Examining the Link Between Sports Tourism, FDI Inflow, Economic Growth, and FDI Inflows: Does Legal Restrictions on Alcohols Consumption During Sports Events Matter?

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Abstract

The primary objective of this study is to examine the direct effect of sports tourism, FDI inflows, and legal restrictions on alcohol consumption during sporting events on the economic development of Arab Gulf nations. The study also investigated the moderating effect of alcohol consumption during sporting events on the relationship between sports tourism and economic growth. The panel data methodology and fixed effect are utilized in the study, and GMM estimates are utilized for data analysis. The data for variables from 1995 to 2022 come from the databases of the world bank and national statistical offices. FDI, sports FDI, the organization of mega sports events, alcohol consumption, and sports tourism all appeared to have a positive relationship with economic growth, as indicated by the fixed effect estimates. However, there is no correlation between alcohol consumption and economic growth. The findings of the GMM estimates corroborate those of the fixed effect estimates. Further findings indicate that the relationship between sports tourism and alcohol consumption is positive and statistically significant, which suggests that allowing alcohol consumption in the presence of sports tourism will boost the economic development of Arab Gulf nations. In Arab Gulf countries, where alcohol is frequently regarded as incompatible with religious and cultural values, it is vital to consider the potential cultural and social consequences of alcohol consumption. Therefore, any policy decisions regarding the legality of alcohol consumption in these nations should be thoroughly weighed against other social and cultural concerns. This is one of the first studies to examine the impact of sports tourism, FDI inflows, and legal restrictions on alcohol consumption during sporting events on the economic development of Arab Gulf nations.

Keywords: sports tourism, FDI inflows, alcohol consumption, sports events, economic growth, Arab Gulf countries.

Background

Due to the global spread of capitalism and its dominance in the global economy, sports, in general, and sports in particular, have become intricately intertwined with many consumer values that define modern societies. It has become the ideal strategy for spreading social, national, or regional propaganda and advertisements of tourist destinations. It attracts consumers and investors due to its widespread application, product potential, and capacity to inspire novel consumption habits among the crowd or tourists gathered to appreciate or observe the event. In the modern era, sports have enjoyed a new form of soft power that encourages people, particularly youth, to adopt or adapt the lifestyles of professional players or athletes, which marketers have begun to recognize over the past few decades. They now understand how to capitalize on this positive reinforcement and encouragement (Fulton, 2021). Understanding the co-determinism between the economics and sports realms and the influences that each can have on the other is becoming increasingly important. At the core of every for-profit organization is producing value-added goods, which aids in maximizing wealth. In

addition, the business world, particularly the fashion, apparel, and sports outfits industries, now view sports and athletes as integral, dynamic, and central elements (Wallace, 2022). In addition, it helps the firms in the home country to establish their image and strengthen their perception in the eyes of sports tourists attending the event in their home country, which helps to explain why so many countries compete to host international sporting events: while doing so would require a significant increase in government spending, the issue at hand is a long-term investment for nations, and numerous studies have shown that hosts anticipate revenues to increase over time. Although doing so would require a substantial increase in government expenditure, the issue is an investment for nations. According to a study conducted by the FIFA World Cup Organizing Committee, Russia's annual economic growth will increase by approximately $3 billion over the next five years as a direct consequence of hosting the 2018 World Cup (Russo, Figueira, & Mataruna-dos-Santos, 2023). In addition, the event provides an excellent opportunity for Russian firms that have recently completed infrastructure projects to demonstrate their effectiveness and attract foreign direct investment.

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To become global centers and landmarks, many developed, and developing nations plan and compete to host significant events such as the FIFA World Cup and the Olympics. By hosting such mega sports events, nations are attempting to improve their economic, political, or international standing to accelerate urbanization and promote their assets. It is now a global consensus that a country that effectively hosts a mega event will be ranked among the world's top nations. People from diverse communities and backgrounds gathered at one location to share their unique preferences, experiences, and culture, allowing local businessmen, policymakers, and think tanks to gain new perspectives on their pertinent information, ideas, and problems. Maurice Roche, a renowned British sociologist, coined the term colossal events and defined them as short-term events with long-term effects on host cities in his explanation of this phenomenon. The mega-events provide the host nation with a new identity and a positive mental image maintained (often continuously) by the media's intense concentration on the nation (Penfold, 2019). This has long-term benefits, especially for tourism, infrastructure rehabilitation, and recruiting foreign investors, regardless of whether or not the state successfully hosts the event.

The then-mayor of Montreal, Jean Drapeau, exclaimed these words when he learned that his city would host the 1976 Winter Olympics (Frize, 2019). However, inflation, labor disputes, and an ineffective tendering process contributed to substantial cost overruns, proving that he made inaccurate predictions. Whether a country or city should host mega-sporting events is frequently the subject of vigorous debate among the media, politicians, and academics (for a recent, comprehensive treatment of the topic, see (Pourpakdelfekr & Oboudi, 2022). Two of the most common objections raised by those who oppose the event are its cost and the possibility that it will be used again. Those in favor of holding the event will contend that it will stimulate economic growth and attract more domestic and international investment due to increased export revenues (Song & Zhou, 2020) and positive publicity for the nation (due, for instance, to the influx of tourists). However, in most instances, massive sports events result in FDI inflows to the host nation. Thus, the study aims to assess the effect of sports-related FDI on economic growth.

