

Is Outstanding Performance in Sport Events a Driver of Tourism?

Hassan F. Gholipour¹ Amir Arjomandi² Simone Marsiglio³ Behzad Foroughi⁴

Forthcoming in Journal of Destination Marketing & Management

Abstract

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, we focus 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, we find 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.

Keywords: Tourist Arrivals; Football; Performance; World Cups; FMOLS

JEL Classification: O10, O11

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

¹ Western Sydney University, School of Business, Contact: h.fereidouni@westernsydney.edu.au.

² University of Wollongong, School of Accounting, Economics and Finance. Contact: amira@uow.edu.au.

³ University of Pisa, Department of Economics and Management. Contact: simone.marsiglio@unipi.it.

⁴ I-Shou University, Department of International Business Administration. Contact: behzad.foroughi@gmail.com.

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, Fyall, & 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, we analyze 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. According to FIFA (2018), more than half of the world's population watched the 2018 FIFA World Cup (specifically, 14 June to 15 July 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 (Foroughi, Gholipour, McDonald, & Jafarzadeh, 2018). In this study, we examine 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. We categorize as a surprise team a situation in which 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/0XbIR7e9PYM>).

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 our 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 our 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 mainly focus on the effect induced by sport performance on financial markets. Our 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 our main results. Finally, Section 5 presents concluding remarks highlighting the policy implications of our findings.

2. Literature review

We now present some arguments on how national teams' outstanding performance (either final success or surprising results) in the FIFA World Cup relates to tourism.

Our paper most closely relates to the literature examining the effects of national sport results on economic activities. In particular, this research 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 eighteen 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, Gerrard and Hudson (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 Rathegeber (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 et al. (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 et al. (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 firsthand about the immigrants' 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') perception 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, & García, 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 unrepeated tourism experiences (Han, 1989; Wirtz, 2003). The halo effect was first introduced in the psychology literature by Thorndike (1920) and then widely applied in marketing (Beckwith et al., 1978).

Several studies discuss how halo effects may have important implications for the diffusion of awareness and the development of a country's image, and how such a halo may be leveraged through appropriate destination branding (Florek & Insch, 2011; Koc, 2005; Matiza & Slabbert, 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 event 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, we perform 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.

Therefore, we hypothesize 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

We test our hypothesis by using annual data from 1996 to 2017 for 11 surprise teams and 5 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 our sample of champion and surprise teams, we have two teams which also hosted the World Cup. France was host and champion of the 1998 FIFA World Cup. Similarly, South Korea (as a surprise team) was a co-host of the 2002 FIFA World Cup. Therefore, the exposure the countries received from hosting the events may 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 our total sample our regression results are not significantly influenced.

The studied period is 1996 to 2017 due to the availability of tourism arrivals data for these sample countries. The data for this variable are collected from the World Bank while the dependent variable of the study is the number of international inbound tourists. International inbound tourists (overnight visitors) are 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.

Our main explanatory variables of interest are D_1YR and D_2YR . D_1YR 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_2YR 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. We look at the first year and second year after the World Cup 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 our main variables of interest (D_1YR and D_2YR), we 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 A.1 in the Appendix 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 modelling 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 A.2 in the Appendix.

The empirical model can be presented as:

$$TOUR_{it} = c + \beta_1 TOUR_{it-1} + \beta_2 D_1YR + \beta_3 D_2YR + \beta_4 X_{it} + u_{it} \quad (1)$$

where $TOUR$ is the dependent variable (number of international tourist arrivals), $TOUR_{it-1}$ is the lagged dependent variable, D_1YR is a dummy variable which takes value of 1 for one year after event and 0 for other years, D_2YR is a dummy variable which takes value of 1 for two

years after event and 0 for other years, X_{it} is a vector that includes the control variables, c is a constant, $i = 1, \dots, n$ denotes the country, $t = 1, \dots, t$ denotes the time period, β_s are coefficients and u_{it} 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, we apply the panel fully modified ordinary least squares (FMOLS) method. FMOLS is utilized mainly to account for endogeneity in our models. Basically, when facing the issue of simultaneity, which is a form of endogeneity, one may assume 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; Fuleky, Zhao, & Bonham, 2014). In this study, we apply 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 grouped-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 are carried out. Once we establish that a long-run cointegration relationship exists, equation (1) is estimated using the FMOLS method. Therefore, our empirical analysis 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

We start with the panel unit root test to examine the stationarity of the data. Since our datasets are unbalanced panel, we perform the IPS unit root test (developed by Im et al., 2003). 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 our panel as we have 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.

