DOES THE WINNER REALLY TAKE IT ALL: ASSESSING THE IMPACT OF MEGA SPORT EVENTS ON FDI FLOWS OF THE HOSTING COUNTRY

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Abstract

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Many countries see hosting of sports events as a way to ensure their sustainable development and to accelerate this development even further. Hosting a mega sport event can lead to economic, social and political impacts, such as creating new job and business opportunities, increasing tourist visits and promoting sport in a nation etc. However, until now there were no researches as whether hosting a big sport event has a positive influence on the FDI inflow to the country.

We found that hosting Olympic Games does not generate significant positive effect on FDI inflows as well as hosting Football Championships. However, a positive significant anticipation effect was found for countries that have won the right to host Winter Games and World Cup, although the effect has a transitory nature. At the same time, bidding for hosting EURO Championship results in significant influence on FDI inflows with a permanent negative effect.

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Chapter 1

INTRODUCTION

> "When you bring (Euro 2012) to Poland and Ukraine you change the life for the people. You don't change only the life for one month of football, you change the life for the people because there is a big boost for the country".
>
> Michel Platini, UEFA president
> CNN, December 02, 2011

In June 2012 Poland and Ukraine will host the 14th European football Championship. In view of this event and the proposal of the Ukrainian President to hold Winter Olympics-2022 in the Carpathians, expectations are growing high not only with respect to the performance of Ukraine's national team, but also about economic benefits these events can bring to Ukraine. As of March 28th 2012, the total amount for Ukraine's preparation for Euro-2012 was 105.914 billion UAH. Given such a big sum of money, concerns arose as for the profitability of the whole arrangement.

The merits of hosting big sport events, or mega events, have been and are being widely discussed. Mega events can be defined as "exceptional public events, which can be classified according to a) spectator capacity, b) duration and c) location (Ritchie, 1984). According to Horne (2010), mega sport events usually include Summer and Winter Olympic Games, the FIFA football World Cup and the UEFA football Championship.

Governments and big sport companies argue that hosting mega events generates economic, social and cultural benefits that will flow to the hosting country and thus justify the possible costs and risks involved. Usually the proponents of such events refer to the so-called "holy trinity of mega events benefits" described by Matos (Matos, 2006): economic growth, infrastructure improvements and promotion of a good image of the host country. Ever since the Olympic Games in Los Angeles in 1984 generated a profit of USD 200 mln, hosting mega sport events has been perceived not only as prestigious, but also profitable. Hosting countries perceive sport events as a way to foster economic development through increased investments into different sectors of the economy such as road infrastructure, communications, hotels, etc. Last but not the least, - sport events draw attention to the health care infrastructure, promote healthy ways of life within the country and reduce the crime level.

However, many of the advocacy studies, that show positive results of such events, were made in advance of the events themselves and therefore were based on very strong assumptions. Governments often make cost-benefit analysis of the possible event before they actually are granted the right to organize one, and in most cases such analyses exaggerate the real benefits for local communities (Porter, 1999). Post-event studies, measured in surveys and statistical data, show uneven impacts on the host country depending on the kind of the event and the initial conditions of the hosting countries (Matheson, 2004; Lee, 2005).

To date, most of the mega sport events were awarded to developed countries with a well-established history in sports. However, due to the increasing number of bidders, the policy taken by International Olympics Committee (IOC) and UEFA is now aimed to stimulate sport development in developing and transition countries with the recent examples of Winter Olympics that will be held in Russia in 2014 and the World Cup in South Africa in 2010. While awarding such events to developing countries may be good for the IOC and UEFA's image, it certainly

poses significant risk for the hosting country. It goes without saying that developing countries require more capital investments in order to provide high-quality infrastructure and sport facilities than developed ones. Even more important is that the opportunity costs of such capital investments are higher in developing countries, where money of taxpayers spent on the event is not allocated to other areas where they might be more needed, such as the health system, thus hosting a big sport event may be not the most efficient way of spending public money. However, it is difficult to assess all the alternatives and one may doubt whether the alternative projects would have been executed if the sport event would not be organized. The after-event returns of the investments can also differ. The attendance of stadiums in developing countries is much lower while the maintenance costs may be the same or even higher than in developed countries (Watts, 2002).

Given such large expenditures and opportunity costs, why do countries continue to compete for the privilege of hosting such events? Apart from some immaterial benefits such as the improvement of the country's image, there must be also measurable economic benefits the countries pursue. In the existing realm of mega-sport studies, most of them are devoted to the analyses of potential impact of hosting mega events on the trade volumes and government expenditures. There are also researches of the correlation between hosting mega events and financial markets that were mainly aimed at evaluating the impact of mega events on the stock markets of host countries (Berman, Brooks and Davidson, 2000). This thesis research will test whether hosting countries have received benefits in terms of FDI inflows compared to those that have bid for hosting but lost. Hosting mega events creates international awareness and may put the country on the map of potential investors. It also creates an expectation of a higher consumer demand in the local markets and thus attracts capital from abroad as was proved for the case of the Olympic Games (Bruckner and Pappa, 2011). This research will test whether there

exists a positive correlation between hosting mega events such as Olympics, the World cup and Euro Championship and check whether there is a short-term or a long-term effect on FDI. The concept "short-term" will be referred to as the period immediately before, during and after the event. The estimation of the long-term effect might sound paradoxical given that the very nature of the event is temporary. However, a long-term effect occurs if the economic activities are moved to another level in the way that mega events permanently change the long-term preferences of FDI flows in the particular country. Long-term period is defined as being 5 years after the event itself.

The methodology used in the research is based on a model that will examine the volumes of flows of FDI both in the countries that have hosted the event and bid losing countries for the same event. By comparing losers and winners, we can control for unobservable variables that might influence FDI streams and are correlated with the willingness of a country to bid for an important sports event. The variables in the model include determinants of FDI flows that are considered to be universal for all countries to control for other factors that influence the decision of foreign investors (Blonigen, 2005). The data is collected from 1970 till 2010 from the official websites of the Olympic Games and FIFA Cup's and Championship's websites, IMF, Heritage Foundation and UNCTAD official websites.

The remainder of the paper will proceed as follows: Chapter 2 provides a review of the existing literature about impact of hosting mega events and gives a description of the methodology used and the findings of the previous researches; Chapter 3 outlines theoretical and empirical framework of the research; Chapter 4 gives data sources used and the description of the variables. Chapter 5 examines the results of the estimated econometric model and finally Chapter 6 presents conclusions and possible extensions.

