanavutd Chutiphongdech. Study supervision: Thanavutd Chutiphongdech.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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No financial information is available for disclosure.

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This article does not involve any studies with human participants conducted by the author and therefore did not require ethics approval.

ROLE OF THE SPONSOR

The research funding body is a public university and had no role in the design and conduct of the study, the collection, management, and analysis of the data, or the preparation, review, and approval of the manuscript.

ARTIFICIAL INTELLIGENCE (AI) USE

During the preparation of this work, the author utilized AI-assisted tools to enhance the copyediting and final proofreading of the article, thereby improving its readability and language. Following the use of this tool, the author reviewed and edited the content as necessary and assumes full responsibility for the content of the submitted article.

REFERENCES

1. Chutiphongdech T, Kampitak T. A systematic review of the key success factors of sports event management: A Resource-based View pproach. *Annals of Applied Sport Science*. **2022**;10(4):1-10. doi:10.52547/aassjournal.1100.
2. Rossini L, Lavinia F, Alexandro A, and Federici D. Exploring the socio-economic impact of small and medium-sized sports events on participants, tourism and local communities: A systematic review of the literature. *Journal of Sport & Tourism*. **2024**;28(4):197-220. doi:10.1080/14775085.2024.2448940.
3. Zourgani A, Ait-Bihi A. A systematic literature review: Assessing the impact of sports events between 2010 and 2022. *International Journal of Sport Policy and Politics*. **2023**;15(2):347-65. doi:10.1080/19406940.2023.2206397.
4. Agha N, Taks M. Modeling resident spending behavior during sport events: Do residents contribute to economic impact? *Journal of Sport Management*. **2018**;32(5):473-85.
5. Chutiphongdech T, Tangtammaruk P, Aksorntap A, Tovara S, Daengmeesee S, Siwareepan N. Sport event hosting and provincial economic growth: Evidence from the Bangsaen21 Half Marathon in

Thailand. *Humanities and Social Sciences Communications*. **2025**;12(1):1098. doi:10.1057/s41599-025-05494-4.
6. Yüksel F, Ön F. Sport event research in the hospitality and tourism industry: a bibliometric analysis. *Worldwide Hospitality and Tourism Themes*. **2024**;16(4):423-39. doi:10.1108/WHATT-06-2024-0123.
7. O'Reilly N, Abeza G, Fodor A, MacIntosh E, Nadeau J, MacAdam L, et al. Impact studies in sport: the development of an assessment process model. *Sport, Business and Management: An International Journal*. **2020**;10(4):381-402. doi:10.1108/SBM-05-2018-0037.
8. Ranjan W. A review of sport events impact evaluation methods. *Journal of Tourism, Hospitality and Sports*. **2016**;19:31-6.
9. Andersson TM. Triple impact assessments of sport events. In: Söderman S, Dolles H, editors. Handbook of research on sport and business: Edward Elgar; **2013**. p. 237-56.
10. Li S, Jago L. Evaluating economic impacts of major sports events – a meta analysis of the key trends. *Current Issues in Tourism*. **2013**;16(6):591-611. doi:10.1080/13683500.2012.736482.
11. Sukhera J. Narrative reviews: Flexible, rigorous, and practical. *Journal of Graduate Medical Education*. **2022**;14(4):414-7. doi:10.4300/jgme-d-22-00480.1. PMid:35991099.
12. Ferrari R. Writing narrative style literature reviews. *Medical writing*. **2015**;24(4):230-5.
13. Byrne JA. Improving the peer review of narrative literature reviews. *Research Integrity and Peer Review*. **2016**;1(12):1-4. doi:10.1186/s41073-016-0019-2.
14. Chutiphongdech T, Phob-udom P, Zhao Y. A systematic review on managing esports events: A call to the Event Management community. *Event Management*. **2025**;29(3). doi:10.3727/152599524X17265263360412.
15. Kobierecki MM, Pierzgalski M. Sports mega-Events andeconomic growth: A synthetic control approach. *Journal of Sports Economics*. **2022**:15270025211071029.
16. Gelan A. Local economic impacts. *Annals of Tourism Research*. **2003**;30(2):406-25. doi:10.1016/s0160-7383(02)00098-1.
17. Lin H-W, Lu H-F. A longitudinal assessment on the economic effects of hosting major sporting events. *Applied Economics*. **2018**;50(56):6085-99. doi:10.1080/00036846.2018.1489117.
18. Wilson R. The economic impact of local sport events: significant, limited or otherwise? A case study of four swimming events. *Managing Leisure*. **2006**;11(1):57-70. doi:10.1080/13606710500445718.
19. Jiménez-Naranjo HV, Coca-Pérez JL, Gutiérrez-Fernández M, Sánchez-Escobedo MC. Cost–benefit analysis of sport events: The case of World Paddle Tour. *European Research on Management and Business Economics*. **2016**;22(3):131-8. doi:10.1016/j.iedee.2015.04.001.
20. Preuss H. The economic impact of visitors at major multi-sport events. *European Sport Management Quarterly*. **2005**;5(3):281-301. doi:10.1080/16184740500190710.
21. Burgan B, Mules T. Economic impact of sporting events. *Annals of Tourism Research*. **1992**;19:700-10.
22. Barajas A, Coates D, Sanchez-Fernandez P. Beyond retrospective assessment. Sport event economic impact studies as a management tool for informing event organization. *European Research on Management and Business Economics*. **2016**;22(3):124-30. doi:10.1016/j.iedee.2015.05.001.
23. Kavetsos G, Szymanski S. National well-being and international sports events. *Journal of Economic Psychology*. **2010**;31(2):158-71. doi:10.1016/j.joep.2009.11.005.
24. Crespo Sogas P, Fuentes Molina I, Araujo Batlle À, Raya Vílchez JM. Economic and social yield of investing in a sporting event: Sustainable value creation in a territory. *Sustainability*. **2021**;13(13):7033.
25. Daniels MJ, Backman KF, Backman SJ. Supplementing event economic impact results with perspectives from host community business and opinion leaders. *Event Management*. **2004**;8(3):117-25.
26. Diedering M, Kwiatkowski G. Economic impact of events and festivals on host regions-methods in practice & potential sources of bias. *Polish Journal of Sport and Tourism*. **2015**;22(4):247-52.
27. Taks M, Kesenne S, Chalip L, Green CB. Economic impact analysis versus cost benefit analysis: the case of a medium-sized sport event. *International Journal of Sport Finance*. **2011**;6(3):187-203.
28. Yao Q, Schwarz EC. Impacts and implications of an annual major sport event: A host community perspective. *Journal of Destination Marketing & Management*. **2018**;8:161-9. doi:10.1016/j.jdmm.2017.02.007.
29. Duglio S, Beltramo R. Estimating the economic impacts of a small-scale sport tourism event: The case of the Italo-Swiss mountain trail CollonTrek. *Sustainability*. **2017**;9(3):343.

