

## The Effect of Hosting Mega-Sporting Events on Asian Countries' Economic Growth

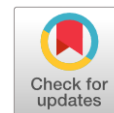
Rifqi Muhammad Aufa\* and Akhmad Syakir Kurnia

Department of Economics and Development Studies, Faculty of Economics and Business, Universitas  
Diponegoro, Semarang, Indonesia

\*Corresponding Email: [rifqimuhammadaufa@student.undip.ac.id](mailto:rifqimuhammadaufa@student.undip.ac.id)

Received: 31<sup>st</sup> December 2024; Last Revised: 24<sup>th</sup> April 2025; Accepted: 24<sup>th</sup> April 2025

Available Online: 26<sup>th</sup> April 2025; Published Regularly: March 2025



### Abstract

*This study aims to see the effect of hosting mega-sporting events: the FIFA World Cup, Summer Olympics, and Winter Olympics on Asian countries' economic growth, such as China, Indonesia, Japan, South Korea, Thailand, Bahrain, Singapore, Saudi Arabia, Malaysia, and India from 1998 to 2023. This study compares the effects of each Mega-Sporting Event (MSE) across nations using panel data. Because it takes into consideration country-specific factors that could affect the outcomes, the Fixed Effect Model (FEM) was used. Hosting the FIFA World Cup did not have a positive effect on economic growth, hosting the Summer Olympics brought a positive effect on economic growth, and hosting the Winter Olympics did not have a positive effect on economic growth. A limitation of this study is that it did not include Qatar because the variables used in the research were unavailable. Additionally, the study did not examine the indirect effects of hosting mega-sporting events on economic growth. **This study offers a novel** cross-country panel analysis on the economic impact of hosting MSEs in Asia over 26 years using a Fixed Effect Model.*

**Keywords:** Economic Growth, FIFA World Cup, Summer Olympics, and Winter Olympics

**JEL Classifications:** E17, L83, and O53

 <https://doi.org/10.14710/djoe.48955>



[This is an open-access article under  
the CC BY-SA 4.0 license](#)

Copyright © 2025 by Authors, Published by Faculty of Economics and Business, Universitas  
Diponegoro

### Introduction

Mega-sporting events (MSEs) are large-scale events with profound economic, social, and cultural implications. These events, which draw global attention, bring together thousands of participants and spectators, offering both opportunities and challenges for host nations. Prominent examples include the FIFA World Cup, a hallmark of international football, and the Olympics, a testament to global unity and sporting excellence. The inaugural FIFA World Cup in 1930, held in Montevideo, Uruguay, marked a pivotal moment in sports history, setting the stage for subsequent tournaments that have become cultural phenomena. Similarly, the Olympics, with their

bifurcated Summer and Winter editions, represent a platform for nations to showcase their athletic prowess, cultural heritage, and economic vitality.

Traditionally, developed countries with substantial infrastructure and financial capacity hosted MSEs. However, the landscape has shifted, with emerging nations increasingly taking on this role. Brazil's 2014 FIFA World Cup and South Africa's 2010 FIFA World Cup exemplify this transition, highlighting the ability of developing nations to host these global spectacles successfully. Asia, in particular, has emerged as a significant host region, underscoring its growing influence on the global stage. Events like the 2002 FIFA World Cup in South Korea and Japan, the 2008 Beijing Olympics, and the 2022 Qatar FIFA World Cup illustrate how Asian nations leverage MSEs to bolster economic growth, cultural diplomacy, and global prestige.