Chapter 2

LITERATURE REVIEW

For years the economists have been researching the potential costs and benefits of hosting (and bidding for hosting) a mega sport-event, focusing on ex-ante and ex-post analyses of the economic situation in the candidate countries. The existing literature on the issue can be divided into several groups. There are studies that investigate:

1) Impact of mega sport events on national exports;

2) Influence of mega sport events on the host country image;

3) Influence of the announcement of the host country on stock performance;

4) Improvement in tourist infrastructure in the host country.

The present literature review is structured as follows: first, the findings of previous studies are discussed according to different outcome variables, mentioned above. Second, the methodology used to assess the impact of hosting mega-events is reviewed. Third, the survey of the existing literature on the determinants of FDI is provided.

There is a considerable amount of research that investigates the economic effects of holding a big sport event. However, studies produce controversial results and economic benefits obtained seem to be dubious (Owen, 2005). On the one hand, Seoul Olympics in 1998 and later South Korea World Cup (2002) were found to be too costly and didn't meet high expectations of the residents about the economic benefits for the local communities (Choo, 2002). On the other hand, one of the most recent works of Rose and Spiegel (2011), who were studying the correlation

between hosting mega sport events and international trade promotion, found a large and permanent positive effect of hosting the Olympic Games.

Estimations of 'soft' benefits like host country image improvement are also mixed and differ in terms of long-term impact. Apart from the emotions of foreign tourists and sport fans that will be transformed into the perception of the host country afterwards, organization of mega events may also increase the nation's self-consciousness and motivation and lead to the economic boom (Gethard, 2006). Moreover, the impressions of both external and internal audiences may create a synergy effect that will affect image of the host country (Dauncey and Hare, 2000). At the same time, some researches point out to the small statistical significance of hosting a mega event on the image of the country as in case with Sydney Olympics (Rivenburgh, Louw, Loo and Mersham, 2002) and to the bias in the survey data that is collected during or shortly after the event (Matos, 2006).

The effect of stock market reaction on the announcement of the host country has been investigated in the works of Veraros (2004), who found significant positive returns on the Athens Stock Exchange index following the Olympic Games in Athens in 2004 while there was no significant effect on industries of the bidding countries that have lost. The market reaction to the announcement of Olympic Games in Sydney was studied by Berman et al. (2000). The research showed that there was no significant effect on the overall stock market and only a small positive effect on the infrastructure-related industries. The stock-markets of the countries hosting Olympics, World Cup or European Football Cup were also studied in the research of Martins and Serra (2007) and showed no direct return benefits for the industries more likely to be affected by the events and also insignificant cumulative returns for losing bidders.

Sport economists also asked to what extent hosting mega events influence tourist arrivals in the hosting countries (Matheson 2002; Solberg and Preuss 2006; Fourie, Siebrits, and Spronk 2010). Whereas some tourists who are also sport fans may be attracted to the hosting country, other tourists that are travelling for sightseeing

purposes or who are used to visit the region may on the contrary, refrain from visiting the host country. This could be due to the changed market conditions, such as increased prices, logistic difficulties with accommodation and transport due to the increased demand on the market or security concerns (Fourie, et al. 2010).

Among the variety of models used in the existing literature to measure the impact of the mega-sport events usually 3 methods are distinguished: input-output analyses and social accounting models (SAM), cost-benefit approach or computable general equilibrium (CGE) models. Originally founded by Leontief, input-output and social accounting models are based on a multipliers' framework where the output depends on multiple changes in the input variables. Being widely used for the analyses of the impact of major events on countries' economies, in recent studies these methods were heavily criticized for their limitations for considering crowding out effects and too strong assumptions as for the production multipliers patterns, which usually lead to exaggerated estimates of the benefits of mega events (Crompton, 1995; Matheson, 2006).

The failure to account for public costs associated with mega events and difficulties to measure social benefits correctly presents a drawback of the cost-benefit analyses. CGE models contain more variables than equations that is why crucial for such models is to determine the exogenous and endogenous variables to reflect the true economic environment under consideration. As with many simulation models, using CGE models requires certain assumptions and restrictions which influence the various outcomes.

Such a vast plethora of literature on mega sport events has fuelled a popular belief that sport has expanded from its role in the society and is now a trigger for both national and local economic development. Hosting mega events will necessitate certain improvements in the infrastructure to correspond to the extensive list of requirements any host country must meet as well as show the desire and ability of a hosting country to take a more active role on the international level, one can hypothesize whether there is a correlation between sport events and FDI flows.

In fact, hosting a mega event could also present a fiscal stimulus to a country – and in case of developing countries including Ukraine, it serves as an anchor to get things done that otherwise might be neglected and hence generates expectations of an improved economic environment. Increased volumes of trade, development of country image and infrastructure should drive FDI flows as they are will follow the improvements in market conditions of the host country. The main question then is whether the fact of organizing a big sport event can be considered as a determinant of FDI flows by itself. Another interesting question is whether these event-driven FDI flows generate a long-term economic effect on the hosting economy.

The identification of universal FDI determinants is a challenging task given the number of different FDI studies and factors that are specific for each region, country or industry. Moreover, even though traditional determinants of FDI have not disappeared, their importance might have declined for some countries (Dunning, 1999). However, it is still possible to group the existing FDI determinants into 2 main categories:

1)country-specific factors and

2)firm-specific factors.

For the aim of the present thesis I will concentrate on the country-specific FDI determinants.

The existing theoretical literature of the FDI determinants dates back to the work of Ohlin (1933), who argued that FDI were motivated mainly by the possibility of high profitability in the new markets of developing countries, along with the possibility of financing these investments at relatively low rates of interest in the host country. At present the most widely reported determinants that correspond to the economic performance of the country such variables as GDP per capita, number of the country's inhabitants, exchange rate and the openness of the economy are used. A recent study by Blonigen (2011) indicates there is a strong and robust support for the inclusion of GDP per capita into the model, which is supported by the similar studies of Head and Reis (2008) and Di Giovanni (2005).

The influence of the host country population was analyzed in the papers of Eaton and Famura (1994), Wei (2000) and showed a significant correlation between the population number and FDI flows. Consistent evidence of increased inward FDI following movements in exchange rates were studied in the works of Swenson (1994) and Kogut and Chary (1996). The studies resulted in the assumption that effects of exchange rates on FDI are symmetric and proportional to the size of the exchange rate movements. The quality of institutions is also considered to be an important determinant of FDI flows as it tells about the costs of doing business in the particular country and the functioning of markets in the host country in general. The question of institutions' quality was examined in the papers of Daerde (2008) and Anghlet (2005) who found a positive relation between countries with highly ranked quality of institutions and FDI flows.