30. Lee C-K, Taylor T. Critical reflections on the economic impact assessment of a mega-event: The case of 2002 FIFA World Cup. *Tourism Management*. **2005**;26(4):595-603. doi:10.1016/j.tourman.2004.03.002.
31. Bakhsh JT, Taks M, Parent M. Examining monetary valuation methods to analyze residents' social value from hosting a publicly-punded major sport event. *Frontiers in Sports and Active Living*. **2022**;4:823191. doi:10.3389/fspor.2022.823191. PMid:35399597.
32. Carvalho MJ, Sousa M, Paipe G, Bavaresco G, Felipe JL. Economic impact of the 11th douro valley half marathon. *Physical Culture and Sport Studies and Research*. **2018**;78(1):41-9. doi:10.2478/pcssr-2018-0012.
33. Kwiatkowski G, Oklevik O. Primary economic impact of small-scale sports events. *Event Management*. **2017**;21(3):269-80. doi:10.3727/152599517x14942648527509.
34. Maennig W. Major sports events: Economic impact. *Hamburg Contemporary Economic Discussions*. **2017**(58).
35. Lamla MJ, Straub M, Girsberger EM. On the economic impact of international sport events: microevidence from survey data at the EURO 2008. *Applied Economics*. **2014**;46(15):1693-703. doi:10.1080/00036846.2014.881972.
36. Kim MK, Kim S-K, Park J-A, Carroll M, Yu J-G, Na K. Measuring the economic impacts of major sports events: The case of Formula One Grand Prix (F1). *Asia Pacific Journal of Tourism Research*. **2017**;22(1):64-73.
37. Pereira L, Jerónimo C, Sempiterno M, Lopes da Costa R, Dias Á, António N. Events and festivals contribution for local sustainability. *Sustainability*. **2021**;13(3). doi:10.3390/su13031520.
38. Groothuis PA, Rotthoff KW. The economic impact and civic pride effects of sports teams and mega-events: Do the public and the professionals agree? *Economic Affairs*. **2016**;36(1):21-32. doi:10.1111/ecaf.12156.
39. Allmers S, Maennig W. Economic impacts of the FIFA Soccer World Cups in France 1998, Germany 2006, and outlook for South Africa 2010. *Eastern Economic Journal*. **2009**;35(4):500-19. doi:10.1057/eej.2009.30.
40. Massiani J. Assessing the economic impact of mega events using Computable General Equilibrium models: Promises and compromises. *Economic Modelling*. **2018**;75:1-9.
41. Massiani J. Computable General Equilibrium assessment of mega-events: Issues and possible solutions. *Journal of Policy Modeling*. **2022**;44(5):920-42.
42. Li S, Blake A, Thomas R. Modelling the economic impact of sports events: The case of the Beijing Olympics. *Economic Modelling*. **2013**;30:235-44. doi:10.1016/j.econmod.2012.09.013.
43. Brown C, Busser JA, Baloglu S. Sport tourists in a gaming destination: Predicting gaming and non-gaming expenditures. *UNLV Gaming Research & Review Journal*. **2010**;14(2):5.
44. Antolini V. The economic impact of next-generation stadiums: Evidence from the Juventus Stadium using synthetic control methodology. *National Accounting Review*. **2024**;6(4):531-47. doi:10.3934/NAR.2024024.
45. Kuo P-F, Shen C-W, Chiu C-S. The impact of large-scale events: A difference-in-difference model for a Pokémon go safari zone event in Tainan and its effect on bikeshare systems. *Transportation Research Part A: Policy and Practice*. **2021**;149:283-99.
46. Suggs W, Monday AB, May-Trifiletti J, Hearn JC. Institutional effects of adding football: A difference-in-difference analysis. *Research in Higher Education*. **2024**;65(6):1243-68.
47. Lertwachara K, Tongurai J, Boonchoo P. Mega sporting events and inward foreign direct investment: An investigation of the differences among the types of sporting events and host countries. *Journal of Sport Management*. **2022**;36(1):9-24. doi:10.1123/jsm.2020-0256.
48. Lertwachara K, Cochran JJ. An event study of the economic impact of professional sport franchises on local US economies. *Journal of Sports Economics*. **2007**;8(3):244-54.
49. Gratton C, Dobson N, Shibli S. The economic importance of major sports events: A case-study of six events. *Managing Leisure*. **2000**;5(1):17-28. doi:10.1080/136067100375713.
50. Gratton C, Shibli S, Coleman R. The economic impact of major sports events: A review of ten events in the UK. *The Sociological Review*. **2006**;54(2):41-58.