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Is outstanding performance in sport events a driver of tourism?

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A B S T R A C T

Can success in sport events be a positive determinant of the number of tourists arriving in a country where successful teams are based? In order to test this hypothesis, this paper focuses on football events linking national teams’ outstanding performance in the FIFA World Cup tournaments to tourist inflows at the national level. By applying panel cointegrating regressions, the paper finds that countries whose national teams obtain surprising results (e.g. Costa Rica in 2014) in the World Cup final tournaments benefit from a significant increase in tourist arrivals after two years. In countries whose national teams qualify as football champions, the benefits appear in the first and second years following the event and the result is stronger. This suggests that outstanding performance in sport events can favor tourism and economic development in successful teams’ home countries. Policies aiming to promote national sporting teams can thus have significant effects on other sectors of the economy.

1. Introduction

As one of the world’s largest industries, travel and tourism employs a large labor force, drives exports, and contributes significantly to economic growth throughout the world. According to WTTC (2018), in 2017 the contributions of this sector to global gross domestic product (GDP), employment, exports and investment were 10.4%, 9.9%, 6.5% and 4.5%, respectively. Given such a substantial role played by tourism in most nations’ economic performance, understanding how to increase international visitors has become an essential aspect of economic development around the world (Balli, Balli, & Cebeci, 2013; Balli, Balli, & Louis, 2016). In order to favor tourist inflows, tourism policy and decision makers rely on a mix of marketing strategies, where the emphasis is on their countries’ valuable tangible assets such as cultural and natural heritage (e.g. Buckley, 2004; Yang, Lin, & Han, 2010). The intangible attractiveness of tourist destinations such as having content and happy people (e.g. Gholipour, Tajaddini, & Neyugn, 2016) and organizing sport and cultural events (e.g. Fourie & Santana-Gallego, 2011; Hernández-Mogollón, Duarte, & Folgado-Fernández, 2018) have been the subject of much attention in the literature of tourist destinations and their management and marketing. In particular, the link between mega-sport events and tourist attraction has been increasingly recognized by tourism and economic researchers in recent years, enabling policy makers and planners to better understand – and critically so – the management and marketing of such places (e.g. Arnegger & Herz, 2016; Heere et al., 2019; Knott, Pyall, & Jones, 2015). These studies provide empirical evidence that such sport events can promote tourist arrivals and exert a positive influence on a destination’s image or reputation. By attracting more international tourists, these strategies can create considerable benefits for the national economy, favoring especially the development of those local and regional areas where alternative industries may be lacking. The current study contributes to this growing literature on marketing and management of tourist destinations by exploring the possibility of an alternative strategy which may favor tourism development, i.e. success in sport events. Particularly, it analyzes the possible relationship between countries’ national teams’...
outstanding performance in the Fédération Internationale de Football Association (FIFA) World Cup tournaments and tourist arrivals in those nations.

Football is considered to be the most popular, most-played and watched sport around the world (Förüghi, Mohammad Shah, Ramayah, & Irmananesh, 2019). According to FIFA (2018), more than half of the world’s population watched the 2018 FIFA World Cup (specifically, 14 June to July 15, 2018) that was played in Russia. For the 64 matches that were played throughout the tournament, the average live audience was 191 million while the final between France and Croatia on 15 July enjoyed a combined global audience of 1.12 billion (FIFA, 2018). According to FIFA’s (2007) Big Count estimates, 265 million players (male and female), as well as five million referees and officials, making a total of 270 million people (4% of the world’s population) are actively involved in this sport (Förüghi, Gholipour, McDonald, & Jafarzadeh, 2018). This study examines whether the home countries of champion teams (e.g. Brazil in 2002) and surprise teams (e.g. Costa Rica in 2014) can benefit from an increase in tourism in the years following the World Cup event. A surprise team was categorized as when a national team reaches at least the quarterfinals without having been included in Pot 1 in the World Cup draw. The idea that success in sport events can be used as a marketing strategy to support tourism is consistent with some recent experiences worldwide. For example, following the 2018 World Cup in which Croatia was runner-up, Croatia’s Tourism Board launched a promotional video to increase international tourists to the country. In this video, titled “Croatia Full of Life”, Croatia’s national football players, leveraging on the recent media exposure gained during the World Cup, get together to share what tourists can do when visiting their country (https://youtu.be/0XbBR7e9PYM).