This research will look at the anticipation effects as the announcement of the actual host and bidding for hosting can be perceived as news about possible investment opportunities for the international community. The question is whether this news has a short-term or a long-term effect on FDI, if there is an effect at all. To test for the past, contemporaneous and future effects of hosting the mega events on FDI flows a quasi-natural experiment approach with fixed effects' estimation techniques will be applied using panel data of countries that hosted the mega-event and countries that have bid to host the event, but have lost. I will also perform both sensitivity analyses of the data and tests for the omitted variables bias.

Chapter 3

METHODOLOGY

The idea behind estimating the impact of mega sport events is that they initiate a significant increase in the demand for goods and services in the hosting country. The effect concerns not only the direct impact created by the investments before the event itself (like the construction of new stadiums or hotels) or by consumer expenditures during the event (for example, tickets and hotel bookings), but also the indirect impact of other economic activities that were increased by the direct effect (like the stimulus to tourist infrastructure). Increased expenditures in sport facilities and on consumption of goods and services unambiguously provide a stimulus to the economic activity of the country which in its turn can attract foreign investments into the hosting country. The same is true for the bidding countries as when a country competes for the honor to host a mega sport event, it receives local and international media attention and thus has an increased opportunity to attract financial investments.

As there is little consensus in the existing literature on what are the main FDI determinants, there are different approaches on how to model the FDI flows. In the present thesis the FDI inflows are modeled according to the following equation:

$$FDI_{it} = \alpha_0 HOST_{it} + A(L)HOST_{it} + B(F)HOST_{it} + \beta_0 BID_{it} + C(L)BID_{it} + D(F)BID_{it} + \gamma_1 CONTROL_{it} + \alpha_{1i} + \beta_{1i} + \varepsilon_{it},$$

where i stands for a particular country;
t stands for time;

FDIit stands for foreign direct investments inflows as % of GDP;

HOSTit stands for a dummy variable that takes value 1 if country i has hosted mega sport event in year t;

BIDit stands for a dummy variable that takes value 1 if country i has bidden to host mega sport event in year t;

CONTROLit stands for control variables for the particular country, that are discussed in the Data section.

εit stands for other omitted influences on FDI, assumed to be well-behaved.

As bidding to host the mega event takes place before the actual hosting, the lags of the bidding and hosting country variables up to 7 years before are included to capture the lagged effects of the event on the hosting country, so that

$A(L) = a_1L_1 + a_2L_2 + \cdots + a_7L_7$ and $C(L) = c_1L_1 + c_2L_2 + \cdots + c_7L_7$, where the polynomials A(L) and C(L) show the effects on the hosting and bidding country before the event. In the same way the after-event effect can be captured by including lagged polynomials $B(F) = b_1F_1 + b_2F_2 + \cdots + b_7F_7$ for the host country and $D(F) = d_1F_1 + d_2F_2 + \cdots + d_7F_7$ for the bid country.

The model was also tested for a longer time horizon, but as no significant coefficients for the 10 years lags and leads was found, in the present thesis 7 years are taken as a base as the announcement of the winner hosting country takes place 7 years before the actual Olympic Games and approximately 4 years for the Football Championships. The model also captures the contemporaneous effect of the mega event for bidding and hosting countries by the coefficients α_0 and β_0.

The estimation is based on the data for about 140 countries for the years 1975-2010 and allows to see whether hosting or bidding countries in fact have a positive or negative effect from mega sport events on FDI. A further extension of the research is to compare inflow of FDI of hosting countries and bidding countries.

This might help to address the endogeneity concerns: FDI flows may be attributable to unobserved differences between the economic development of the countries in the sample – by focusing on bidders we can control to some extent for such differences.

Country fixed effects αi and year fixed effects βt are further included in the model to account for time-invariant specific factors and thus to reduce further the importance of endogeneity in the model. The inclusion of fixed effects allows to control for fixed country factors like climate, language or access to the sea. Year fixed effect controls for specific timeline factors as world business cycle or seasonality in FDI. Controlling for both country-specific and year-specific fixed effects allows to interpret the estimated slope coefficients as the result of a difference-in-difference equations (Brucker and Pappa, 2011). A measure of distance is not included as this research doesn't use gravity model per se, but rather looks at country totals.

Another extension to the basic model is to test whether the type of hosted sport event matters for FDI inflows and whether Olympics or Football is more attractive to foreign investors. The two events are very similar in the organizational procedures – bidding for hosting the events happens from 5 to 8 years beforehand, the winner is announced 4 years before the event and the event itself happens on the regular basis every 4 years. Using the methodology mentioned above, we estimate the ex ante and ex post effects of hosting and bidding for Olympics (both Summer and Winter) and Football Championships (both World Cup and Euro Championship) to compare the results. However, the number of countries that have hosted or bid to host football events is much smaller than those for Olympics, which reduces the variance in the explanatory variable and hence makes it more difficult to find precise estimates.

The decision to apply for hosting a mega sport event is usually driven by a desire of the governments to create a positive and lasting effect (so-called legacy effect) for the country and its people. IOC and FIFA are very concerned about the long-term impact of mega sporting events that they hold. They want to ensure that hosting countries are "left with the best possible legacy venues, infrastructure, environment, expertise and experience". In addition, host countries are afraid to build "white elephants" - stadiums and complexes that will become unprofitable once the event is over. The model will also check whether hosting and bidding for mega sport events in general (and for Olympics and Football Championships in particular) has a long-term effect on the FDI inflows. To do this, the sum of the estimated coefficients will be tested against the null hypothesis that the sum of the coefficients is equal to zero.

Also to check that the model was identified correctly, test for difference between bidding and hosting countries will be made to see whether the coefficients for both types of the countries differ. The estimation framework also allows to test whether there is a significant difference in FDI inflows for developing and developed countries in the effect of mega sport event. By now, only one developing country – South Africa in 2010 – has ever hosted mega sport event, thus in the thesis the difference of the effect on FDI inflows will be tested only for bidding developing and developed countries to see whether bidding for a sport event can become a drive for increased FDI inflows to the developing countries. Also, as mega sport events are hosted mostly by developed countries, separate regressions for hosting and bidding developed countries are run as a robustness check.

To eliminate the problem of serial correlation in the error terms, Huber-robust standard errors are used at the country level. Finally, the sensitivity of the model specification is tested with another mega event – International Exposition (EXPO). Unlike mega sport events, bidding for EXPOs is limited, thus the comparison is

made of the effects of the actual hosting. Similarly with the sport events, the tests for long-term effect of hosting EXPOs on FDI inflows is made.