The relationship between tourism and alcohol consumption has been the focus of numerous studies over the past two decades. While researching the tourism industry's determinants, scholars and researchers have attempted to examine the relationship between alcohol consumption and international tourism, particularly regarding occupational experience (Gupta et al., 2023; Ha Nam Khanh, 2020). It has been the subject of debate because many cultures and societies

worldwide view imbibing as usual and even integral to the holiday season. To be more precise, the existing corpus of knowledge has examined drinking patterns and experiences in numerous tourist settings and samples. However, the effect of allowing public alcohol consumption on promoting tourism is supported by scant evidence, the majority of which is contradictory. Most studies on the drinking habits of vacationing visitors have concentrated on young Westerners (Gupta et al., 2022). Therefore, the findings only paint an incomplete picture of the relationship between tourism and alcohol (primarily in the United Kingdom and the United States). However, research on the drinking habits of other categories of tourists, such as those of older age or from Asia, has lagged (Al-Saidi, 2021). In addition, most research on young people's drinking habits on vacation has focused on extreme cases, such as excessive drinking. Therefore, consuming alcohol while on vacation has frequently been portrayed as a social problem and discussed within "deviant behavior" and "moral panic" narratives, both of which link it to other socially unacceptable behaviors (such as violence, aggressive behavior, crime, and drugs) (Bradley, 2021). Depending on where they go, what they do, and who they travel with, the quantity of alcohol a person consumes while on vacation can vary significantly. In certain instances, such as when college students are on spring break, alcohol consumption may be the primary motivation for a trip. In other instances, however, alcohol consumption may be a secondary yet significant aspect of the journey (Vuillier et al., 2021). With a few notable exceptions, there has been minimal research on the drinking customs of countries with Muslim religious traditions, such as Qatar.

The Arab Gulf states have a distinct culture and adhere to Islamic Sharia law, prohibiting alcohol consumption in public and private settings (Farah et al., 2021). As Several verses in the Quran discourage alcohol consumption and its harmful effects, including:

"O you who have believed, indeed, intoxicants, gambling, [sacrificing on] stone alters [to other than Allah], and divining arrows are but defilement from the work of Satan, so avoid it that you may be successful." (5:90)

These verses, along with others, emphasize the negative effects of alcohol and its potential to lead people astray. Therefore, many countries with a Muslim majority prohibit alcohol in public spaces and regulate its consumption strictly. In addition, halal tourism is promoted as a means for Muslims to travel without compromising their religious values and beliefs. Arab nations have recently shifted their focus from oil-based economies to economies based on knowledge, tourism, and athletics. One of the issues highlighted in one of the most significant events ever hosted by Arab Gulf countries

was the prohibition of alcohol consumption in football stadiums (Rookwood, 2019). The number of visitors who visited Qatar in the year of the FIFA World Cup Qatar 2022 broke all previous records. In a BBC Sports poll, the 2018 FIFA World Cup in Russia, which attracted more than 1.4 million football fans worldwide, was voted the most incredible World Cup of this century. During the 29-day, 32-nation tournament, visitors from around the globe could take advantage of Qatar's numerous tourist attractions, restaurants, museums, and cultural events to experience more than just the games. In addition to the activities, the tournament featured numerous cultural events. More than one million people visited Qatar between January 2022 and August 2022 as the country prepared for the prestigious tournament, demonstrating the country's remarkable recovery from the Covid-19 pandemic (Scharpf, Gläßel, & Edwards, 2022). In addition to the reopening of the Museum of Islamic Art and the opening of the pedestrianized Lusail Boulevard, which has been described as "the country's latest open-air shopping and dining destination," tourists were able to witness the opening of Al Maha Island and several public spaces, as well as the opening of several world-class luxury hotels and resorts, including Fuwairit Kite Beach, Rixs Gulf Hotel Doha, and The Outpost Al Barari.

Skytrax recognized Qatar Airlines as the "best airline in the world," one of the numerous accolades the airline has received over the years. Qatar Airways operated close to 14,000 flights during the World Cup, substantially boosting the country's robust tourism industry. As the Official Airline Partner of FIFA, the airline acted as the country's official representative. In 2022, QT initiated multiple tourism promotion campaigns. One of these ads was titled "No Football, No Worries" and featured the legendary Italian soccer player Andrea Pirlo. The campaign brought attention to the carefully curated, high-quality Qatari offerings. The successful event has left researchers with a few questions:

- How do the FDI inflows from mega sports events affect the country's economic growth?
- What is the impact of sports tourism on the country's economic growth?
- Does a ban on Alcohol consumption impact the economic growth of the country?