Overall, this study contributes to two strands of the tourism destination literature, aiming to identify the determinants of international tourist arrivals, and the link between national (or regional) sport results and their economic impact, respectively. With regard to the former, while several studies have evaluated the economic and political determinants of inbound tourism such as economic development, political stability, travel costs and exchange rate (see, inter alia, Crouch, 1994; Lim, 1997; Song & Li, 2008; Witt & Witt, 1995), to the best of the authors’ knowledge, no empirical studies have yet examined the effect of success in the FIFA World Cup on inbound tourism. Existing analyses mainly focus on single-country case studies (e.g., Nicolau, 2012 for Spain) and there are no cross-sectional time-series (panel data) studies on the link between success in the World Cup and tourist arrivals. However, the use of panel data (or longitudinal data) has several advantages over time-series and cross-sectional data, since it provides more information and variability, less collinearity amongst the variables, and more degrees of freedom and efficiency (Baltagi, 2008). Regarding the second contribution, a number of studies examine the relationship between national (or regional) sport results and their impacts on the economy in general (Ashton, Gerrard, & Hudson, 2003; Boyle & Walter, 2003; Floros, 2010; Gerlach, 2011; Kaplanski & Levy, 2010; Klein, Zwergel, & Henning Fock, 2009; Rowe & McGuirk, 1999) and on the tourism sector in particular (Nicolau, 2012). These studies focus mainly on the effect induced by sport performance on financial markets. This study, however, is broader and concentrates on tourist arrivals, not only in countries whose national teams qualify as champions but also as surprises.

The remainder of this paper is structured as follows. Section 2 briefly reviews related literature and discusses the nature of the relationship between sport and tourism performance. Section 3 presents the data and the model specification. Section 4 explains the methodology and discusses the main results. Finally, Section 5 presents concluding remarks, highlighting the policy implications of the findings.

2. Literature review

Some arguments on how national teams’ outstanding performance (either final success or surprising results) in the FIFA World Cup relates to tourism are now presented.

This paper most closely relates to the literature examining the effects of national sport results on economic activities. In particular, it is motivated by the findings reported by Nicolau (2012), who provides evidence that the Spanish national (men) football team’s victory in the 2010 FIFA World Cup had a significant and positive impact on abnormal stock returns of the two most prominent Spanish tourism firms for 18 days after Spain’s success. Nicolau (2012) argues that the positive effect on Spain’s tourism market value has greatly enhanced destination brand knowledge. More specifically, he shows that being World Cup champion has enhanced the awareness of “Spain” as a brand. Furthermore, Nicolau (2012) states that the brand’s image can be evoked more easily and more repeatedly, improving its recognition and recall.

Moreover, it is asserted by Nicolau (2012) that in a highly precise decision framework such as tourism, the characteristics of brand associations, for example strength (both quantitative and qualitative), favorability (especially with regard to the expected experiential and symbolic advantages), and exclusivity (aspects which tend to be more unique than a World Cup victory), play an especially important part in increasing brand knowledge. Furthermore, the country’s name can benefit from secondary associations and this has the advantage of attracting sponsorship activities and celebrity endorsers. What is not incurred here are the costs generally associated with these strategies. For this reason, Nicolau (2012, p. 508) asserts that “there should be an increment in the likelihood of the destination being part of the individual’s consideration set and, consequently, of being selected as a vacation destination”. Other notable contributions under this strand of the literature (national football results and stock market returns) include studies by Ashton et al. (2003; 2011), Rowe and McGuirk (1999), Boyle and Walter (2003), Klein et al. (2009), Kaplanski and Levy (2010), Floros (2010), Gerlach (2011), Geyer-Klingeberg, Hang, Walter, and Rathgeber (2018), and Nicolau and Sharma (2018).

The potential link between a nation’s sport performance and its economic consequences can also be explained by findings of studies indicating indirect (implicit) marketing on promoting tourism destination. It helps to improve destination image, which in turn attracts more international tourists. According to Balli et al. (2016), implicit marketing exists in the form of positive externalities from the export of music, movies, TV shows, soap operas, bilateral agreements and visa waivers. Balli et al. (2016) argue that people are attracted to visit a foreign destination by virtue of being exposed to the arts of that culture or the incentives generated by foreign government policies.