Please insert Table 1 about here

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

We perform Kao's (1999) cointegration tests to evaluate the existence of the long-run equilibrium relationship among the variables when we use tourist arrival per capita and tourist arrival 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.

Please insert Table 2 about here

4.3. Long-run coefficients

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

Please insert Table 3 about here

The results indicate the positive impact of surprising performance in the FIFA World Cup on tourist arrivals appears 2 years after the event for the home countries of surprise teams. The coefficient of *Dummy_2 years after event* is statistically significant and positive (0.031) at the 1% level. This finding supports our hypothesis that surprising outcomes in a sport mega-event like the World Cup can contribute to the rising number of tourists going to the home countries of surprise teams, after controlling other relevant determinants of tourist arrivals. To make our argument more concrete, we note one example. Turkey in the 2002 World Cup is a surprise team and finishes the tournament in third place. The country receives 12.7 million tourists in 2002, 13.3 million in 2003 and, with a substantial growth, Turkey attracts 16.8 million tourists in 2004. As noted by Koc (2005), Turkey's third place in the 2002 World Cup might have triggered much interest in going to Turkey as a destination, for example hosting training camps

for many football teams. This is one reason why tourism has increased in the country thanks to the surprising performance of its national team. Of course, one cannot argue that tourist arrivals in countries of successful teams are merely due to their success in the World Cup. Our results show that as well as other determinants of tourist arrivals, a nation's success in the World Cup may positively contribute to its tourist attraction.

All of the control variables (with the exception of the exchange rate) have the predicted sign and are statistically significant (see Panel A of Table 3), indicating that the international tourist arrivals are higher in countries with higher levels of economic development, political stability and lower travel costs. Among the control variables, economic development of destination plays a very important role in attracting international tourists, as the coefficient of GDP per capita is biggest compared with other control variables (see, for example, Panel A of Table 3). This finding is in line with Saha et al. (2017) who show that economic development enhances the tourism competitiveness of destinations which in turn helps attract more international tourists. The insignificant relationship between exchange rate and tourist arrivals might be due to low variation in the Euro/US exchange rate for the Euro area countries in our sample. In addition, our results show there is a negative and significant relationship between the index of air travel prices and tourist arrivals meaning that an increase in travel costs makes traveling more expensive, in turn discouraging potential tourists less from travelling overseas (Gholipour et al., 2014). We also find that tourist arrivals in the last year have a positive impact on current arrivals in the sample countries, as the coefficient of *ln (Tourist arrival per capita (-1))* is positive and significant.

The positive impact of outstanding performance in the FIFA World Cup on tourist arrivals is stronger for the home countries of champion teams (compared with surprise teams) as the coefficients of *Dummy_1 year after event* and *Dummy_2 years after event* are positive and statistically significant (see Panel B of Table 3). As well, our results 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 becomes the 1998 World Cup champion the country has received nearly 70 million tourists in 1998. However, the number of tourists visiting France has 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 our 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.

Our 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.

Our 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 our findings, we also estimated the relationship between tourist arrivals and "Dummy_1 year after event" and "Dummy_2 years after event" for 11 countries (1995-2017) that participated in the same World Cups but were not surprise or champion teams.