Literature Review

Over the last few decades, scholars utilizing a variety of theoretical models have attempted to examine the long-term effects that hosting mega events, particularly in sports, can have on macroeconomic factors, including metropolitan expansion, tourism receipts, foreign investment, and GDP growth. Alalawneh, Mammadov, and Alqasem (2021) studied the short- and long-term effects of hosting the FIFA 2010 World Cup in South Africa on the country's economic growth. A survey of 1,135 individuals from nine surrounding areas revealed that the municipality's one-year hosting duties positively impacted economic development and resident well-being, despite the fact that most local residents did not attend the world cup matches. The study's recommendations assisted policymakers and tournament organizers in devising policies to improve the long-term viability of major sporting events. Similarity Ermolaeva and Lind (2021) analyzed the short- and long-term effects of hosting the FIFA World Cup on a variety of social, societal, and economic factors, including i) the modernization, development, and upgradation of infrastructure, such as the modernization of the city's transport system, the construction of new stadiums, and the upgrading of sports centers. ii) propagation of a soft image of a nation's culture and a stamp on its respect for peace and propensity of masses, iii) Finally, he concluded that these events have long-lasting effects on the host nation's long-term economic growth and FDI inflows. Comerio and Strozzi (2019), utilizing CGE models and concentrating on the 2008 Beijing Olympics, found that the organization of mega sports events significantly positively impacted China's long-term economic growth. The study's findings indicated that the organization of such events not only stimulates the host nation's economy but also influences the development of nations with similar cultures or values. In addition to the organization of mega-sporting events such as the FIFA World Cup or the Olympics, the organization of Expos has a significant impact on the economic development of any nation. Expo 2012, organized by South Korea and held in Yeosu, Korea, had a significant impact on that country's spending habits and economic development, according to Singh et al. (2023). In addition, the study revealed that coordinating such mega events stimulates employment by creating more jobs and hosting a diverse international workforce, which in turn trains the local labor force. The host region was found to be responsible for 80% of the effects while neighboring regions were responsible for 20% of the effects. According to the study's findings, when calculating the economic impact of hosting mega-events, it is crucial to consider not only the host countries but also the economic region. It is evident from the literature that sports events contribute to economic growth by promoting sports tourism and infrastructure development. The market for sports tourism is expected to reach approximately $560 billion by 2027, according to a report (Figure 1).

Market Size Outlook (USD Billion)

2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027
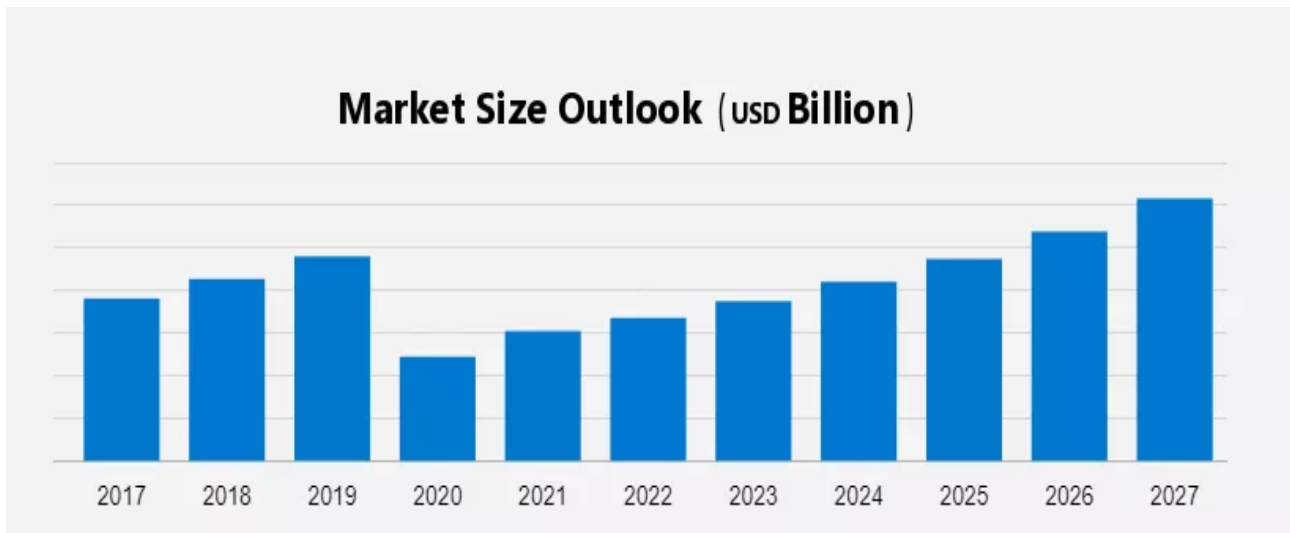
Figure 1: Sports Tourism Market Size in USD Billions
Source: Technavio.com

Hayduk and Naraine (2022) conducted a fascinating study that analyzed the effect of mega sports events such as the Olympic Games and FIFA on the development and growth of small and micro businesses in host nations and surrounding areas. Using a survey-based methodology, data from the five continents were gathered. The study results revealed that the organization of mega-events accelerates the development of micro and small firms, which in turn boosts the economic growth of a country. Sani and Mulyandi (2022) conducted a study to determine the effect of significant tourism events on Surakarta's economic growth. The research followed a descriptive approach by accumulating and analyzing data. The results demonstrated that infrastructure, security, and safety budgets impact planning a significant tourist event in the city. The research was carried out in the United States. According to the findings, hosting and coordinating events of this magnitude has a positive effect on the local economy. Fourie and Santana-Gallego (2022) contrasted the economic impact of the London 2012 Summer Olympics and the Brazil 2014 FIFA world cup, even though the former was hosted by a developed nation and the latter by a developing nation. Considering various factors such as marketing campaign cost and infrastructure development, the study revealed that the positive impact of sports tourism and hosting a mega event in London was significantly more significant than in Brazil. To explain the difference between these two outcomes, they asserted that London's status as a well-established tourist destination with an acceptable but already established infrastructure gave it a competitive advantage. At the same time, the Olympics hosted a relatively more significant number of countries. According to Falla (2022),

mega-events such as the Olympics, the FIFA World Cup, and the Commonwealth Games have a positive impact on the urban development of the host cities, as well as political, economic, and cultural consequences. This research distinguishes itself by utilizing novel approaches to answer how individuals, communities, and host cities experience the effects of mega events and tourist arrival.