Despite their potential benefits, the economic impact of hosting MSEs remains a topic of considerable debate. Proponents argue that these events stimulate economic growth through increased tourism, infrastructure development, and job creation. For instance, the 2002 FIFA World Cup significantly boosted South Korea and Japan's GDP and created over 31,000 jobs (Winona, 2022). Similarly, the 2022 Qatar FIFA World Cup attracted substantial investment and showcased the nation's economic ambitions (Hernawan, 2023). On the other hand, critics highlight the substantial costs and risks associated with hosting MSEs. Examples such as the debt burden from the 1976 Montreal Olympics and underutilized facilities post-event, like Beijing's "Bird's Nest," raise questions about the long-term sustainability of these investments (PPPI, 2015). Additionally, the COVID-19 pandemic exposed vulnerabilities, with events like the 2020 Tokyo Olympics facing unprecedented challenges, including financial losses and reduced economic benefits due to restrictions (Agustina, 2021).

Against this backdrop, this research seeks to examine the relationship between hosting MSEs and economic growth, focusing on Asian countries as case studies. By analyzing variations in economic performance before, during, and after these events, this study aims to elucidate the extent to which MSEs contribute to GDP growth and identify factors that influence these outcomes. This investigation not only addresses a critical research gap but also provides valuable insights for policymakers seeking to optimize the benefits of hosting such events while mitigating associated challenges.

## **Literature Review**

Empirical studies on Mega Sporting Events (MSEs) reveal mixed economic outcomes. Anton et al. (2011) found positive growth in host nations, projecting similar impacts for South Africa post-2010 FIFA World Cup. Matheson and Baade (2004) and Zimbalist (2016) noted inflated benefit claims and high costs for infrastructure and operations, often resulting in negligible or adverse effects. McFarland (2017) emphasized the need for independent studies to provide accurate assessments of MSEs' economic impacts.

Keynesian economic theory, developed by John Maynard Keynes, highlights the role of aggregate demand in determining economic output and guiding government policies. Insufficient demand during downturns leads to unemployment and reduced production, which fiscal and monetary policies aim to counter. The theory underscores the importance of consumption, investment, government spending, and net exports in driving GDP growth, with changes in spending creating a multiplier effect on output and employment (Mankiw, 2009).

Aggregate demand (AD) is a measure of the total spending on goods and services within an economy at a specific time and price level. It is composed of four main components: consumption, investment, government spending, and net exports, each of which significantly influences AD. Consumption, which represents household expenditures, is positively influenced by prior GDP growth, as higher income levels typically lead to increased spending. However, higher interest rates and taxes negatively affect consumption, as they reduce disposable income and increase the cost of borrowing (Froyen, 2012).

Investment, which refers to business spending on capital goods, also correlates positively with prior GDP growth, as stronger economic performance encourages businesses to expand. Like consumption, investment is negatively impacted by higher interest rates, which raise borrowing costs. Government spending, on the other hand, is considered exogenous, meaning it is determined independently of economic fluctuations and is often used as a tool to stabilize the economy (Froyen, 2012).

Net exports, the difference between exports and imports, are influenced by exchange rates. Higher exchange rates make domestic goods more expensive for foreign buyers, reducing exports while increasing imports, which negatively impacts AD. Together, these components interact dynamically, determining the level of aggregate demand and driving the overall economic activity. Changes in these components can cause shifts in AD, ultimately affecting economic growth and stability (Froyen, 2012).

## Research Method

This research methodology employs quantitative techniques and makes use of panel data, which is secondary data that includes both cross-sectional and time series data. China, Indonesia, Japan, South Korea, Thailand, Bahrain, Singapore, Saudi Arabia, Malaysia, and India were the ten Asian nations from whom sample data for the cross-sectional study were taken. Annual data spanning 1998 to 2023 were used in the time series data. These ten countries and 26 years were selected to capture as many relevant events as possible across different nations, based on the availability of data. World Bank data was the source of the information. The Eviews10 program was used to perform the analysis.