Bidding and hosting mega sport events can be considered exogenous to the current output and investment growth as the very bidding process takes place several years in advance before the actual event. To test whether the right to host the mega-event is indeed assigned independently of the level of FDI a logit model is estimated with a dummy variable for hosting or bidding country as a dependent variable being a function of FDI inflows. Such model specification allows to examine whether changes in FDI inflows to the country are correlated with the probability of hosting or bidding for mega sport event.

Chapter 4

DATA DESCRIPTION

The panel data includes observations for 147 countries for the period 1975-2010. The data for countries includes both developed and developing countries according to the IMF classification. The data for bidding and hosting countries for Olympics and football championships is taken from the official web-sites of IOC, FIFA and UEFA. Both Summer and Winter Olympic Games as well as World Cup and EURO Championships are considered in the data to increase the number of major sports events included. As dependent variable we use the overall FDI inflows as % of GDP, provided by the IMF World Economic Outlook database. Appendix Table 1 and Table 2 provide a list of bidding and hosting countries for the mega sport events.

Consistent with previous studies, the independent variables reflecting host country market size, openness to trade and FDI inflows in other sectors are included. GDP per capita is used to reflect the market size of a particular country. In studies of FDI, GDP per capita proves to be a highly robust determinant (Chakrabarti, 2001), though it is sometimes argued to be more an indicator of level of market development than market size. Also, in the literature the market size is measured through the population of the given country, though the significance of this coefficient varies in different studies (Schneider and Frey 1985, Cleeve 2008 Mhlanga et al 2010).

As a proxy for trade openness, the sum of the country's export and import as a percent of GDP will be used. A number of studies find this variable to be significant (Asiedu, 2002; Noorbakhsh et al 2001) and this variable is most likely to be correlated with aggregate FDI inflows apart from the market size.

Previous studies also point out that a stable economic and financial situation in the country imply current account balance and price stability, thus attracting FDI inflows (Cleeve, 2008). Botric and Skuflic (2006) showed that high or volatile inflation rates stand for economic instability indicator and thus may influence the decision of foreign investors. Macroeconomic stability measured by the inflation level was also found to be insignificant in some studies mentioned before (Noorbakhsh 2001; Asiedu 2002) but there are exceptions (Harms and Ursprung 2002; Kolstad and Villanger 2008), so it is also included. The data on the current account deficit of a particular country also denotes instability and possible problems with the movement of capital between countries, so this variable is included in the regressions (Schneider and Frey, 1985).

Finally, a variable that captures the socio-political development of the particular country is included. The main reasoning for including this variable is that investors determine risks and costs of doing business in the country based on its socio-political environment, as many studies have found out (Globerman and Shapiro, 2002; Harms, 2002; Biswas, 2002). The variable of socio-political development is economic freedom index calculated by created by The Heritage Foundation, which is an aggregated index of 10 different socio-political characteristics (business freedom, trade freedom, monetary freedom, government size/spending, fiscal freedom, property rights, investment freedom, financial freedom, freedom from corruption, labor freedom). The idea behind using the aggregate index is that disaggregate indexes are highly correlated and exhibit little variation for countries for several years which makes their inclusion in the fixed effect regression problematic.

In the view of the current crisis in Greece, some economists have suggested that one reason for such a devastating situation was the expensive Olympics in Athens in 2004 (Owen, 2005). However, the President of the International Olympic Committee (IOC) Jacques Rogge warned that to bind the debt crisis and the Olympic Games is at least "unfair." According to him, Athens still feel the beneficial effects of improvements in urban infrastructure and transportation system, which appeared only because of the Games. Greek Olympic Committee has a similar point of view, referring to the fact that the national debt, evaluated to be at 310 billion Euros, is too great to be able to write off only the costs associated with the Olympic Games. To check whether his statement is econometrically correct, the data on the government debt is included into the estimation model as an additional control variable.

Chapter 5

EMPIRICAL RESULTS

During the estimation procedure, several model specifications were used. First, the models including all control variables were tested against models that excluded one or several explanatory variables to check for the model sensitivity. It turned out that in all model specifications such variables as Inflation (as GDP deflator) and Economic Freedom Index, while considerably reducing sample size due to the big number of missing data (for example, Economic Freedom Index is available only from 90s onwards), were found to be insignificant. It also seems that the statement of Mr Rogge didn't find its confirmation in this work as the coefficient for Government Debt (as % of GDP) was found to be insignificant in all model specifications and doesn't seem to affect at least FDI inflows of the hosting country. These findings correspond to the previous researches that found insignificant effect of these determinants (Mhlanga et al, 2010; Mohamed and Sidiropoulos, 2010; Cleeve, 2008), so in the final estimation models these 3 variables were excluded from the regressions. At the same time, the coefficients for Population, logged value of GDP, Trade and Current Account of the countries were found to be significant at 99% significance level and with the expected signs, verifying previous findings of Botric and Skuflic (2006) and Cleeve (2008).

The estimates for contemporaneous and before-effects of hosting and bidding for the mega sport events are presented in Table 2. Column 2 shows that countries that have hosted the mega sport events did not experience a statistically significant increase in the FDI inflows in the year of the event. The estimated coefficients proved to be insignificant even at 10% significance level. Also, all coefficients for hosting country for the after-event period are negative, though insignificant. The test of the sum of the lags for hosting country also showed that they are statistically not different from zero. For bidding countries the situation is a bit different as

apart from insignificant estimates for ex-ante, contemporaneous and ex-post effect from bidding, the values have positive sign for the after event period (Table 2).

Again, if we sum the coefficients for bidding countries, we cannot reject the null that they are equal to zero, implying that there is no difference whether the country bids or actually hosts a mega sport event, the result in both cases is statistically insignificant.

We also look whether the type of the sport event matters for the FDI inflows in the hosting country. Table 3 examines whether hosting or bidding for Olympic Games has ex-post or ex-ante effect on the FDI inflows. The results obtained for Olympics are insignificant meaning that investors do not perceive Olympics as an attractive investment. Moreover, negative values of the coefficients suggest that the signal for hosting the Olympics brings unfavorable effect. The findings support the idea presented in the introduction to the present thesis that in fact, countries that are expecting to get higher FDI inflow due to the Olympics hosting based on ex-ante cost-benefit analysis are not receiving the return once ex-post analysis is conducted. The results might justify the findings of many researches that there are either very small or no benefits from organizing Olympic Games for the host country. Similar insignificant results we obtain for the bidding countries as well and the tests of the sum of the coefficients proved to be zero.