It was discovered that the mega-event encouraged urban development in the city and that tax revenues and land prices were the two most significant economic indicators that responded to the mega-event. Some of these earlier studies concentrated on the direct economic impact, such as the effect of hosting mega-events on economic expansion. Other of these earlier studies concentrated on the indirect economic effects. Others examined the social impact, such as how it would impact urbanization, while others examined the indirect economic impact, such as how it would impact urbanization. Researchers have investigated the effects of significant sporting events on developed and developing countries. In most earlier studies, descriptive methods were used extensively during the data collection and analysis phases (Qalati et al., 2021). This study differs from others in several ways, including the use of notable macroeconomic factors for hosting major events, such as foreign direct investment, infrastructure spending, and tourism revenues; the study also focuses on a relatively long period, including the preparation period, the hosting period, and the post-hosting period. In addition, the study employs prominent macroeconomic variables, such as foreign direct investment, infrastructure spending, and tourism revenues, for hosting significant events. These characteristics distinguish this study from comparable

ones conducted by other researchers. This study combined descriptive analysis with a contemporary statistical methodology to investigate the long-term impact of mega-sporting events on economic development. It is impossible to exaggerate the importance of athletics to Germany's culture. In 2006, there were 91,000 sports clubs in Germany, which the country's 27.4 million inhabitants frequented. The German Olympic Committee officially recognizes the preponderance of these sports as legitimate competitions.

As evidenced by Germany's status as one of the world's most powerful footballing nations due to its four World Cup and three European Cup victories, the fierce competition among countries to host the World Cup appears to reflect the immense economic and noneconomic benefits of hosting the tournament. After Germany was awarded the right to host the 2006 FIFA World Cup on July 6, 2000, the German government promptly invested 1.5 billion Euros in renovating older stadiums and constructing 12 new stadiums in the 12 host cities. Additionally, the transportation infrastructure received an additional investment of €3.9 billion, including €500 million for a brand-new traffic management system. Over three billion viewers witnessed 64 World Cup matches in 2006, making it one of the most-viewed sporting events in history. Following tournaments held in 1994, 2002, and 1998, it rated fourth among the most-watched tournaments. According to the numbers, FIFA and Germany spent considerable money to ensure a tournament of historic significance. This tournament benefited millions of attendees, approximately 15,000 journalists and media professionals, and millions of television viewers worldwide. The costs of developing Germany's transport infrastructure and building stadiums in the twelve host cities are detailed below. According to the data presented below, the most expensive stadium was constructed in Munich, Germany, at a total cost of 340 million Euros. It made its début in 2005 and has 67,432 seats.

In recent years, the number of individuals traveling to sporting events has increased significantly, participating in or observing sporting events at a particular location. According to studies, a country or city hosting a sporting event can earn a significant amount of money from tourism related to the event. It has been demonstrated that large-scale sporting events are particularly effective at attracting many people and stimulating the economy.

The subject of extensive research is the relationship between hosting sporting events as a tourist attraction, fostering economic growth, and attracting foreign direct investment. According to research, increasing foreign direct investment (FDI) flows into the economies of countries that host significant sporting events. Investors favor these nations because of their positive reputation in the international community and their potential for economic development (Lertwachara, Tongurai, & Boonchoo, 2021). The expansion of sports tourism and the staging of large-scale sporting events can have positive economic effects, including the creation of new jobs, an increase in tax revenues, and the development infrastructure.

Nonetheless, the expansion of sports tourism and the success of significant sporting events are susceptible to several factors. One of these factors is the imposition of a legal alcohol limit, which is discussed in greater detail in the following section. Limiting the quantity of alcohol that can be consumed has been shown to reduce tourism. This is because many people associate alcohol with negative experiences. When the legal prohibition of alcohol consumption is applied to sports tourism and large-scale sporting events, it can diminish the character of the tourist experience and the economic returns. Alcoholic beverage consumption, sports-related tourism, and overall economic growth are intertwined in ways that merit further study.