This research will examine the effect of hosting mega-sporting events on economic growth. There are three models that have been used in this research:

### Model 1: The Effect of FIFA World Cup

$$Y_{it} = \alpha_i + \beta_1 Y_{i,t-1} + \beta_2 R + \beta_3 E + \beta_4 FDI + \beta_5 Gov\_Exp + \beta_6 Tour\_Rev + \delta_1 FWC + \mu_{it} \quad (1)$$

### Model 2: The Effect of the Summer Olympics

$$Y_{it} = \alpha_i + \beta_1 Y_{i,t-1} + \beta_2 R + \beta_3 E + \beta_4 FDI + \beta_5 Gov\_Exp + \beta_6 Tour\_Rev + \delta_1 SOLY + \mu_{it} \quad (2)$$

### Model 3: The Effect of the Winter Olympics

$$Y_{it} = \alpha_i + \beta_1 Y_{i,t-1} + \beta_2 R + \beta_3 E + \beta_4 FDI + \beta_5 Gov\_Exp + \beta_6 Tour\_Rev + \delta_1 WOLY + \mu_{it} \quad (3)$$

where:

|             |                                          |
|-------------|------------------------------------------|
| $Y$         | = GDP growth                             |
| $\alpha_i$  | = cross-section effect                   |
| $Y_{t-1}$   | = GDP growth year before                 |
| $R$         | = interest rate                          |
| $E$         | = exchange rate                          |
| $FDI$       | = foreign direct investment inflow       |
| $Gov\_Exp$  | = government expenditures                |
| $Tour\_Rev$ | = tourism revenue                        |
| $FWC$       | = dummy variable for FIFA World Cup      |
| $SOLY$      | = dummy variable for the Summer Olympics |
| $WOLY$      | = dummy variable for Winter Olympics     |
| $\mu$       | = error term                             |
| $i$         | = cross-section                          |
| $t$         | = time series                            |

## Result and Discussion

This study investigates the impact of hosting mega sporting events (MSEs) on economic growth in Asian countries, focusing on variables such as GDP growth, interest rates, exchange rates, Foreign Direct Investment (FDI) inflows, government expenditure, and tourism revenue. The descriptive analysis reveals significant variability in these indicators, highlighting diverse economic conditions across nations. For instance, GDP growth averages 4.173%, with notable fluctuations ranging from -13.127% to 14.520%, while tourism revenue and FDI inflows show moderate variation, reflecting differing national contexts. The study also examines the roles of China, Japan, and South Korea as prominent hosts of events like the FIFA World Cup, the Summer Olympics, and the Winter Olympics. These findings are critically analyzed within the Keynesian Economic Growth framework, demonstrating how hosting MSEs contributes to economic dynamics, including increased aggregate demand.

## Data Analysis

The study rigorously evaluates the Classical Linear Regression Model (CLRM) assumptions to ensure the validity and reliability of panel data analysis (see Table 1). Key diagnostic tests, including normality, multicollinearity, heteroscedasticity, and autocorrelation, were conducted. The Jarque-Bera test revealed that data are not normally distributed, though asymptotic normality in large samples ensures the robustness of fixed effects estimators. The multicollinearity test showed all correlation coefficients below the threshold of 0.8, confirming no significant multicollinearity issues. The Glejser test results indicated no heteroscedasticity across models, while the Durbin-Watson test revealed autocorrelation problems, though it is not critical in panel data analysis. Model selection tests, including the Chow and Hausman tests, confirmed the Fixed Effects Model (FEM) as the best fit for regression. The F-test results demonstrated that the independent variables GDP growth lag, interest rate, exchange rate, FDI inflows, government expenditure, tourism revenue, and hosting mega sporting events (FIFA World Cup, Summer Olympics, Winter Olympics) simultaneously and significantly influenced economic growth in 10 Asian countries

from 1998 to 2023. This comprehensive analysis underscores the robustness of the FEM in examining the impact of these variables on economic growth.