Several studies examine the relationship between indirect marketing and tourist attraction. For example, Balli et al. (2013) provide evidence that Turkish TV soap operas exported to Eastern Europe and the Middle East influence viewers to visit Turkey. Riley, Baker, and Van Doren (1998) find that people are tempted to visit what they have seen in movies. They claim that movies provide the subjects and places for the gaze of many people, and for some people, movies may induce them to travel to the film location and experience it in reality. Wen, Josiam, Spears, and Yang (2018) demonstrate that Chinese consumers’ engagement with movies and TV dramas has a significant and positive impact on their international travel incentives. Using country-level panel data, Balli et al. (2016) find that nationals in immigrant-receiving countries are encouraged to visit immigrant-sending countries. This is because nationals have had opportunities to hear about the immigrants, their place of origin, and subsequently been exposed to the camaraderie, conviviality and cultures of these immigrants. In the football context, the Samsung Economic Research Institute (2002) reports that South Korea’s victories against strong European teams in the 2002 World Cup (Italy, Spain, Portugal and Poland) have improved the country’s economic competitiveness and enhanced the brand image of South Korean goods. Likewise, Kim and Morrison (2005) find that the 2002 World Cup has positively influenced the image of South Korea as a tourism destination among potential
Japanese, Chinese and US visitors. Rocha and Fink (2017) show that hospitality associated with the Olympic Games mitigates some possible negative outlooks or concerns that international tourists may have about Brazil, giving rise to an increase in the number of international tourists visiting Brazil after the Olympic Games.

The idea that national teams’ outstanding performance in sport events may have positive effects on tourism is also supported by a halo-type argument. Halo effects refer to the cognitive biases in which decision makers unconsciously rely on one single factor to determine their perception of an individual, business, product or brand. Such a single factor thus provides a halo over decision makers’ global impression and consequently, can be exploited through effective marketing strategies. Success in major sport events may form in people’s (and in particular in tourists’) perceptions a positive impression of a specific country, which then extends their perception of the country as a tourism destination with an attractive image (Gallarza, Saura, & Garcia, 2002; Lee & Lockshin, 2011). A country-level halo may be particularly useful to promote a country especially when consumers are unfamiliar with the country and cannot observe the effective quality of its products and services, which is the typical case in the context of repeated tourism experiences (H. F. Gholipour et al., 2020; Pan, Santos, & Kim, 2017). For instance, Pan et al. (2017) argue that television commercials have played a substantial role in shaping destination image and as such promoting tourism in South Korea. With reference to the relationship between sport events and destination image, Florek and Insch (2011) show that Germany’s hosting of the 2006 World Cup helped improve the country’s destination image. Lai (2018) also investigates the influence of the 2008 Beijing Olympic Games on China’s destination image using a survey of onsite Chinese tourists during this event. Lai’s findings reveal that this event’s image was positively correlated with stronger effects on destination image compared to other established formation factors of destination image. Koc (2005) claims that Turkey’s football success has played an important role in promoting the country’s destination image. Unlike Koc (2005), who relies on a qualitative analysis on a single country’s experience, the present paper performs a quantitative analysis based on a panel of countries to assess whether outstanding performance in sport events may be beneficial for tourism development via halo-type effects.

Another reason why outstanding performance in the FIFA World Cup may increase tourists in the following years is through sport tourism. When a team is a surprise or a champion in the World Cup, it creates an awareness and interest in the country as a destination to hold training camps for football teams. For example, Koc (2005) shows that Turkey’s impressive performance in the World Cup in 2002 (it reached third place) subsequently shaped an awareness and interest in Turkey as an ideal destination to hold training camps and friendship tournaments for many football teams.

Given the above discussion, it would be reasonable to expect that when a national football team does exceptionally well in very widely watched sport events such as the FIFA World Cup, the team’s country of origin will garner more attention worldwide. The outstanding performance may positively influence international tourists’ attitudes about visiting the countries of performing teams after the World Cup due to positive changes in the destination’s image, such that the country’s inbound tourism may increase. In other words, outstanding performance in the World Cup may trigger the development of a favorable image of teams’ home country which can stimulate demand to visit these places. In addition, excellent performance can attract international football teams to the country to hold their pre-season training.