Alcohol Bans: Legal Implications

Alcohol Ban refers to the policies that restrict or prohibit the production, sale, and consumption of alcohol within a country's jurisdiction. These policies differ from country to country based on the assumptions and circumstances underlying the imposition of any particular ban. As they involve restricting a legal product or activity, they can have significant legal ramifications for the government. In the majority of cases, the violation of the alcohol prohibition is punishable, and anyone found violating the law regarding the production, sale, or consumption of alcohol faces fines, imprisonment, or both. This may have significant legal ramifications since it involves the formulation and subsequent implementation of laws. The legal repercussions of violating an alcohol prohibition may vary from country to country and region to region because different nations consider various factors, such as religion, culture, public safety, public health, crime rate, etc. when imposing such bans. As in many Muslim countries, such as Saudi Arabia, Libya, Kuwait, Qatar, Sudan, and Pakistan, the sale, production, and consumption of alcohol are prohibited for religious and public health reasons, whereas in other parts of the world, it is prohibited for a variety of other reasons, such as to reduce crime, corruption, tax burden, and improve health hygiene. Strict law enforcement agencies must implement such a prohibition capable of identifying and punishing lawbreakers.
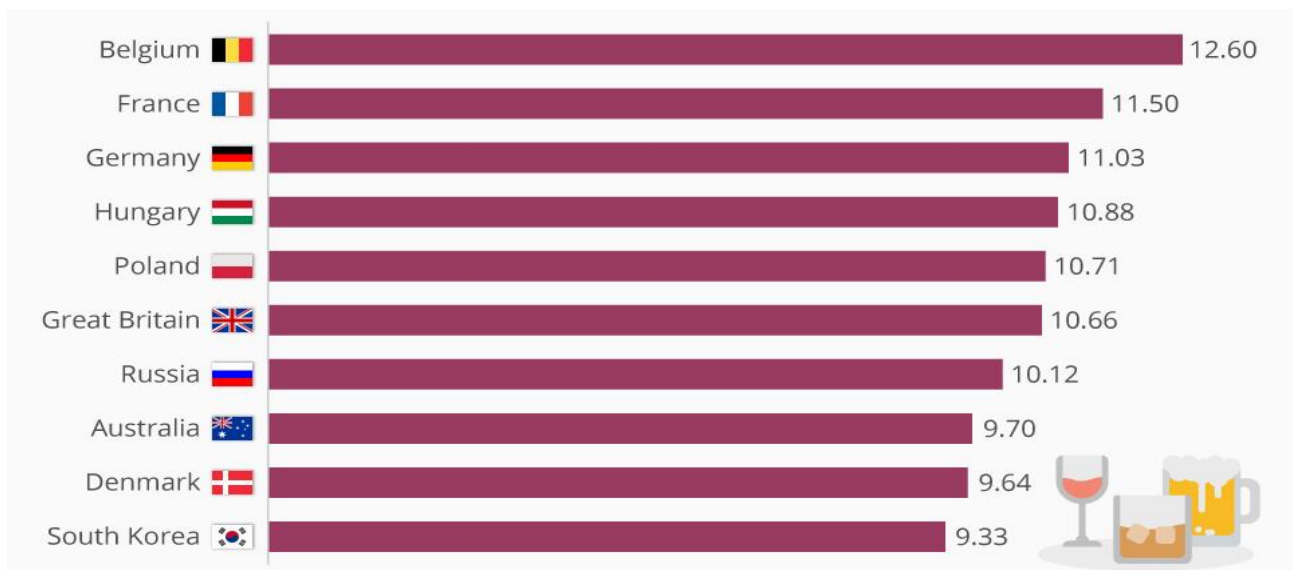
Figure 2: Countries with higher per-capital consumption of alcohol
Source: Perlis of Perception 2017 (Statista)

It has been discovered that alcohol-related crimes such as drunk driving, assault, and public disorder are prevalent in many nations. which are more significant in nations that sanction alcohol in public. There is evidence that lax alcohol regulations, cultural attitudes toward consumption, and a failure to enforce existing laws may increase alcohol-related crime rates. It is essential to note that alcohol-related crimes are a multifaceted issue that cannot be solely attributed to alcohol consumption. Effective methods for reducing alcohol-related offenses may include education, prevention, and enforcement.

Tourism and alcohol

Because it raises questions about alcohol's role in contemporary culture, the relationship between tourism and alcoholic beverages is complex and controversial (Afifi, Mohsin, & Farouk, 2021). In some communities, alcohol consumption, such as wine imbibing in southern Europe, is widely regarded as socially acceptable. In other communities, such as Muslim communities, alcohol consumption is rigorously prohibited and considered socially unacceptable. Travel facilitates intercultural communication but increases the likelihood of socially awkward encounters between those from imbibing and sober cultures. Malaysia, a predominantly Muslim nation, is used by Henderson (2022) to illustrate "the dilemmas Muslim nations face as they attempt to adapt to modern mass tourism." Because widespread tourism can elicit hedonistic practices forbidden by Islam, such as alcohol consumption, Muslim governments (re) constantly negotiate forms of tourism that accommodate divergent tourist and local values. Because widespread tourism can encourage behaviors such as alcohol consumption.

Furthermore, problems can arise in the context of host-guest relationships even when individuals from diverse imbibing cultures interact. For instance, Moore Boardman (2020) describes how an increase in international visitors to the Greek village of Arachova has drastically altered the residents' preference for wine over other alcoholic beverages. Beer, along with locally produced wine and distilled spirits, is now one of the most popular intoxicating beverages among men, according to him (Slánský, 2022).

According to Sørensen et al. (2022), "alcohol consumption plays a significant role in the tourism industry," especially for visitors from high-income nations. Boardman (2020) highlights the widespread practice of "alcotourism," which can be defined as tourism incorporating the consumption of alcoholic beverages. Prior research has documented the alcoholic experiences of various tourists, including youth tourists on backpacking trips and college students on spring break. Researchers in this field have observed that the hospitality industry markets and promotes specific vacation destinations, including Ibiza and Ios in Greece, as "drink scapes" where intoxication is tolerated and celebrated. Such locations include the island of Ios in Greece and the island of Ibiza in Spain. Certain cultural practices, such as seaside vacations, are examples of liminal experiences which support this viewpoint (Jacobsen et al., 2021). During these vacations, vacationers enjoy more excellent leisure than they would in their typical home environment. Some academicians have argued that tourist experiences should be viewed as continuations of our leisure activities instead of liminal experiences that suspend or

revert our daily routines (Skandalis, Banister, & Byrom, 2023). In other words, tourist experiences should not be regarded as merely transitory. In other words, drinking is a common pastime that locals engage in during their leisure time, not just tourists.