Table 1. Panel Data Test

| Model   | Test Name             | Test Type     | Test Result | Description                                                    |
|---------|-----------------------|---------------|-------------|----------------------------------------------------------------|
| Model 1 | Normality             | Jarque-Bera   | 0.000       | Abnormal error distribution                                    |
|         | Multicollinearity     | Matrix        | <0.800      | Multicollinearity does not exist                               |
|         | Heteroscedasticity    | Glejser Test  | >0.050      | Heteroscedasticity does not exist                              |
|         | Autocorrelation       | Durbin-Watson | 1.410       | Autocorrelation detected                                       |
|         | Hypothesis Test       | F-test        | 11.1498     | Independent Variable Simultaneously affects Dependent Variable |
|         | Best Regression Model | Chow Test     | 0.000       | Fixed-Effect Model                                             |
|         |                       | Hausman Test  | 0.000       | k                                                              |
| Model 2 | Normality             | Jarque-Bera   | 0.000       | Abnormal error distribution                                    |
|         | Multicollinearity     | Matrix        | <0.800      | Multicollinearity does not exist                               |
|         | Heteroscedasticity    | Glejser Test  | >0.050      | Heteroscedasticity does not exist                              |
|         | Autocorrelation       | Durbin-Watson | 1.413       | Autocorrelation detected                                       |
|         | Hypothesis Test       | F-test        | 10.6634     | Independent Variable Simultaneously affects Dependent Variable |
|         | Best Regression Model | Chow Test     | 0.000       | Fixed-Effect Model                                             |
|         |                       | Hausman Test  | 0.000       | Fixed-Effect Model                                             |
| Model 3 | Normality Test        | Jarque-Bera   | 0.000       | Abnormal error distribution                                    |
|         | Multicollinearity     | Matrix        | <0.800      | Multicollinearity does not exist                               |
|         | Heteroscedasticity    | Glejser Test  | >0.050      | Heteroscedasticity does not exist                              |
|         | Autocorrelation       | Durbin-Watson | 1.394       | Autocorrelation detected                                       |
|         | Hypothesis Test       | F-test        | 11.3677     | Independent Variable Simultaneously affects Dependent Variable |
|         | Best Regression Model | Chow Test     | 0.000       | Fixed-Effect Model                                             |
|         |                       | Hausman Test  | 0.000       | Fixed-Effect Model                                             |

### Fixed Effect Model Result

This study examines the factors influencing economic growth, including the impact of hosting the FIFA World Cup. The analysis reveals that without any influence from

independent variables, the baseline economic growth rate stands at 1.51% (see Table 2). Among the variables examined, prior GDP growth plays a significant role, where a 1% increase in the previous year's GDP growth leads to a 0.20% rise in the current year's growth ( $p < 0.05$ ).

Foreign Direct Investment (FDI) inflows emerge as another critical factor, with a 1% increase contributing to a 0.84% rise in economic growth ( $p < 0.05$ ). However, variables such as interest rates, exchange rates, government expenditure, and the FIFA World Cup do not exhibit significant effects on economic growth. Despite their statistical insignificance, a 1% increase in interest rates, exchange rates, and government expenditure corresponds to marginal changes in growth rates of 0.02%, 7.34E-05%, and -0.03%, respectively. Hosting the FIFA World Cup shows a non-significant 0.20% decrease in growth. Interestingly, tourism revenue significantly reduces growth by 0.16% for every 1% increase ( $p < 0.05$ ).

Table 2. Fixed Effect Model Result 1

| Variable  | Coefficient | Std. Error | t-Statistic | Prob.  |
|-----------|-------------|------------|-------------|--------|
| Constanta | 1.5124      | 0.8708     | 1.7367      | 0.0837 |
| $Y_{t-1}$ | 0.2032      | 0.0452     | 4.4938      | 0.0000 |
| R         | 0.0251      | 0.0270     | 0.9310      | 0.3527 |
| E         | 7.34E-05    | 5.90E-05   | 1.2437      | 0.2147 |
| FDI       | 0.8490      | 0.0594     | 14.2881     | 0.0000 |
| Gov_Exp   | -0.0377     | 0.0443     | -0.8527     | 0.3946 |
| Tour_Rev  | -0.1606     | 0.0470     | -3.4136     | 0.0007 |
| FWC       | -0.2048     | 0.4964     | -0.4127     | 0.6801 |