This paper therefore hypothesizes that countries whose national team performs outstandingly (either as a surprise or a champion) in the FIFA World Cup experience a significant increase in tourists in the following years, ceteris paribus.

3. Data and model specification

The hypothesis is tested by using annual data from 1996 to 2017 for 11 surprise teams and five champion teams in the FIFA World Cups of 1998, 2002, 2006, 2010 and 2014. A national football team is selected as a surprise team if the team manages to qualify for the quarterfinal in one World Cup tournament without being included in Pot 1 in that World Cup draw. Teams in Pot 1 are often the top teams from FIFA/Coca-Cola World Ranking and chosen a month before the draw. For example, if the draw is done in November 2014, FIFA looks at the ranking in October 2013.

Based on this criterion, the selected surprise teams are Croatia (1998), Senegal (2002), South Korea (2002), Turkey (2002), Ukraine (2006), Portugal (2006), Uruguay (2010), Paraguay (2010), Ghana (2010), France (2014) and Costa Rica (2014). The champion teams are France (1998), Brazil (2002), Italy (2006), Spain (2010) and Germany (2014). In the sample of champion and surprise teams, two teams that also hosted the World Cup: France was host and champion of the 1998 FIFA World Cup, while South Korea (as a surprise team) was a co-host of the 2002 FIFA World Cup. The exposure the countries received from hosting the events may therefore also affect their tourist arrivals in following years, similar to the way that studies on the effect of mega-event host nations on tourism show (e.g., Arnegger & Herz, 2016; Knott et al., 2015). However, since these two countries are a small part of the total sample, the regression results are not significantly influenced.

The period studied is 1996–2017 due to the availability of tourism arrivals data for these sample countries. The data for this variable were collected from the World Bank while the dependent variable of the study is the number of international inbound tourists. International inbound tourists (overnight visitors) relates to the number of tourists who travel to a country other than that in which they have their usual residence, but outside their usual environment, for a period not exceeding 12 months and whose main purpose in visiting is other than an activity remunerated from within the country visited. In order to have robust results and considering the population of these countries, two dependent variables are considered: tourism arrivals and tourism arrivals per capita.

The main explanatory variables of interest are D_1 YR and D_2 YR. D_1 YR is a dummy variable that equals to 1 for one year after the event for a country whose national team qualifies as either a surprise or a champion and 0 for other years. D_2 YR is another dummy variable which equals to 1 for two years after the event for the home country of either a surprise or champion team and 0 for other years. The first year and second year after the World Cup is examined because the impact of sport events is likely to have a delayed effect on inbound tourism, given the assumption that tourists plan and book their holidays in advance. It is worth noting that in the literature it is common to include a vector of dummy variable as an independent variable. This serves to capture the effect of an event or excellent performance in mega-sport events (Karafiath, 1988; Nicolau, 2012).

In addition to the main variables of interest (D_1 YR and D_2 YR), the study control for the major determinants of international tourist arrivals involving income per capita of host (as a proxy for economic development), political stability and absence of violence/terrorism index (as proxy for political stability), exchange rates against the US dollar (as a proxy of domestic competitiveness) and index of air travel prices (as a proxy of travel costs) in the models. Table A1 provides more detailed descriptions of the control variables, data sources and their expected signs. This choice of control variables is guided by three considerations: firstly, the relevance of the variables in panel data modeling of inbound tourism (Saha, Su, & Campbell, 2017; Saha & Yap, 2014); secondly, the availability of data for variables for all sample
countries over the period of 1996–2017; and thirdly, the need for a parsimonious specification imposed by the relatively small size of sample. The descriptive statistics of the variables (before taking the natural logarithm) are presented in (Table A2 in the Appendix).