How the consumption of alcoholic beverages affects visitors' ability to learn about the history and culture of a country is another area of study. In this regard, Thomas, Mura, and Romy (2019) provide numerous examples of the fabrication, commercialization, and promotion of the heritage associated with alcoholic beverages as a tourism attraction. The Ale Trail in Hull and the Manchester Pub Crawl are two examples. According to Thomas et al. (2019), consuming alcoholic beverages while on vacation is a form of acquiring cultural capital in this context (especially wine sampling by wine tourists).

Alcohol prohibition is prevalent in several Arab Gulf states, which can significantly impact sports tourism. Mega sporting events in the region, such as the Qatar World Cup and the Abu Dhabi Grand Prix, are drawing an increasing number of vacationers. However, the strict alcohol laws in these countries may deter some travelers. In some countries, such as Saudi Arabia, the sale and consumption of alcoholic beverages are rigorously prohibited, whereas in others, such as the United Arab Emirates, alcohol is sold only in licensed establishments, such as hotels and restaurants. This can restrict the options available to tourists who wish to consume alcohol while viewing a sporting event or mingling with other fans. The influence of alcohol restrictions on sports tourism in the Gulf region is a subject of ongoing debate. Some argue that strict laws are necessary to preserve the region's cultural and religious values, while others argue that they inhibit economic development and discourage tourists. Policymakers must consider the potential effects (positive and negative) of alcohol restrictions on sports tourism when making decisions regarding the hosting of mega-sporting events and the development of tourism infrastructure. Because tourism-related alcohol consumption can increase crime, vandalism, and public disorder, endangering the safety and well-being of tourists and locals.

Additionally, drunken behavior can create an unwelcoming environment for visitors and damage the reputation of a destination. In certain cultures and religious traditions, alcohol consumption may be forbidden or disapproved; therefore, promoting alcohol in tourism may be viewed as insensitive and disrespectful. Alcohol consumption associated with tourism can increase costs for local governments and communities, particularly for police and health services. Alcohol sales may incur social and environmental costs that outweigh their economic benefits.

Data and Method

The econometric models of the current study are modeled in equations 1 and 2 below. Equation 1 represents the impact of FDI (foreign direct investment), SFDI (FDI inflow due to mega sports events), SPEV (1 if there is an international sports event, and 0 otherwise), ALCC (1 if there is the permission of alcohol consumption, is an international sports event, and 0 otherwise), SPT (ratio of tourist during sports events to total tourist), and ECHG (a measure of economic growth). The data of variables from 1995 to 2022 are taken from the World Banks database and countries' statistics bureaus.

$$ECNGR_{i,t} = \alpha_0 + \alpha_1 FDI_{it} + \alpha_2 SFDI_{it} + \alpha_3 SPEV_{it} + \alpha_4 ALCC_{it} + \alpha_5 SPT_{it} + \mu_i + \lambda_t + \varepsilon_{i,t} \qquad (1)$$

$$ECNGR_{i,t} = \alpha_0 + \alpha_1 FDI_{it} + \alpha_2 SFDI_{it} + \alpha_3 SPEV_{it} + \alpha_4 ALCC_{it} + \alpha_5 SPT_{it} + \alpha_5 SPT_{it} * ALCC + \mu_i + \lambda_t + \varepsilon_{i,t} \qquad (2)$$

As previously mentioned, using fixed effects for accounting for cross-section heterogeneities when estimating any of the abovementioned equations is advantageous. This action was performed because it had previously been discussed. Additionally, it decreases the likelihood that omitted variable biases will result from the unrestrained influence exerted. We approximate each of the abovementioned equations by factoring in our calculations' country and time effects. Accounting for time effects with fixed effects is advantageous for several reasons. One is that it accounts for the possibility of global shocks impacting the four countries during the investigated period. In addition, we include cross-sectional clustered errors resistant to heteroscedasticity and serial correlation in our estimations of the effects of the fixed treatments (Wetherill et al., 1986).

Incorporating heterogeneity across countries into estimating each set of equations allowed us to precisely define the econometric effects of each set of independent variables on ECNGR. This allowed for precisely determining the econometric effects of each set of independent variables on ECNGR.

Concerning is the relationship between the repressors in the FE models, which are derived from credit and liability risk measures, and the error term (Kola, Gjipali, & Sula, 2019). We aim, among other things, to determine whether ECNGRs are stable over time. This would entail determining whether or not ECNGR that occurred in previous periods influences the magnitude of such activities in the present period. We substituted the lagging dependent variable into the right-hand side of the equation to answer this query. Due to the presence of autocorrelation, which is induced by the use of lags of the dependent variables as regressors, estimating a dynamic

model with conventional static FE can be challenging. This can make the estimation process significantly more difficult. Consequently, a distinct estimation strategy employing a dynamic panel model is required for the second problem.

To address endogeneity, the dependent variable (ECNGR) was regressed over additional time-delayed explanatory variables within the context of FE models (Kola et al., 2019). Because past values are mathematically impossible to affect the present, this method reduces the significance of any outlier results (Power et al., 2014). Consider the instrumental variables (IV) method as a second option. These strategies address the prospect of ECNGR and FDI endogeneity problems.