On the other hand, hosting Football Championships gives a positive though insignificant effect of the increased FDI inflows (Table 4). Positive effect is found for hosting country 7 years before the event and for bidding countries positive effect is found for 5 years before the event, while coefficients for longer periods are found to be insignificant. Also, there is no contemporaneous effect found for hosting countries. The sum of the estimated coefficients is statistically insignificant for Football Championships, however, meaning that there is no legacy effect found.

Next thing we look at is whether the type of the Olympics or Football Championship matters for the investors. Table 5 presents the effect on FDI inflows from hosting and bidding for Summer Olympic Games. The contemporaneous and long-term results were found to be insignificant for the hosting countries while there are significant negative results for 2 and 3 years ex-ante effects for bidding countries. However, the sum of estimated coefficients proved to be statistically insignificant at any conventional confidence level.

For Winter Olympics the results obtained are presented in Table 6. Significant positive before event coefficients for 6 and 7 years for hosting country imply that once the actual host of the Winter Olympics is known, it creates positive expectations in the host country – investors see Winter Olympics as a good investment opportunity. However, the estimated contemporaneous and after-event coefficients are found to be insignificant and have negative sign which means that the effect is short-lived and once the actual preparations for the Olympic start, the country has difficulties in attracting additional FDI inflows. For bidding country positive significant effect was found only for 3 years after event FDI inflows. However, the sum of estimated coefficients reject the hypothesis that there exists a legacy effect from hosting a Winter Olympics, thus the effects found are only of transitory nature.

Quite different situation we have once we begin to analyze the World Cup and EURO Championships. Hosting the World Cup creates additional FDI inflows only 4 years before the event – in the year when the official host is announced. For bidding countries we obtain positive significant results (Table 7) for contemporaneous effect and 4-5 years before the event, that is in the years when the final hosts are announced. This suggests that in fact, investment inflows generated by the news of the country's participation in the bidding process are due to the perceived investment opportunities of the bidder and positive ex-post

coefficients suggest that in fact, countries have won in terms of investments compared to the actual organizers at least in the short-term period. Possible explanation may be that bidding process has a big media exposure and attracts different economic and political attention that is difficult to generate in other way.

Again, the sum of coefficients proved to be significantly different from zero for bidding country implying that it is more beneficial for the country to bid for the event but not be the actual host as the lost bidding country doesn't bear all necessary expenditures connected with the event itself, but may instead use generated international visibility in other types of business opportunities.

On the other hand, hosting EURO Championships does not increase inward investments (Table 8). The estimated coefficients for the long-term effect are both insignificant and negative and we fail to reject the null hypothesis that the sum of coefficients is statistically different from zero. Such results cast serious doubts whether Ukraine will gain in terms of inward FDI flows once EURO-2012 is over. A different story we have with the bidding countries – the post-event effect on FDI inflows is found to be significant and negative, implying that the legacy of the lost bid may have negatively affected the outcomes for the bidding country once the event is over. Possible explanations may be that a country willing to host the event may delay or cancel other projects not related to the event but which may present a lost investment opportunity. Another fact is that the very bidding process is a costly one as it includes expenditures on consulting agencies, PR, marketing and advertising, etc. which may hamper the economic situation in the country in general. The long-term effect for bidding countries, unlike results for hosting countries, proved to be significant and points out to the existence of long-term negative effect of the lost bid, so countries should make a weighted decision whether to take part in the bidding process.

As a further sensitivity analyses procedure, we test whether hosting International Expositions (EXPO) has an effect on the FDI inflows of the hosting country. In contrast to the Olympic Games or Football Championships, hosting EXPO generates additional positive FDI inflows in the year of the event only, while the long-term ex-post and ex-ante coefficients except for 6 years after the event, were found to be insignificant (Table 9). Similarly as hosting Olympics or Football Championships, hosting EXPO doesn't create legacy effect.

Also we formally test whether hosting EXPO has different effects than hosting Olympic Games or Football Championships by including dummy variables for 2 events (EXPO and Olympics separately and EXPO and Football separately) in the distributed lag model and testing whether the estimated coefficients are the same.

Table 10 shows the contemporaneous, ex-ante and ex-post effect on FDI inflows from hosting EXPO compared to effects from hosting Olympic Games and Football Championships. The results show that the contemporaneous and before-event effects of hosting EXPO and hosting Olympics and Football is the same while the after-event effects differ – the effect from hosting EXPO is different from those of hosting Olympics – hosting EXPO has a positive contemporaneous impact on FDI flows while coefficients for Olympics were found to be insignificant.

Finally, we tested a logit model to see whether the obtained right to host a mega sport event or the decision to bid for mega sport event (Olympics and Football Championships separately) is significantly related to the changes in FDI inflows. We are interested in the estimates for 7 years before the Olympic Games and 4 years before the Football Championships as at this time the official hosts are announced. We obtain significant results for countries that have hosted Olympics 2 and 3 years before the event or Football 3 and 6 years before the event and for bidding countries significant results are found for the variables 7 years before the

event. However, there is no clear pattern for the influence of past values of FDI inflows on the probability of hosting the mega sport event and the variables for the announcement days (Table 11). Since the estimated coefficients for FDI inflows for the announcement years are found to be insignificant, the findings provide evidence that it is unlikely that there are systematic positive reverse effect of FDI inflows on the likelihood to host or bid for the Olympic Games or Football Championships.

Finally, we test whether the right to host a mega sport event is not given randomly but depends on some economic pre-conditions of the winner country (in our case – on the existing FDI inflows). If the right to host the event is not assigned randomly, then the pre-event FDI inflows of the actual winners should be higher than those of the bidders. We formally check this by testing whether before-event coefficients for hosting countries are the same as the coefficients for the bidding countries. If they are the same, the voting of IOC, FIFA and UEFA are biased as FDI inflows also determine the possibility to win the bid. P-values of the null hypothesis that the coefficients are the same are shown in Table 12. The obtained results show that the assignment of the hosting right indeed is random as the coefficients for actual hosts and bidders are found to be identical.

Chapter 6

CONCLUSIONS

The current paper analyzes the effect of hosting a big sport event (Olympic Games and Football Championships) on the FDI inflows compared to the country that have bid to host the event, but have lost. As both hosting and bidding for a mega sport event happen with a considerable media coverage and sponsorship, countries are hoping to attract attention of the foreign investors and generate considerable FDI inflows. The hypothesis was tested with a fixed effect econometric model that included dummies for hosting and bidding countries and a number of control variables considered to be important FDI determinants. The paper was also aiming to find whether different types of sport events have different impact on FDI inflows of the hosting country and whether there is a long-term legacy effect from hosting a mega sport event.