The empirical model can be presented as:

$$\text{TOUR}_t = c + \beta_1 \text{TOUR}_{t-1} + \beta_2 \text{D}_1YR + \beta_3 \text{D}_2YR + \beta_4 X_n + \epsilon_t$$  (1)

where \(\text{TOUR}\) is the dependent variable (number of international tourist arrivals), \(\text{TOUR}_{t-1}\) is the lagged dependent variable, \(\text{D}_1YR\) is a dummy variable which takes value of 1 for one year after event and 0 for other years, \(\text{D}_2YR\) is a dummy variable which takes value of 1 for two years after event and 0 for other years, \(X_n\) is a vector that includes the control variables, \(c\) is a constant, \(t = 1, ..., n\) denotes the country, \(t = 1, ..., t\) denotes the time period, \(\beta\) are coefficients and \(\epsilon_t\) is an error term. We include one lag of dependent variable as an explanatory variable since it is likely that persistence is evident in the dynamics of tourist arrivals, such that the previous level of arrivals has an influence on the current level (Balli et al., 2016).

4. Methodology and results

To estimate the relationships between explanatory variables and the dependent variable the panel fully modified ordinary least squares (FMOLS) method was applied. FMOLS is utilized mainly to account for endogeneity in the models. Basically, when facing the issue of simultaneity, which is a form of endogeneity, it can be assumed that changes in exchange rate affect international tourist arrivals. However, it can be argued that appreciation or depreciation of currency can be caused by a fluctuation in international tourist arrivals. Similarly, there might be a feedback relationship between national income and tourist arrivals. Also, since all variables are stationary in their first-difference and there is evidence of cointegration between them (as detailed in sub-sections 4.1 and 4.2), applying a cointegrating regression such as FMOLS (Phillips & Hansen, 1990) is considered to be appropriate for this study.

The FMOLS uses a semi-parametric correction for endogeneity and residual autocorrelation (Banerjee, 1999; Liddle, 2012) and for this reason MOLS estimators have been applied widely in tourism literature in recent years (e.g. Dogru, Sirakaya-Turk, & Crouch, 2017; Dritsakis, 2012; Puley, Zhao, & Bonham, 2016). This study applies the group-mean FMOLS estimator (Pedroni, 2000, 2001) which averages over the individual cross-section FMOLS estimates. In the presence of heterogeneity in the cointegrating relationships, the group-mean estimator provides consistent estimates of the sample mean of the cointegrating vectors, in contrast to the pooled and weighted FMOLS estimators.

Regarding the FMOLS estimation, preliminary analyses on unit root and cointegration were carried out. Once it is established that a long-run cointegration relationship exists, equation (1) is estimated using the FMOLS method. The empirical analysis therefore includes three steps: (1) checking the order of integration of the data, (2) panel cointegration testing, and (3) estimating the coefficients.

4.1. Unit root tests

The panel unit root test was used to examine the stationarity of the data. Since the datasets are unbalanced panel, the IPS unit root test (developed by Im, Pesaran, & Shin, 2003) was performed. Unlike other panel unit root tests, the IPS test does not require balanced datasets. Also, the IPS test relaxes the assumption that all panels share a common autoregressive parameter. Relaxation of this assumption is important for the panel as there are countries with different cultural and institutional contexts. The null hypothesis of the IPS test is that all panels contain a unit root. Panel A (surprise teams) and Panel B (champion teams) of Table 1 present the test statistics for the variables.

The results indicate the presence of a unit root in level. However, all variables are stationary in first difference as the IPS test rejects the null of a unit root of variables in panels A and B. Since the data seem to include non-stationary components, it is necessary to test for cointegration and apply estimators that are suitable for non-stationary data.

4.2. Panel cointegration tests

Kao’s (1999) cointegration tests were performed to evaluate the existence of the long-run equilibrium relationship among the variables when tourist arrival per capita and tourist arrival were used as dependent variables followed by other explanatory variables. The Kao tests follow Engle-Granger’s (1987) two-step (residual-based) cointegration tests. The Engle-Granger (1987) cointegration test is based on an analysis of the residuals of a spurious regression with non-stationary I (1) variables. If the variables are cointegrated then the residuals need to be stationary I (0) and if the variables are not cointegrated then the residuals will be I (1). Kao (1999) extended the Engle-Granger framework to tests involving panel data and the null hypothesis of no cointegration.

The results of the Kao residual cointegration test are recorded in Panel A (surprise teams) and Panel B (champion teams) of Table 2. The null hypothesis of no cointegration is rejected, indicating there is a long-run relationship between the variables in both models.