We opted for the Khan et al. (2019) difference GMM estimator, initially proposed by Holtz-Eakin, Holtz-Eakin, Newey, and Rosen, because our panel dataset has a brief time horizon and larger country dimensions. This estimator was proposed initially by Chen and Lee (2018). Using the GMM framework, the first difference of the dependent variable can be estimated as a function of the differenced latency of the dependent variable and the lag of the variables on the right-hand side that are thought to be endogenous. This is accomplished by utilizing the first difference of the dependent variable. Autocorrelation occurs when the lagged dependent variable is used on the right-hand side of the equation. Utilizing a dynamic model specification instead of a static one can accommodate this. This section contains a description of the dynamic model:

$$y_{it} = \alpha_1 y_{it-1} + \alpha_1 x_{it} + \alpha_2 w_{it} + \varepsilon_{i,t} \qquad (3)$$
$$\varepsilon_{i,t} = U_i + V_{i,t} \qquad (4)$$

Pre-Analysis

Determining whether or not the variables were stationary was the initial step of the investigation. We used the panel Fisher-type unit root test following the Philipps-Perron method to test for stationary variables. This allowed us to exclude the prospect of erroneous regressions. This allowed us to determine whether or not specific regressions were accurate. According to the statistical analysis results, the levels of all the variables have remained unchanged. We utilized the Fisher-type unit root test, which employs the Augmented Ducky Fuller (ADF) test on each cross-section, to consolidate the p-values from Choi's four unique panel-specific unit-root tests. This enabled us to obtain more precise results. These tests were designed to determine whether or not the questioned panel contained a unit root. The p-values are transformed using the inverse $\chi 2$, inverse normal, or inverse logit in the last three procedures. Four procedures involve applying modifications

to the inverse $\chi 2$ transformations, which are frequently employed as N approaches infinity. It will be determined whether the null hypothesis states that each panel has a unit root is true. The findings indicate that the variables remain constant across all levels of analysis. In each panel, the unit root represents the null hypothesis that is being tested. Despite conducting the test with various latency lengths, the significant results remained unchanged; however, this did not affect the overall result.

The Pearson correlation coefficients used to ascertain the strength of the relationships between the independent variables investigated in this study are presented in Table 1. According to Table 1, none of the independent variables are significantly correlated (r > 0.80). To identify multicollinearity, we decided to implement the 0.8 level of correlation suggested by Zarrouk et al. (2018). The correlation matrix offers no evidence to support the variable multicollinearity hypothesis. Using Pearson's correlation matrix, we found at least 80% significant collinearity in all variables. Only the loan ratio and liquidity variables were found to have a statistically significant correlation. We removed the loan ratio from the equation to eliminate the possibility that our model's parameters were incorrect.

We utilized a variety of diagnostic instruments to generate the most accurate estimates possible (see Table 2). Initially, the White Heteroscedasticity test was used to identify heteroscedasticity issues in our aggregate model. To accomplish this, the data were compared to a standard normal distribution. The results of the tests indicate, with p-values ranging from 0.0000 to 0.0020, that our aggregate model does not support the null hypothesis at a level of confidence of 5%. This can be concluded based on the test results. Given the existence of heteroscedasticity, it is advised that random effect estimates be utilized in the aggregate aggregated model. This recommendation is founded on the accuracy of random effect estimates.

The Bresuch Pagan LM test was performed to choose between the aggregated OLS and random effects estimations (Martin, 2023). Given that the specific term in the cross-sections has been set to zero, this test determines if the aggregated OLS method produces an autocorrelation-free BLUE estimator. When the null hypothesis is presumed to be accurate, LM employs a Chi-square distribution with a single level of freedom. The random effects model necessitates rejecting the null hypothesis and concluding the existence of cross-section individual effects if the calculated value exceeds the tabulated chi-square. This is achieved using the example as a guide. The results of the LM test presented in Table (1) indicate that the aggregated OLS model is inferior to the random effects model. Choose

between a model with fixed effects and a model with stochastic effects to represent your data. In this discussion, estimators 1 (fixed effect) and 2 (random effect) were evaluated using the Hausman specification test (Bell, Fairbrother, & Jones, 2019). According to the contending hypothesis, estimator two cannot reliably produce accurate parameter estimates. There should be no discernible pattern between the outcomes of the two estimators' work in this scenario. According to Table 4.5, the model with fixed effects should be chosen over the null hypothesis. The Arellano-Bond test for zero autocorrelation was conducted

as part of the work's GMM analysis, and its estimated results are shown in the Table that follows this paragraph. We looked for dependent models across multiple time points using the Pearson test. According to the results of the numerous tests, the cross-sections are interdependent. When panels are well-balanced (PCSE), FGLS and the Panel Corrected Standard Error are valuable methods for analyzing panel data. We employed robust and clustering procedures on each model to account for our panel datasets not being uniformly distributed. We created data clusters for the entire bank.

Table 1

Results of the Diagnostic test

Model	Statistics	Breusch and Pagan test/ autocorrelation test	White Heteroscedasticity test	Hausman test	Arrelano-Bond Test
1	Prob>chi2 Prob>z	0.0000	0.0000**	0.0023**	0.751
2	Prob>chi2 Prob>z	0.0000	0.0000**	0.0013**	0.621

Under the constraints of our GMM model, each endogenous variable can only have one instrument. We cannot conduct an over-identification test under these conditions because our model is identified with a singular instrument representing each endogenous variable. Therefore, the validity of these instruments is

determined by autocorrelation tests (Arrelano-Bond Test) reported after the GMM estimation. The Arellano-Bond Test results demonstrated conclusively that autocorrelation did not exist. Therefore, estimates based on the fixed effect and the GMM appear most appropriate for the overall model.