Table 3. Fixed Effect Model Result 2

| Variable  | Coefficient | Std. Error | t-Statistic | Prob.  |
|-----------|-------------|------------|-------------|--------|
| Constanta | 1.5920      | 0.8471     | 1.8792      | 0.0614 |
| $Y_{t-1}$ | 0.1794      | 0.0446     | 4.0171      | 0.0001 |
| R         | 0.0216      | 0.0266     | 0.8115      | 0.4178 |
| E         | 9.14E-05    | 5.77E-05   | 1.5838      | 0.1145 |
| FDI       | 0.8520      | 0.0572     | 14.8751     | 0.0000 |
| Gov_Exp   | -0.0574     | 0.0437     | -1.3115     | 0.1909 |
| Tour_Rev  | -0.1235     | 0.0459     | -2.6896     | 0.0076 |
| SOLY      | 1.8915      | 0.6404     | 2.9534      | 0.0034 |

This study evaluates the fixed-effect model regression results for factors influencing economic growth, particularly the impact of hosting the Summer Olympics. The constant value indicates that in the absence of any independent variable influence, the baseline economic growth rate is 1.59% (see Table 3). Among the variables analyzed, prior GDP growth and FDI inflows are significant determinants. A 1% increase in prior GDP growth results in a 0.17% increase in economic growth ( $p < 0.05$ ), while a 1% rise in FDI inflows boosts growth by 0.63% ( $p < 0.05$ ).

Tourism revenue is another significant variable, although its effect is negative; a 1% increase in tourism revenue reduces economic growth by 0.12% ( $p < 0.05$ ). Hosting the Summer Olympics significantly impacts economic growth as well, increasing it by 1.89% ( $p < 0.05$ ).

In contrast, interest rates, exchange rates, and government expenditure do not exhibit significant effects on economic growth. Specifically, a 1% increase in these

variables corresponds to changes of 0.02%, 9.14E-05%, and -0.05% in economic growth, respectively, none of which are statistically significant.

Table 4. Fixed Effect Model Result 3

| Variable  | Coefficient | Std. Error | t-Statistic | Prob.  |
|-----------|-------------|------------|-------------|--------|
| Constanta | 1.5689      | 0.8533     | 1.8386      | 0.0671 |
| $Y_{t-1}$ | 0.1831      | 0.0452     | 4.0496      | 0.0001 |
| R         | 0.0260      | 0.0267     | 0.9710      | 0.3324 |
| E         | 6.35E-05    | 5.82E-05   | 1.0911      | 0.2762 |
| FDI       | 0.8349      | 0.0582     | 14.3235     | 0.0000 |
| Govt_Exp  | -0.0196     | 0.0445     | -0.4420     | 0.6588 |
| Tour_Rev  | -0.1789     | 0.0461     | -3.8781     | 0.0001 |
| WOLY      | -1.2495     | 0.5535     | -2.2572     | 0.0248 |

This study evaluates the fixed-effect model regression results for factors influencing economic growth, particularly the impact of hosting the Winter Olympics. The constant value indicates that in the absence of any independent variable influence, the baseline economic growth rate is 1.56% (see Table 4). Among the variables analyzed, prior GDP growth and FDI inflows are significant determinants. A 1% increase in prior GDP growth results in a 0.18% increase in economic growth ( $p < 0.05$ ), while a 1% rise in FDI inflows boosts growth by 0.83% ( $p < 0.05$ ).

Tourism revenue is another significant variable, although its effect is negative; a 1% increase in tourism revenue reduces economic growth by 0.17% ( $p < 0.05$ ). Hosting the Winter Olympics significantly impacts economic growth as well, decreasing it by 0.82% ( $p < 0.05$ ).

In contrast, interest rates, exchange rates, and government expenditure do not exhibit significant effects on economic growth. Specifically, a 1% increase in these variables corresponds to changes of 0.02%, 6.35E-05%, and -0.01% in economic growth, respectively, none of which are statistically significant.