However, we did not find a significant link 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. We have 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_3YR). 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 we would not expect the effect on inbound tourism to be present in later years, even if we could not test this since our dataset does not include the four years after the 2014 World Cup. We have 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_1YR, D_2YR and TOUR. Similarly, including the number of World Heritage sites as an additional control variable does not influence the link between D_1YR, D_2YR 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 however have examined the relationship between outstanding performance in international mega-sport events (the FIFA World Cup) and tourist arrivals in the following years. For this aim, in this study we categorize 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 benefitting 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, we find 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 1 to 2 years after these events. Our 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. As well, our findings are 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 due to the fact that outstanding performance of a country in mega-sport events generates a halo-effect at the country level and in turn promoting 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. Our empirical results 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.

Our results 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 our 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 policy makers look at tourism as the best-placed strategy for economic development, this may also have important consequences for standards of living and social welfare.

In this study, we only use 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., success of Leicester City football club in the 2016 English Premier League). Also, our research only looks at champion and surprise teams in the World Cups. However, we may conduct similar studies for those teams which had shocking and unexpectedly bad results in the World Cups, for instance Spain in 2014. Finally, we have focused on the promotion of outstanding performance in sport events as a tourism development strategy, while the recent coronavirus pandemic is putting under stress the entire tourism industry. Therefore, it may be interesting to reassess our conclusions 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.

References

- Arnegger, J., & Herz, M. (2016). Economic and destination image impacts of mega-events in emerging tourist destinations. *Journal of Destination Marketing & Management*, 5(2), 76–85.
- Ashton, J. K., Gerrard, B., & Hudson, R. (2003). Economic impact of national sporting success: evidence from the London stock exchange. *Applied Economics Letters*, 10(12), 783–785.
- Ashton, J. K., Gerrard, B., & Hudson, R. (2011). Do national soccer results really impact on the stock market? *Applied Economics*, 43(26), 3709–3717.
- Balli, F., Balli, H. O., & Cebeci, K. (2013). Impacts of exported Turkish soap operas and visa-free entry on inbound tourism to Turkey. *Tourism Management*, 37, 186–192.
- Balli, F., Balli, H. O., & Louis, R. J. (2016). The impacts of immigrants and institutions on bilateral tourism flows. *Tourism Management*, 52, 221–229.
- Banerjee, A. (1999). Panel Data Unit Roots and Cointegration: An Overview. *Oxford Bulletin of Economics and Statistics*, 61(s1), 607–629.
- Beckwith, N. E., Kassarian, H. H., & Lehmann, D. R. (1978). Halo Effects in Marketing Research: Review and Prognosis. *Advances in Consumer Research*, 5(1), 465–467.
- Boyle, G., & Walter, B. (2003). Reflected glory and failure: international sporting success and the stock market. *Applied Financial Economics*, 13(3), 225–235.
- Buckley, R. (2004). The effects of World Heritage listing on tourism to Australian national parks. *Journal of Sustainable Tourism*, 12(1), 70–84.
- Crouch, G. I. (1994). The study of international tourism demand: A survey of practice. *Journal of Travel Research*, 32(4), 41–55.
- Dogru, T., Sirakaya-Turk, E., & Crouch, G. I. (2017). Remodeling international tourism demand: Old theory and new evidence. *Tourism Management*, 60, 47–55.
- Dritsakis, N. (2012). Tourism development and economic growth in seven Mediterranean countries: A panel data approach. *Tourism Economics*, 18(4), 801–816.
- Engle, R. F., & Granger, C. W. J. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica: Journal of the Econometric Society*, 55, 251–276.
- Florek, M., & Insch, A. (2011). When fit matters: Leveraging destination and event image congruence. *Journal of Hospitality Marketing & Management*, 20(3–4), 265–286.
- Floros, C. (2010). The impact of the Athens Olympic Games on the Athens stock exchange. *Journal of Economic Studies*, 37(6), 647–657.
- Foroughi, B., Gholipour, H. F., McDonald, H., & Jafarzadeh, B. (2018). Does national culture influence the turnover frequency of national football coaches? A macro-level analysis. *International Journal of Sports Science and Coaching*, 13(6), 902–911.
- Fourie, J., & Santana-Gallego, M. (2011). The impact of mega-sport events on tourist arrivals. *Tourism Management*, 32(6), 1364–1370.
- Fuleky, P., Zhao, Q., & Bonham, C. S. (2014). Estimating demand elasticities in non-stationary panels: The case of Hawaii tourism. *Annals of Tourism Research*, 44, 131–142.
- Gallarza, M. G., Saura, I. G., & García, H. C. (2002). Destination image: Towards a conceptual framework. *Annals of Tourism Research*, 29(1), 56–78.
- Gerlach, J. R. (2011). International sports and investor sentiment: do national team matches really affect stock market returns? *Applied Financial Economics*, 21(12), 863–880.