Under assumption that hosting and bidding for mega sport event present a natural experiment, we were able to address the main question of the present paper. Our empirical results show that hosting or bidding for a mega sport event doesn't have a significant effect on the FDI inflows of the country once all 4 events are included into the estimation equation. In case of Olympics, either hosting or bidding do not generate additional benefits which confirms previous studies of the so-called Olympic Effect. For Summer Olympics the results for hosting country are insignificant while for Winter Games we found a significant positive anticipatory effect 6-7 years before the Games which implies that investors perceive the organization of Winter Games as a positive indicator for possible future profits. Similarly, significant results were found for Football Championships – hosting countries experience a positive impact on FDI inflows once the actual host is announced while bidding countries experience positive contemporaneous effect in the year of the event. For World Cup a positive announcement effect on FDI

inflows is also found. The results suggest that while actual hosting of the Cup has a positive impact on the FDI inflows, it is not a necessary precondition as bidding countries also experience an FDI inflow at levels comparable with actual hosts. In case of EURO Championship, no significant results for hosting countries were found, so we cannot make a clear statement on the merits of hosting EURO to countries. The robust long-term legacy effect for hosting countries was not found and when we use hosting EXPO as a natural experiment, the results are similar.

Hosting mega sport event has become very prestigious and popular nowadays. However, the countries competing for being selected base their potential outcomes on the ex-ante analysis, while the present paper shows that once ex-post analysis is conducted, the possible outcomes may vary both for actual hosts and bidders and depending on the type of the event. Our results have showed that while there is an obvious positive anticipation effect on FDI inflows of the hosting country, this effect is temporary and may not justify the costs the hosting country would undertake. It is therefore very important for the researches, government officials and governing bodies of IOC, FIFA and UEFA to recognize the shortcomings of the ex-ante studies while ex-post assessment of the

potential benefits in terms of increased FDI inflows vary and may lead to disappointing outcomes. This will help potential hosts of mega sport events to improve their predictions and critically assess the economic risks of hosting while making a final decision.

TABLES

Table 1. Descriptive Statistics

	Observations	**Mean**	**Standard Deviation**
FDI inflow, % of GDP	3845	3,91	18,01
ln(GDP per capita), constant 2000 USD	3845	7,77	1,54
Population, number of inhabitants, mln.	3845	41,8	139
Trade, % of GDP	3845	80,26	50,02
Inflation, GDP deflator	3829	38,78	383,35
Government Debt, % of GDP	855	53,32	34,53
Economic Freedom Index	1806	60,54	10,05
Fixed Capital Formation, % of GDP	3678	22,12	7,62
CA balance, % of GDP	3845	-3,48	8,43

Table 2. Ex-Ante and Ex-Post Effects of Hosting and Bidding for Mega Sport Events

FDI Inflows				**FDI Inflows**			
Hosting Country	0.56			Bidding Country	0.08		
	(0.49)				(0.33)		
L1 Hosting Country	0.26	F1 Hosting Country	-0.07	L1 Bidding Country	0.08	F1 Bidding Country	-0.1
	(0.51)		(0.51)		(0.40)		(0.34)
L2 Hosting Country	0.42	F2 Hosting Country	-0.21	L2 Bidding Country	-0.2	F2 Bidding Country	0.43
	(0.39)		(0.50)		(0.33)		(0.32)
L3 Hosting Country	0.34	F3 Hosting Country	-0.51	L3 Bidding Country	-0.26	F3 Bidding Country	0.62
	(0.53)		(0.50)		(0.45)		(0.44)
L4 Hosting Country	0.28	F4 Hosting Country	-0.03	L4 Bidding Country	0.13	F4 Bidding Country	0.49
	(0.37)		(0.41)		(0.43)		(0.30)
L5 Hosting Country	-0.01	F5 Hosting Country	-0.35	L5 Bidding Country	0.63	F5 Bidding Country	0.42
	(0.43)		(0.42)		(0.60)		(0.42)
L6 Hosting Country	0.51	F6 Hosting Country	-0.004	L6 Bidding Country	0.13	F6 Bidding Country	0.33
	(0.44)		(0.42)		(0.38)		(0.31)
L7 Hosting Country	0.99	F7 Hosting Country	-0.72	L7 Bidding Country	0.19	F7 Bidding Country	0.05
	(0.91)		(0.48)		(0.51)		(0.28)
Number of observations	2469	Number of observations	2469	Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141	Number of Countries	141	Number of Countries	141

Note: Robust standard errors in parenthesis

Table 3. Ex-Ante and Ex-Post Effects of Hosting and Bidding for Olympic Games

FDI Inflows				**FDI Inflows**			
Hosting Country	0.25			Bidding Country	-0.25		
	(0.59)				(0.42)		
L1 Hosting Country	-0.16	F1 Hosting Country	-0.42	L1 Bidding Country	-0.24	F1 Bidding Country	-0.66
	(0.72)		(0.71)		(0.47)		(0.40)
L2 Hosting Country	0.06	F2 Hosting Country	-0.42	L2 Bidding Country	-0.71*	F2 Bidding Country	0.39
	(0.58)		(0.62)		(0.36)		(0.36)
L3 Hosting Country	-0.76	F3 Hosting Country	-0.69	L3 Bidding Country	-0.54	F3 Bidding Country	1.03*
	(0.78)		(0.74)		(0.66)		(0.61)
L4 Hosting Country	-0.47	F4 Hosting Country	-0.46	L4 Bidding Country	-0.04	F4 Bidding Country	0.2
	(0.51)		(0.70)		(0.61)		(0.37)
L5 Hosting Country	-0.61	F5 Hosting Country	-0.28	L5 Bidding Country	0.41	F5 Bidding Country	0.7
	(0.65)		(0.62)		(0.91)		(0.61)
L6 Hosting Country	0.25	F6 Hosting Country	-0.04	L6 Bidding Country	0.55	F6 Bidding Country	0.18
	(0.66)		(0.58)		(0.58)		(0.33)
L7 Hosting Country	-0.16	F7 Hosting Country	-1.08	L7 Bidding Country	0.54	F7 Bidding Country	-0.13
	(0.71)		(0.72)		(0.88)		(0.34)
Number of observations	2469	Number of observations	2469	Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141	Number of Countries	141	Number of Countries	141

Notes: Robust standard errors in parentheses;
*significantly different from zero at 90% confidence.