### Cross-Section Fixed-Effect

Cross-sectional effects provide additional insights for FIFA World Cup host countries. For Japan and South Korea, hosting the event adjusts their base economic growth rates to 0.94% and 2.54%, respectively. These findings underline the importance of FDI inflows and prior GDP growth as key drivers of economic growth while indicating that tourism revenue and mega-events like the FIFA World Cup may have adverse or negligible impacts.

Table 5. Cross-section Fixed Effect Result Model 1

| Cross ID    | Fixed-Effect | t-Statistic |
|-------------|--------------|-------------|
| China       | 4.2486       | -0.4957     |
| Japan       | -0.5654      | 0.0056      |
| South Korea | 1.0355       | -0.1360     |

Cross-section effects reveal variations for Summer Olympics host countries. For China and Japan, the adjusted base economic growth rates are 6.67% and 1.11%, respectively. This suggests hosting the Summer Olympics contributes significantly to economic growth in China but only marginally in Japan. These results underscore the importance of prior GDP growth and FDI inflows in driving economic performance

while highlighting the positive impact of mega-events like the Summer Olympics.

Table 6. Cross-section Fixed Effect Result Model 2

| Cross ID    | Fixed-Effect | t-Statistic |
|-------------|--------------|-------------|
| China       | 5.0803       | -0.6189     |
| Japan       | -0.4755      | 0.0116      |
| South Korea | 1.059        | -0.1193     |

Cross-section effects reveal variations for Winter Olympics host countries. For China, Japan, and South Korea, the adjusted base economic growth rates are 5.57%, 2.80%, and 2.99%, respectively. This suggests hosting the Winter Olympics contributes positively to economic growth in China but yields negative growth outcomes for Japan and marginally positive effects for South Korea. These results underscore the importance of prior GDP growth and FDI inflows in driving economic performance while highlighting the nuanced impact of mega-events like the Winter Olympics.

Table 7. Cross-section Fixed Effect Result Model 3

| Cross ID    | Fixed-Effect | t-Statistic |
|-------------|--------------|-------------|
| China       | 4.0028       | -0.6189     |
| Japan       | 1.2272       | 0.0116      |
| South Korea | 1.4300       | -0.1193     |

## Conclusion

This study examines the economic impact of hosting Major Sporting Events (MSEs), with findings highlighting that the effects on economic growth vary depending on the event. The Summer Olympics are shown to have a positive and statistically significant impact, while the FIFA World Cup and Winter Olympics either have negative or insignificant effects. The discrepancy arises from factors such as the scale, popularity, and investment levels associated with these events. The Summer Olympics, due to its broad appeal and significant economic activity, generate the most positive impact, while the Winter Olympics and FIFA World Cup show limited benefits due to high costs, shared rewards, and minimal post-event advantages.

The study's limitation is the exclusion of Qatar as a host country for the FIFA World Cup, due to unavailable data, which affects the comprehensiveness of the analysis. The research also acknowledges the complexity of measuring the indirect effects of MSEs on economic growth, suggesting the use of advanced econometric models to better capture these effects.

For policy recommendations, governments should consider collaborative hosting, as seen with South Korea and Japan during the 2002 FIFA World Cup, to reduce financial strain and foster regional cooperation. Events with substantial economic benefits, like the Summer Olympics, should be prioritized for hosting, while careful cost-benefit analyses should be conducted for events with smaller returns, like the Winter Olympics and FIFA World Cup, to ensure a balance between expenses and expected benefits.

Future research should aim to include Qatar's FIFA World Cup data and utilize advanced models like structural equation modeling or dynamic panel data approaches to explore the indirect effects of MSEs. Comparative studies across countries with

different levels of development and governance could further enhance understanding of the economic outcomes of hosting such events.