- Geyer-Klingeberg, J., Hang, M., Walter, M., & Rathgeber, A. (2018). Do stock markets react to soccer games? A meta-regression analysis. *Applied Economics*, *50*(19), 2171–2189.
- Gholipour, Hassan F, Tajaddini, R., & Neyugn, J. (2016). Happiness and inbound tourism. *Annals of Tourism Research*, *57*, 251–253.
- Gholipour, Hassan Fereidouni, Tajaddini, R., & Al-mulali, U. (2014). Does personal freedom influence outbound tourism? *Tourism Management*, *41*, 19–25.
- Han, C. M. (1989). Country image: halo or summary construct? *Journal of Marketing Research*, *26*(2), 222–229.
- Heere, B., Wear, H., Jones, A., Breitbarth, T., Xing, X., Paramio Salcines, J. L., ... Derom, I. (2019). Inducing Destination Images Among International Audiences: The Differing Effects of Promoting Sport Events on the Destination Image of a City Around the World. *Journal of Sport Management*, *33*(6), 506–517.
- Hernández-Mogollón, J. M., Duarte, P. A., & Folgado-Fernández, J. A. (2018). The contribution of cultural events to the formation of the cognitive and affective images of a tourist destination. *Journal of Destination Marketing & Management*, *8*, 170–178.
- Im, K. S., Pesaran, M. H., & Shin, Y. (2003). Testing for unit roots in heterogeneous panels. *Journal of Econometrics*, *115*(1), 53–74.
- Kao, C. (1999). Spurious regression and residual-based tests for cointegration in panel data. *Journal of Econometrics*, *90*(1), 1–44.
- Kaplanski, G., & Levy, H. (2010). Exploitable predictable irrationality: The FIFA World Cup effect on the US stock market. *Journal of Financial and Quantitative Analysis*, *45*(2), 535–553.
- Karafiath, I. (1988). Using dummy variables in the event methodology. *Financial Review*, *23*(3), 351–357.
- Klein, C., Zwergel, B., & Henning Fock, J. (2009). Reconsidering the impact of national soccer results on the FTSE 100. *Applied Economics*, *41*(25), 3287–3294.
- Knott, B., Fyall, A., & Jones, I. (2015). The nation branding opportunities provided by a sport mega-event: South Africa and the 2010 FIFA World Cup. *Journal of Destination Marketing & Management*, *4*(1), 46–56.
- Koc, E. (2005). New product development in the Turkish tourism market: the case of football tourism. *Journal of Sport & Tourism*, *10*(3), 165–173.
- Lai, K. (2018). Influence of event image on destination image: The case of the 2008 Beijing Olympic Games. *Journal of Destination Marketing & Management*, *7*, 153–163.
- Lee, R., & Lockshin, L. (2011). Halo effects of tourists' destination image on domestic product perceptions. *Australasian Marketing Journal (AMJ)*, *19*(1), 7–13.
- Liddle, B. (2012). The importance of energy quality in energy intensive manufacturing: Evidence from panel cointegration and panel FMOLS. *Energy Economics*, *34*(6), 1819–1825.
- Lim, C. (1997). Review of international tourism demand models. *Annals of Tourism Research*, *24*(4), 835–849.
- Matiza, T., & Slabbert, E. (2020). South Africa's place brand: A marketing axiom to South Africa as a tourism destination? *Journal of Destination Marketing & Management*, *15*, 100380.
- Nicolau, J. L. (2012). The effect of winning the 2010 FIFA World Cup on the tourism market