Table 4. Ex-Ante and Ex-Post Effects of Hosting and Bidding for Football Championships

FDI Inflows				**FDI Inflows**			
Hosting Country	0.47			Bidding Country	0.006		
	(0.63)				(0.38)		
L1 Hosting Country	0.07	F1 Hosting Country	0.02	L1 Bidding Country	0.03	F1 Bidding Country	-0.3
	(0.56)		(0.69)		(0.44)		(0.53)
L2 Hosting Country	0.27	F2 Hosting Country	-0.22	L2 Bidding Country	0.24	F2 Bidding Country	-0.35
	(0.45)		(0.80)		(0.44)		(0.47)
L3 Hosting Country	0.68	F3 Hosting Country	-0.94	L3 Bidding Country	-0.26	F3 Bidding Country	-1.27**
	(0.56)		(0.60)		(0.48)		(0.57)
L4 Hosting Country	0.5	F4 Hosting Country	-0.1	L4 Bidding Country	0.20	F4 Bidding Country	-0.41
	(0.41)		(0.47)		(0.48)		(0.65)
L5 Hosting Country	0.13	F5 Hosting Country	-0.65	L5 Bidding Country	1.00*	F5 Bidding Country	-1.34**
	(0.44)		(0.66)		(0.54)		(0.65)
L6 Hosting Country	0.21	F6 Hosting Country	-0.12	L6 Bidding Country	-0.65	F6 Bidding Country	-0.46
	(0.66)		(0.60)		(0.51)		(0.66)
L7 Hosting Country	1.87*	F7 Hosting Country	-0.96	L7 Bidding Country	-0.60	F7 Bidding Country	-0.41
	(1.92)		(0.57)		(0.44)		(0.51)
Number of observations	2469	Number of observations	2469	Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141	Number of Countries	141	Number of Countries	141

Notes: Robust standard errors in parentheses;
*significantly different from zero at 90% confidence

Table 5. Ex-Ante and Ex-Post Effects of Hosting and Bidding for the Summer Olympic Games

FDI Inflows				**FDI Inflows**			
Hosting Country	0.27			Bidding Country	-0.15		
	(0.98)				-0.82		
L1 Hosting Country	0.21	F1 Hosting Country	-0.07	L1 Bidding Country	-0.75	F1 Bidding Country	-0.66
	(0.80)		(1.03)		(0.67)		(0.54)
L2 Hosting Country	0.03	F2 Hosting Country	-0.01	L2 Bidding Country	-0.97**	F2 Bidding Country	0.28
	(0.60)		(1.02)		(0.46)		(0.42)
L3 Hosting Country	-0.83	F3 Hosting Country	-0.11	L3 Bidding Country	-1.40**	F3 Bidding Country	-0.15
	(0.88)		(0.96)		(0.68)		(0.57)
L4 Hosting Country	-0.68	F4 Hosting Country	-0.77	L4 Bidding Country	-0.56	F4 Bidding Country	-0.16
	(0.87)		(1.23)		(0.96)		(0.56)
L5 Hosting Country	-0.86	F5 Hosting Country	0.30	L5 Bidding Country	-1.02	F5 Bidding Country	0.71
	(0.93)		(0.81)		(0.85)		(1.12)
L6 Hosting Country	-0.49	F6 Hosting Country	0.76	L6 Bidding Country	0.15	F6 Bidding Country	0.21
	0.86		(0.59)		(0.75)		(0.39)
L7 Hosting Country	-1.31	F7 Hosting Country	0.62	L7 Bidding Country	-0.81	F7 Bidding Country	-0.23
	(1.08)		(0.60)		(0.92)		(0.49)
Number of observations	2469	Number of observations	2469	Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141	Number of Countries	141	Number of Countries	141

Notes: Robust standard errors in parentheses;
**significantly different from zero at 95% confidence

Table 6. Ex-Ante and Ex-Post Effects of Hosting and Bidding for the Winter Olympic Games

FDI Inflows				**FDI Inflows**			
Hosting Country	0.31			Bidding Country	-0.05		
	(0.64)				0.43		
L1 Hosting Country	-0.39	F1 Hosting Country	-0.67	L1 Bidding Country	0.26	F1 Bidding Country	-0.55
	(1.00)		(0.78)		(0.65)		(0.51)
L2 Hosting Country	0.01	F2 Hosting Country	-0.71	L2 Bidding Country	-0.24	F2 Bidding Country	0.50
	(0.90)		(0.62)		(0.53)		(0.51)
L3 Hosting Country	-0.11	F3 Hosting Country	-0.92	L3 Bidding Country	0.27	F3 Bidding Country	1.87**
	(0.85)		(0.94)		(0.89)		(0.94)
L4 Hosting Country	0.09	F4 Hosting Country	0.11	L4 Bidding Country	0.50	F4 Bidding Country	0.45
	(0.76)		(0.49)		(0.68)		(0.53)
L5 Hosting Country	0.08	F5 Hosting Country	-0.43	L5 Bidding Country	1.12	F5 Bidding Country	0.28
	(0.82)		(0.66)		(1.13)		(0.60)
L6 Hosting Country	1.36*	F6 Hosting Country	-0.36	L6 Bidding Country	0.79	F6 Bidding Country	0.13
	(0.78)		(0.82)		(0.63)		(0.52)
L7 Hosting Country	1.05*	F7 Hosting Country	-2.01	L7 Bidding Country	1.17	F7 Bidding Country	-0.56
	(0.61)		(0.76)		(1.00)		(0.63)
Number of observations	2469	Number of observations	2469	Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141	Number of Countries	141	Number of Countries	141

Notes: Robust standard errors in parentheses;
**significantly different from zero at 95% confidence;
*significantly different from zero at 90% confidence.