## References

- Almalik, R., Shaheen, R., & Ahmed, M. (2024). The impact of foreign direct investment on economic growth: Empirical evidence in G20 countries. *International Journal of Advanced and Applied Sciences*, 11(10), 90–98. <https://doi.org/10.21833/ijaas.2024.10.010>
- Baade, R., & Matheson, V. (2015). An Analysis of Drivers of Mega-Events in Emerging Economies. *Economics Department Working Papers*. Paper 153. [https://crossworks.holycross.edu/econ\\_working\\_papers/153](https://crossworks.holycross.edu/econ_working_papers/153)
- Baker, W. (2019). The economic impact of mega sport event [Bachelor's thesis]. Trinity College. Available online: <https://digitalrepository.trincoll.edu/theses/793>
- Bakshi, J., & Elangbam, R. S. (2022, September 20). Interest rate and economic growth linkages: An experience of the Indian Economy. *American Journal of Economics and Business Management*. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4304657](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4304657)
- Brenke, K., & Wagner, G. G. (2014). FIFA World Cup 2014: Ein fragwürdiger Spaß für die Menschen in Brasilien.
- Chairunnisa, G., & Muchlis, M. (2023). Transformasi ekonomi melalui Piala Dunia FIFA 2022: Analisis meningkatnya pendapatan per kapita di Qatar sebagai tuan rumah.
- Drapkin, I. M., & Lukyanov, S. A. (2020). The effects of large-scale sport events on foreign direct investment inflows: The results of empirical estimation. *MGIMO Review of International Relations*, 12(6), 167–187. <https://doi.org/10.24833/2071-8160-2019-6-69-167-187>
- Drobyshevsky, S., Trunin, P., Bozhechkova, A., & Sinelnikova-Muryleva, E. (2017). The effect of interest rates on economic growth.
- Edwards, D. (2023, March 23). The impact of Miami Grand Prix on hotel performance.
- Ezebunwo, N. N. (2024). Impact of exchange rate on economic growth in Nigeria. *International Journal of Advanced Economics*, 6(6), 242–250. <https://doi.org/10.51594/ijae.v6i6.1237>
- Firgo, M. (2019). The causal economic effects of Olympic Games on host regions.
- Gleason, T. (2023, January 5). No more empty stadiums: A meta analysis of mega sporting events and their economic impact.
- IAF. (2024, August 10). The economic effect of hosting mega sports events in developing countries. [https://www.ia-forum.org/Content/ViewInternal\\_Document.cfm?contenttype\\_id=1&ContentID=9586](https://www.ia-forum.org/Content/ViewInternal_Document.cfm?contenttype_id=1&ContentID=9586)
- Koskinen, T. (2022, March). Economic Impact of Tokyo 2020 Olympic Games that never happened.
- Kunwar, S., & Nepal, S. (2024). Government expenditure and economic growth of Nepal. *The Lumbini Journal of Business and Economics*, 12(1), 135–148. <https://doi.org/10.3126/ljbe.v12i1.70328>
- Lertwachara, K., Tongurai, J., & Boonchoo, P. (2021). 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*, 36(1), 9–24. <https://doi.org/10.1123/jsm.2020-0256>
- Liu, D. (2023). Comparison of Beijing and PyeongChang Winter Olympics. *Advances in Economics Management and Political Sciences*, 20(1), 263–267. <https://doi.org/10.54254/2754-1169/20/20230205>
- Müller, M., & Wolfe, S. D. (2014). World Cup Russia 2018: Already the most expensive ever? *Russian Analytical Digest*, 150, 2-6. <https://doi.org/10.5167/uzh-101440>
- Matheson, V., & Baade, R. (2004, December). Mega-sporting events in developing nations: Playing the way to prosperity?
- Mcfarland, T. (2017). *Economic impact of sports mega-events: A meta-analysis*.
- Mishkin, F. (2018). The economics of money, banking and financial markets. Pearson.
- Mohsen, A. S., Hoang, F. A., & Tariq, A. F. (2022). Effect of interest rates on economic growth in Bangladesh. *Journal of Economics*, 6(1), 36–44. <https://doi.org/10.53819/81018102t5086>
- Mubinzhon, A. (2023, March 10). The impact of investment on economic growth: Evidence from Tajikistan.
- Pearce, S. (2017). Hosting mega Events impact on GDP Growth: A panel data analysis.
- Popescu, C., & Diaconu, M. (2021, June 9). Government spending and economic growth: A cointegration analysis on Romania.
- PPPI. (2015, September 15). Olympic games and its economic impact. *Paramadina Public Policy Institute*. <https://policy.paramadina.ac.id/olympic-games-and-its-economic-impact>
- Pramanik, S. (2021, April). Exchange rate and economic growth: A comparative analysis of the possible relationship between them.
- Prestiantika, S., & Sishadiyati. (2024, June 27). The effect of tourism revenue on community welfare through economic growth.
- Prijis, M. (2018, May). Sports, economic performance and FDI: The impact of hosting different sports mega-events on economic growth and foreign direct investment in developed and developing countries, 1970 - 2016.
- Rogneda, G., Drapkin, I., & Mariev, O. (2018). The effects of major sports events on economic growth and foreign direct investment inflows: The results of empirical estimation. *10th Economics & Finance Conference*. <https://doi.org/10.20472/efc.2018.010.030>
- RRI. (2024, July 13). Kilas sejarah 13 Juli 1930: Piala Dunia FIFA pertama. <https://www.rri.co.id/sepak-bola/822405/kilas-sejarah-13-juli-1930-piala-dunia-fifa-pertama>
- Septiyanto, A. (2024, June 30). Culinary economic and social impacts of mega-sporting events: A comprehensive literature review.
- Sergey, D., Alexandra, B., Pavel, T., & Elena, S. (2017). The effect of interest rates on economic growth.
- Sugiyono. (2013). *Metode penelitian kuantitatif, kualitatif dan R&D*. Alfabeta.
- Susilo, D. (2017). The impact of foreign direct investment on economic growth (A casual study in the United States).
- Terry, D. (2023, August 4). Hanoi hell inside the deserted £540m F1 Circuit planned for the Vietnamese GP before it was canned when mayor was sent to jail. *The Sun*. <https://www.thesun.co.uk/sport/20093252/f1-deserted-circuit-vietnamese-grand-prix/>