- value: The Spanish case. *Omega*, 40(5), 503–510.
- Nicolau, J. L., & Sharma, A. (2018). A generalization of the FIFA World Cup effect. *Tourism Management*, 66, 315–317.
- Pan, S., Santos, C., & Kim, S. (2017). Promoting tourism, projecting power: The role of television commercials. *Journal of Travel & Tourism Marketing*, 34(2), 192–208.
- Pedroni, P. (2000). Fully modified OLS for heterogeneous cointegrated panels. In B. . Baltagi (Ed.), *Nonstationary panels, panel cointegration, and dynamic panels* (pp. 93–130). Amsterdam: Elsevier.
- Pedroni, P. (2001). Purchasing power parity tests in cointegrated panels. *The Review of Economics and Statistics*, 83(4), 727–731.
- Phillips, P. C. B., & Hansen, B. E. (1990). Statistical inference in instrumental variables regression with I (1) processes. *The Review of Economic Studies*, 57(1), 99–125.
- Riley, R., Baker, D., & Van Doren, C. S. (1998). Movie induced tourism. *Annals of Tourism Research*, 25(4), 919–935.
- Rocha, C. M., & Fink, J. S. (2017). Attitudes toward attending the 2016 Olympic Games and visiting Brazil after the games. *Tourism Management Perspectives*, 22, 17–26.
- Rowe, D., & McGuirk, P. (1999). Drunk for three weeks. *International Review for the Sociology of Sport*, 34(2), 125–141.
- Saha, S., Su, J.-J., & Campbell, N. (2017). Does Political and Economic Freedom Matter for Inbound Tourism? A Cross-National Panel Data Estimation. *Journal of Travel Research*, 56(2), 221–234.
- Saha, S., & Yap, G. (2014). The moderation effects of political instability and terrorism on tourism development: A cross-country panel analysis. *Journal of Travel Research*, 53(4), 509–521.
- Samsung Economic Research Institute. (2002). *Economic and social change after 2002 World Cup*. Seoul: Samsung Economic Research Institute.
- Song, H., & Li, G. (2008). Tourism demand modelling and forecasting—A review of recent research. *Tourism Management*, 29(2), 203–220.
- Thorndike, E. L. (1920). A constant error in psychological ratings. *Journal of Applied Psychology*, 4(1), 25–29.
- Wen, H., Josiam, B. M., Spears, D. L., & Yang, Y. (2018). Influence of movies and television on Chinese Tourists perception toward international tourism destinations. *Tourism Management Perspectives*, 28, 211–219.
- Wirtz, J. (2003). Halo in satisfaction measures: the role of purpose of rating, number of attributes, and customer involvement. *International Journal of Service Industry Management*, 14(1), 96–119.
- Witt, S. F., & Witt, C. A. (1995). Forecasting tourism demand: A review of empirical research. *International Journal of Forecasting*, 11(3), 447–475.
- WTTC. (2018). Travel & Tourism Economic Impact 2018. Retrieved September 7, 2019, from <https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2018/world2018.pdf>
- Yang, C.-H., Lin, H.-L., & Han, C.-C. (2010). Analysis of international tourist arrivals in China: The role of World Heritage Sites. *Tourism Management*, 31(6), 827–837.

Table 1

Results of panel unit root test

Panel A: Surprise teams		
	Statistic	
<i>Variables</i>	<i>Level</i>	<i>1st difference</i>
ln (Tourist arrival)	2.842	-6.612***
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		
	Statistic	
<i>Variables</i>	<i>Level</i>	<i>1st difference</i>
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; *** $p < 0.01$.

Table 2

Results of the Kao Residual Cointegration Test

Panel A: Surprise teams		
	t-Statistic	Prob.
ADF		
ln (Tourism arrival per capita)	-4.234	0.000
ln (Tourism arrival)	-6.045	0.000

Panel B: Champion teams		
	t-Statistic	Prob.
ADF		
ln (Tourism arrival per capita)	-2.556	0.005
ln (Tourism arrival)	-4.241	0.000

Notes: Null Hypothesis: No cointegration; Trend assumption: No deterministic trend; Newey-West automatic bandwidth selection and Bartlett kernel.