Table 2

Correlation Matrix

Variables		1	2	3	4	5	6
ECNGR	1	1.00					
FDI	2	-0.5649	1.00				
SFDI	3	0.4343	-0.3216	1.00			
SPEV	4	0.3437	0.1924	0.3101	1.00		
ALCC	5	-0.2124	0.0320	-0.0235	-0.2115	1.00	
SPT	6	-0.2598	-0.2124	-0.0615	-0.5210	-0.0315	1.00

Results and Discussion

Table 3 displays the results of the fixed effect and GMM estimations. According to the results of the fixed effect estimates for the first equation, FDI, sports FDI, the organization of mega sports events, alcohol consumption, and sports tourism, all appeared to have a positive relationship with economic development. However, there is no correlation between alcohol consumption and economic growth. The findings of the GMM estimates corroborate those of the fixed effect estimates. The results of the fixed effect and GMM estimates presented in Table 3 suggest that FDI, Sports FDI, organization of mega sports events, and

sports tourism all have a positive relationship with economic growth in Arab Gulf countries. This indicates that hosting mega sports events, attracting sports-related investment, and promoting sports tourism can effectively boost economic growth in these nations. The outcomes are consistent with previous research (Abujamous et al., 2019; Swart et al., 2018). However, the finding that alcohol consumption is not substantially associated with economic growth is consistent with the stringent alcohol laws and bans prevalent in many Arab Gulf nations. While alcohol consumption may be a significant factor in sports tourism and event attendance in other regions, the legal restrictions in these countries may mitigate its impact.

Table 3

Regression Results

	Equation 1		Equation 2	
	Fixed Affect	Difference GMM	Fixed Affect	Difference GMM
$ECNGR_{t-1}$	-	0.2156***	-	0.2211***
FDI	0.2230***	0.2340**	0.3130***	0.0101**
SFDI	0.2421***	0.2017***	0.2021***	0.1602***
SPEV	0.2111**	0.3200***	0.1211**	0.2110***
ALCC	0.1231	0.1207	0.1031	0.1727
SPT	0.2312**	0.1362***	0.1012**	0.2120***
$SPT * ALCC$			0.0131***	0.1939***
R-square	0.622		0.721	

However, the results of Model 2 indicate that the interaction between sports tourism and alcohol consumption is positive and statistically significant. This suggests that allowing alcohol consumption in the presence of sports tourism will boost the economic development of Arab Gulf nations. The interaction between sports tourism and alcohol consumption has a positive relationship with economic development in Arab Gulf states; this is an intriguing result. Contrary to the findings of Model 1, it suggests that permitting alcohol consumption in the presence of sports tourism can boost economic growth in these nations. This result could be attributed to the fact that many sports travelers may be interested in consuming alcohol as part of their leisure activities. Therefore, permitting alcohol consumption in licensed establishments such as hotels and restaurants could be an effective strategy for promoting sports tourism and attracting visitors to these nations. However, it is essential to note that legal restrictions and bans in many Arab Gulf nations may constrain the relationship between alcohol consumption and economic development. While the legal consumption of alcohol in licensed venues may increase the economic benefits of sports tourism, there may still be restrictions on the availability and accessibility of alcohol that could have a negative impact on the overall tourism experience.

Conclusion

In conclusion, the finding that the interaction between sports tourism and alcohol consumption is positively related to economic development in Arab Gulf countries presents policymakers with an intriguing opportunity. Even though allowing alcohol consumption in licensed venues may increase the economic benefits of sports tourism, it is essential to recognize that legal restrictions and cultural values may limit this relationship. Consequently, any

decisions regarding legalizing alcohol consumption in these nations must be thoroughly evaluated and measured against other social and cultural concerns. To ensure the long-term success and sustainability of sports tourism in Arab Gulf countries, balancing economic development and cultural values will be essential. In Arab Gulf countries, where alcohol is frequently viewed as incompatible with religious and cultural values, it is also essential to consider the potential cultural and social consequences of alcohol consumption. Therefore, any policy decisions regarding the legality of alcohol consumption in these nations should be thoroughly weighed against other social and cultural concerns.

While concluding on Arab Gulf countries, we should also be aware of the reasons why. Alcohol consumption and what the road map for Muslim nations should be There are numerous factors why some nations prohibit public drinking. Religious or cultural beliefs are a significant factor. In several Muslim-majority countries, imbibing is prohibited in public and, in some instances, private spaces. Islam considers alcohol haram or forbidden, and the Quran prohibits its consumption. Several nations have outlawed the consumption of alcohol in public due to health and safety concerns. Several nations, for instance, have enacted alcohol-free zones in public places to reduce public intoxication, violence, and other criminal activity.

Alternatively, halal tourism is an emerging trend in the travel industry. Halal tourism refers to travel that adheres to Islamic principles and regulations. This includes halal food, prayer facilities, and accommodations suitable for Muslim travelers. There are numerous justifications for promoting halal tourism. Second, a market with substantial economic potential is expanding significantly. Muslim tourists represent a substantial and growing portion of the global tourism industry, and numerous destinations aggressively pursue this market. Secondly, promoting

halal tourism may help create bridges between civilizations and foster tremendous mutual respect and understanding among religious and cultural groups. Lastly, halal tourism may promote sustainable and responsible tourism practices, which are acquiring prominence in the travel industry.

It is essential to note that these results should be interpreted cautiously, as other factors not accounted for in the model may influence the relationship between the variables. In addition, it is possible that the findings cannot be generalized to other regions or contexts.

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