- Ramadhani, N. M. R., & Afifah, N. Z. (2023). Effect of investment and employment on economic growth. *Journal of Economic Studies*, 2(2), 93–99. <https://doi.org/10.61730/ojes.v2i2.108>
- Wahyuningsih, E., & Purnomo, P. (2024). The influence of the number of tourists, total tourism revenue and renewable energy consumption on economic growth.
- Winona, C. (2022, November 21). Keuntungan ekonomi Piala Dunia U-20 bagi Indonesia. <https://cwts.ugm.ac.id/2022/11/21/keuntungan-ekonomi-piala-dunia-u-20-bagi-indonesia>
- Wooldridge, J. (2012). *Introductory econometrics: A modern approach*. Cengage Learning.
- Hernawan, F. D. (2023). Dampak penyelenggaraan Piala Dunia FIFA 2022 dalam meningkatkan perekonomian Qatar: Tinjauan ekonomi politik internasional. *UNAS Repository*. <http://repository.unas.ac.id/8652>
- Yanti. (2015). Analisis pertumbuhan ekonomi Indonesia sebelum dan sesudah krisis global 2008.
- Zawadzki, K. (2023). The economic legacy of mega sporting events: The impact of hosting European Olympic Games on GDP growth through infrastructure development. *Polish Journal of Sport and Tourism*, 29(3). <https://doi.org/10.2478/pjst-2022-0019>
- Zimbalist, A. (2016). The organization and economics of sports mega-events. *Intereconomics*, 15(3), 110-111. <https://doi.org/10.1007/s10272-016-0586-y>