Table 3

Results of FMOLS estimator

Panel A: Surprise teams			
Dependent Variable: ln (Tourist arrival per capita)		Dependent Variable: ln (Tourist arrival)	
<i>Independent variables</i>	<i>Coefficient (Standard error)</i>	<i>Independent variables</i>	<i>Coefficient (Standard error)</i>
ln (Tourist arrival per capita (-1))	0.483*** (0.025)	ln (Tourist arrival (-1))	0.486*** (0.022)
Dummy_1 year after event	0.020 (0.015)	Dummy_1 year after event	0.019 (0.014)
Dummy_2 years after event	0.031*** (0.014)	Dummy_2 years after event	0.033** (0.013)
ln (GDP per capita)	0.591*** (0.050)	ln (GDP per capita)	0.614*** (0.050)
Political stability index	0.117*** (0.025)	Political stability index	0.117*** (0.025)
ln (Exchange rate)	-0.002 (0.023)	ln (Exchange rate)	-0.004 (0.022)
ln (Index of air travel prices)	-0.046** (0.021)	ln (Index of air travel prices)	-0.036** (0.017)
Panel B: Champion teams			
Dependent Variable: ln (Tourist arrival per capita)		Dependent Variable: ln (Tourist arrival)	
<i>Independent variables</i>	<i>Coefficient (Standard error)</i>	<i>Independent variables</i>	<i>Coefficient (Standard error)</i>
ln (Tourist arrival per capita (-1))	0.502*** (0.065)	ln (Tourist arrival (-1))	0.549*** (0.066)
Dummy_1 year after event	0.058*** (0.021)	Dummy_1 year after event	0.057*** (0.021)
Dummy_2 years after event	0.035* (0.018)	Dummy_2 years after event	0.033* (0.018)
ln (GDP per capita)	0.455*** (0.094)	ln (GDP per capita)	0.463*** (0.096)
Political stability index	0.041** (0.019)	Political stability index	0.037* (0.019)
ln (Exchange rate)	-0.034 (0.033)	ln (Exchange rate)	-0.043 (0.033)
ln (Index of air travel prices)	-0.017 (0.052)	ln (Index of air travel prices)	-0.027 (0.051)

Notes: Panel method: Grouped estimation; Cointegrating equation deterministics: Constant⁵; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

⁵ The sign and significance of coefficients for two variables of interest, i.e. “Dummy_1 year after event” and “Dummy_2 years after event” remain unchanged if we include @Trend in our specifications.

Appendix

Table A.1

Descriptions of control variables, data sources and expected signs

<i>Variables</i>	<i>Definition</i>	<i>Included in studies of</i>	<i>Data source</i>	<i>Expected signs</i>
GDP per capita	<p>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.</p> <p>We did not include the source country GDP per capita 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.</p>	Das & Dirienzo (2009); Saha et al. (2017)	The World Bank	+
Political stability index	<p>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 approximately -2.5 and +2.5, with higher values indicating higher political stability within a country.</p>	Saha et al. (2017); Yap & Saha (2013)	The World Bank	+
Exchange rate	<p>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.</p>	Saha & Yap (2014); Saha et al. (2017)	Euromonitor International	+
Index of air travel prices	<p>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.</p>	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	4,567,000	336.46	11,533.72	0.20	7.10	92.90
Maximum	86,861,000	3753.55	59,221.58	1.40	6,432.70	406.70
Minimum	250,000	17.06	1,506.47	-2.00	0.10	1.40
Std. Dev.	21,818,790	619.08	10,676.89	0.73	1,328.60	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	1,757.78	50,638.89	1.40	3.50	131.70
Minimum	1991,000	12.27	8,073.13	-0.50	0.70	32.50
Std. Dev.	25,787,835	505.19	10,422.38	0.48	0.62	24.30