4.3. Long-run coefficients

Finally, the long-run relationship between the independent variables and dependent variable was estimated. The estimated results for surprise and champion teams are presented in panels A and B of Table 3.

| Panel A: Surprise teams | Statistic | 1st difference |
|-------------------------|-----------|----------------|
| ln (Tourist arrival)    | 2.842     | -6.624***      |
| ln (Tourist arrival per capita) | 2.188 | -6.624***      |
| ln (GDP per capita)     | 1.526     | -12.708***     |
| Political stability index | -0.847 | -6.915***      |
| ln (Exchange rate)      | -0.708    | -4.734***      |
| ln (Index of air travel prices) | 2.136 | -4.263***      |

Panel B: Champion teams

| Panel B: Champion teams | Statistic | 1st difference |
|-------------------------|-----------|----------------|
| ln (Tourist arrival)    | 0.685     | -3.200***      |
| ln (Tourist arrival per capita) | -0.310 | -3.046***      |
| ln (GDP per capita)     | 0.637     | -3.668***      |
| Political stability index | -1.362 | -5.085***      |
| ln (Exchange rate)      | -0.400    | -2.763***      |
| ln (Index of air travel prices) | 0.302 | -2.821***      |

Notes: Method: Im, Pesaran and Shin W-stat; Null Hypothesis: Unit root (individual unit root process); Probabilities are computed assuming asymptotic normality; ***p < 0.01.
Turkey was a surprise nation, for example hosting training camps for many football teams. This and, with a substantial growth, Turkey attracted 16.8 million tourists in 2002, 13.3 million in 2003 and lower travel costs. Among the control variables, economic development and political stability compared to the home countries of surprise teams. The results also reveal that the positive impact of sport performance is stronger in the first year compared to the second year after the event. The coefficient of Dummy_1 year after event is 0.058 whereas the coefficient of Dummy_2 years after event is 0.03. For example, after France became the 1998 World Cup champion, the country has received nearly 70 million tourists in 1998. However, the number of tourists visiting France jumped to 73.1 million in 1999 and 77.1 million in 2000. Interestingly, the impact of Dummy_2 years after this event on tourist arrivals is almost similar for both surprise and champion teams as the coefficient of Dummy_2 years after event is 0.03 for both groups (see Panels A and B of Table 3). It is worth mentioning again that these results do not imply that a country’s outstanding performance in the World Cup is the sole driver of growth in tourist arrivals. Although changes in other factors play an important role here, based on the halo effect hypothesis, such a success in major sport events may form a positive impression of a specific country in tourists’ perceptions and particularly the destination image.

The findings also show that economic development and political stability of destinations are the major determinants of inbound tourism in countries of champion teams (see Panel B of Table 3). It is noteworthy that the coefficient of political stability index is higher for surprising countries ($\beta = 0.117$) than champion teams ($\beta = 0.041$) (see Panels A and B of Table 3). A possible explanation for the weaker impact of political stability on tourist arrivals in champion countries might be due to the low variation of this variable in champion countries. All champion countries (except Brazil) are advanced economies and have the least political stability compared to the home countries of surprise teams.

The finding on the positive link between a team’s outstanding sport performance and a more vibrant tourism sector in the country of a champion team is consistent with Nicolau (2012), who shows that Spanish tourism firms benefit financially from Spain’s victory in the 2010 World Cup.

To check the robustness of the findings, the relationship between tourist arrivals and “Dummy_1 year after event” and “Dummy_2 years after event” was also estimated for 11 countries (1995–2017) that participated in the same World Cups but were not surprise or champion teams. However, no significant link was found between tourist arrivals and “Dummy_1 year after event” and “Dummy_2 years after event”. This suggests that the impact of outstanding performance in the World Cups on tourist arrivals in subsequent years is only evident for the countries of surprise and champion teams. The study also considered the possibility that the World Cup induced effects on tourism lasting for more than two years, by including a dummy taking on the value of 1 for three years after the event of interest (D_3 YR). However, the estimated coefficient for this variable is not statistically significant, and this may be due to the fact that other major sport events take place two years after World Cup tournaments (i.e., the European Championship) meaning that the induced boom in tourist arrivals falls away. For the same reason the

Table 3 Results of FMOLS estimator.

| Panel A: Surprise teams | Panel B: Champion teams |
|-------------------------|-------------------------|
| Independent variables   | Independent variables   |
| ln (Tourist arrival per capita) | ln (Tourist arrival per capita) |
| Dummy_1 year after event | Dummy_1 year after event |
| Dummy_2 years after event | Dummy_2 years after event |
| ln (GDP per capita)      | ln (GDP per capita)      |
| Political stability index | Political stability index |
| ln (Exchange rate)       | ln (Exchange rate)       |
| ln (Index of air travel prices) | ln (Index of air travel prices) |

Notes: Panel method: Grouped estimation; Cointegrating equation determined: Constant; ***p < 0.01, **p < 0.05, *p < 0.10.
effect on inbound tourism would not be expected to be present in later years, even if this could not be tested since the dataset does not include the four years after the 2014 World Cup. The study has also controlled for the relative consumer price index (CPI) of each country to the US’s and China’s CPI as representatives of the world CPI. These two countries are the world’s major sources of tourist departures (World Bank, 2019). Including the relative CPI in the estimations does not change the association between D_1 YR, D_2 YR and TOUR. Similarly, including the number of World Heritage sites as an additional control variable does not influence the link between D_1 YR, D_2 YR and TOUR.

5. Conclusion

A number of studies have recently investigated the impact of economic and political factors on tourist arrivals in the management and marketing literature on tourist destinations. Very few empirical analyses have, however, examined the relationship between outstanding performance in international mega-sport events (the FIFA World Cup) and tourist arrivals in the following years. To achieve this aim, this study categorized teams with outstanding performance into two groups (champion teams and surprise teams) and investigate the relationship between outstanding performance in the FIFA World Cup tournaments and tourist inflows at the national level. From a theoretical perspective, this allows us to test whether outstanding performance in the World Cup may generate a “halo-effect” in the home countries of surprise and champion teams, benefiting tourist arrivals in those countries.

Using data from 11 surprise teams, five champion teams from the five FIFA World Cups (1998, 2002, 2006, 2010, and 2014) and controlling for major determinants of international tourist arrivals, it is found that outstanding performance in the World Cup can result in international tourist growth in the countries whose national team qualifies as a surprise or a champion in one to two years after these events. The results also show that in terms of tourist inflows, the home countries of champion teams can be benefited more than the home countries of surprise teams. These results lend support to the findings of Nicolau (2012), who provides evidence that the tourism industry can be positively affected by nations’ success in football tournaments. These findings are also in line with those of Koc (2005) who suggests that success in football events has a positive impact on sport tourism in subsequent years. These may be because outstanding performance of a country in mega-sport events generates a halo-effect at the country level and in turn promotes an attractive destination image.

The relationship between football team performance and inbound tourism is of particular relevance to tourism destinations’ policy and decision makers. In recent years, some countries (e.g., Croatia) have launched successful tourism campaigns capitalizing on the successes of their national football teams. The other example is at city-level. Several companies in Leicester in the United Kingdom included the championship of Leicester City team in the 2016 English Premier League in their marketing strategies. The empirical results presented here provide evidence that leveraging on such outstanding sport performance as a tool for promotional campaigns has the potential to increase tourist arrivals, since tourism stakeholders can attach a brand element of football to their destination marketing plans. Tourism marketing agencies can benefit by linking the football achievements of national teams in the World Cup to their countries as destinations to an individual’s consideration set (Nicolau, 2012). Also, as noted by Nicolau (2012), the attribute of “having a champion team associated to a destination” is not easy to copy and, therefore, the destination can gain a unique competitive advantage. As an example, destination policy makers and tourism companies may incorporate the most memorable and thrilling moments of their successful teams during the tournament in their destination advertising. Likewise, images of the most outstanding players can be used in their destination marketing promotions.

The results of this study also suggest that relying on policies supporting sport national teams, provided that they effectively increase the probability of an outstanding performance, can benefit the tourism sector. Indeed, from a normative perspective, tourism development should be determined along with economic development policies, and in this context the analysis implies that providing support for sport national teams may be desirable for tourism and thus economic outcomes. Especially in countries constrained by size or location, in which local policymakers look at tourism as the best-placed strategy for economic development, this may also have important consequences for standards of living and social welfare.

This study only uses the country-level data sets for analysis. For future research, it may be useful to test the relationship between a club’s outstanding performance in the national league and tourist inflows at the city-level (e.g. the success of Leicester City Football Club in the 2016 English Premier League). This research also only looks at champion and surprise teams in the World Cups. However, similar studies may be conducted for those teams which had shocking and unexpectedly bad results in the World Cups, for instance Spain in 2014. Finally, this study has focused on the promotion of outstanding performance in sport events as a tourism development strategy, while the recent coronavirus pandemic is putting the entire tourism industry under stress. Therefore, it may be interesting to reassess the conclusions presented in this paper in light of these events to understand which other strategies may be most effective in this context. Extending the analysis along these directions is left for future research.

Appendix A

Table A.1

| Variables                  | Definition                                                                 | Included in studies of          | Data source | Expected signs |
|----------------------------|---------------------------------------------------------------------------|---------------------------------|-------------|----------------|
| GDP per capita             | Destination GDP per capita based on purchasing power parity (PPP) as measure of economic development. PPP GDP is defined as gross domestic product, which is converted into international dollars using purchasing power parity rates. | Das & Dirienzo (2009); Saha et al. (2017) | The World Bank | +              |
| Source country GDP per capita | Source country GDP per capita was not included because tourist arrivals data only show the aggregate inbound from other countries. In addition, it is a common practice in panel data modeling of tourist arrivals to include GDP per capita of destination as a proxy for the level of economic development. | Saha et al. (2017); Yap & Saha (2013) | The World Bank | +              |
| Political stability index | The index is developed by the World Bank as a measure of political stability (or Political Stability and Absence of Violence/Terrorism). It measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. This indicator can range between 0 (high political stability) to 6 (very high political instability). | Saha et al. (2017) | The World Bank | +              |

(continued on next page)
Table A.1 (continued)

| Variables                  | Definition                                                                                                                                   | Included in studies                      | Data source                        | Expected signs |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------|----------------|
| Exchange rate              | Exchange rates against the US dollar. Higher value means that the local currency becomes weaker (or depreciates). When a destination’s currency depreciates, the travel costs in the destination is cheaper, and hence more international travelers are expected to visit the destination. | Saha & Yap (2014); Saha et al. (2017)    | Euromonitor International          | +              |
| Index of air travel prices | Travel costs: It is a proxy for travel costs and estimated using a sample of prices for a defined set of commodities from air travel category. Air travel is considered as transport of individuals and groups of individuals and luggage by aeroplane and helicopter. The indices' base year is 2010 – 100. | Al-Mulali et al. (2019); Gholipour et al. (2014) | Euromonitor International          | –              |

Table A.2

Descriptive statistics

Panel A: Surprise teams

| Tourism arrival | Tourism arrival per capita | GDP per capita | Political stability index | Exchange rate | Index of air travel prices |
|-----------------|----------------------------|----------------|--------------------------|---------------|---------------------------|
| Mean            | 13,031,042                 | 534.81         | 14,489.43                | 0.12          | 597.68                    | 88.25                  |
| Median          | 23,670,000                 | 536.46         | 11,533.72                | 0.42          | 7.10                      | 92.90                  |
| Maximum         | 86,861,000                 | 3753.55        | 59,221.58                | 1.40          | 6432.70                   | 406.70                 |
| Minimum         | 250,000                    | 17.06          | 1506.47                  | –2.00         | 0.10                      | 1.40                   |
| Std. Dev.       | 21,818,790                 | 619.08         | 16,076.89                | 0.73          | 1328.60                   | 51.47                  |

Panel B: Champion teams

| Tourism arrival | Tourism arrival per capita | GDP per capita | Political stability index | Exchange rate | Index of air travel prices |
|-----------------|----------------------------|----------------|--------------------------|---------------|---------------------------|
| Mean            | 40,298,843                 | 703.31         | 27,671.26                | 0.41          | 1.11                      | 87.29                  |
| Median          | 39,604,000                 | 723.44         | 28,641.56                | 0.40          | 0.90                      | 89.20                  |
| Maximum         | 86,861,000                 | 1757.78        | 50,638.89                | 1.40          | 6432.70                   | 406.70                 |
| Minimum         | 1991,000                   | 12.27          | 8073.13                  | –0.50         | 0.70                      | 32.50                  |
| Std. Dev.       | 25,787,835                 | 505.19         | 10,422.38                | 0.48          | 0.62                      | 24.30                  |

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