Table 7. Ex-Ante and Ex-Post Effects of Hosting and Bidding for the World Cup

FDI Inflows				**FDI Inflows**			
Hosting Country	0.49			Bidding Country	1.16**		
	(0.60)				(0.37)		
L1 Hosting Country	0.0	F1 Hosting Country	-0.31	L1 Bidding Country	0.45	F1 Bidding Country	1.09**
	(0.81)		(1.02)		(0.52)		(0.45)
L2 Hosting Country	0.36	F2 Hosting Country	-0.27	L2 Bidding Country	0.64	F2 Bidding Country	0.89
	(0.76)		(1.12)		(0.68)		(0.67)
L3 Hosting Country	0.85	F3 Hosting Country	-0.02	L3 Bidding Country	0.69	F3 Bidding Country	0.45
	(0.60)		(0.71)		(0.55)		(0.57)
L4 Hosting Country	0.87*	F4 Hosting Country	0.75	L4 Bidding Country	0.81*	F4 Bidding Country	0.70
	(0.47)		(0.46)		(0.46)		(0.45)
L5 Hosting Country	0.16	F5 Hosting Country	-0.36	L5 Bidding Country	1.45**	F5 Bidding Country	0.10
	(0.54)		(0.86)		(0.67)		(0.61)
L6 Hosting Country	0.12	F6 Hosting Country	0.87	L6 Bidding Country	0.77	F6 Bidding Country	0.41
	(0.63)		(1.04)		(0.69)		(0.75)
L7 Hosting Country	0.15	F7 Hosting Country	0.10	L7 Bidding Country	0.79	F7 Bidding Country	0.25
	(0.62)		(0.61)		(0.57)		(0.56)
Number of observations	2469	Number of observations	2469	Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141	Number of Countries	141	Number of Countries	141

Notes: Robust standard errors in parentheses;
**significantly different from zero at 95% confidence
*significantly different from zero at 90% confidence

Table 8. Ex-Ante and Ex-Post Effects of Hosting the EURO Championship

FDI Inflows				**FDI Inflows**			
Hosting Country	0.40			Bidding Country	-1.03		
	(1.35)				(0.91)		
L1 Hosting Country	0.46	F1 Hosting Country	0.57	L1 Bidding Country	-0.44	F1 Bidding Country	-2.27*
	(0.91)		(0.64)		(1.12)		(0.98)
L2 Hosting Country	0.13	F2 Hosting Country	-0.43	L2 Bidding Country	-0.44	F2 Bidding Country	-1.48*
	(0.58)		(1.02)		(0.75)		(0.80)
L3 Hosting Country	0.39	F3 Hosting Country	-1.47*	L3 Bidding Country	-1.59	F3 Bidding Country	-2.55*
	(0.94)		(0.80)		(1.12)		(1.02)
L4 Hosting Country	-0.04	F4 Hosting Country	-0.92	L4 Bidding Country	-0.28	F4 Bidding Country	-3.04*
	(0.65)		(0.86)		(1.04)		(1.59)
L5 Hosting Country	-0.4	F5 Hosting Country	0.00	L5 Bidding Country	0.15	F5 Bidding Country	-2.6**
	(0.83)		(1.32)		(0.73)		(0.89)
L6 Hosting Country	0.22	F6 Hosting Country	-0.58	L6 Bidding Country	-1.09*	F6 Bidding Country	-1.58*
	(1.14)		(0.66)		(0.62)		(0.70)
L7 Hosting Country	2.90	F7 Hosting Country	-1.31	L7 Bidding Country	-1.52*	F7 Bidding Country	-1.15
	(3.60)		(0.85)		(0.83)		(1.14)
Number of observations	2469	Number of observations	2469	Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141	Number of Countries	141	Number of Countries	141

Notes: Robust standard errors in parentheses;
**significantly different from zero at 95% confidence
*significantly different from zero at 90% confidence

Table 9. Ex-Ante and Ex-Post Effects of Hosting the International Exposition (EXPO)

FDI Inflows			
Hosting Country	1.08*		
	(0.54)		
L1 Hosting Country	-0.17	F1 Hosting Country	0.22
	(0.75)		(0.39)
L2 Hosting Country	0.02	F2 Hosting Country	0.47
	(0.44)		(0.42)
L3 Hosting Country	-0.39	F3 Hosting Country	0.55
	(0.54)		(0.39)
L4 Hosting Country	-0.06	F4 Hosting Country	0.38
	(0.58)		(0.61)
L5 Hosting Country	0.49	F5 Hosting Country	0.51
	(0.49)		(0.77)
L6 Hosting Country	-0.15	F6 Hosting Country	1.09*
	(0.38)		(0.51)
L7 Hosting Country	-0.65	F7 Hosting Country	0.25
	(0.65)		(0.67)
Number of observations	2469	Number of observations	2469
Number of Countries	141	Number of Countries	141

Notes: Robust standard errors in parentheses;
*significantly different from zero at 90% confidence.

Table 10. Difference in Effects for EXPO, Olympic Games and Football Championships

	Before-Event Effect	Contemporaneous Effect	After-Event Effect	Number of Observations
Football	0.11	0.56	0.16	1835
Olympics	0.4	0.08*	0.02**	1835

Notes: p-values of the null hypothesis that the effects are the same
**significantly different from zero at 95% confidence;
*significantly different from zero at 90% confidence.

Table 11. Effects of FDI inflows on the Likelihood of Hosting and Bidding for Olympic Games and Football Championships

	Pr(Olympic Host)	Pr(Olympic Bid)	Pr(Football Host)	Pr(Football Bid)
FDI inflow	1.47	0.09	0.05	0.08
	0.88	(0.12)	(0.19)	(0.11)
L1.FDI inflow	-0.55	-0.22	0.13	-0.05
	(0.95)	(0.13)	(0.11)	(0.09)
L2.FDI inflow	-2.19**	-0.06	-0.007	0.08
	(1.24)	(0.15)	(0.20)	(0.16)
L3.FDI inflow	2.78*	0.19	0.19*	-0.01
	(1.36)	(0.12)	(0.12)	(0.15)
L4.FDI inflow	-0.37	-0.008	-0.41	0.16
	(1.29)	(0.16)	(0.37)	(0.15)
L5.FDI inflow	0.74	0.12	-0.42	-0.35
	(1.19)	(0.10)	(0.38)	(0.25)
L6.FDI inflow	-1.68	0.060	0.80	0.01
	(1.46)	(0.24)	(0.43)	(0.18)
L7.FDI inflow	-1.45	0.05	-0.35	0.37*
	(1.65)	(0.12)	(0.33)	(0.20)

Notes: Robust standard errors in paranthesis;
**significantly different from zero at 95% confidence;
*significantly different from zero at 90% confidence.

Table 12. Test of Difference Between Hosting and Bidding Countries

	Olympic Games and Football Champs	Olympic Games	Football Champs	Summer Olympics	Winter Olympics	World Cup	EURO
Hosting Country - Bidding Country	0.37	0.46	0.49	0.72	0.53	0.27	0.33
L1.Hosting Country - L1.Bidding Country	0.83	0.92	0.96	0.33	0.53	0.58	0.51
L2.Hosting Country - L2.Bidding Country	0.29	0.24	0.96	0.18	0.78	0.74	0.53
L3.Hosting Country - L3.Bidding Country	0.26	0.78	0.18	0.57	0.66	0.78	0.17
L4.Hosting Country - L4.Bidding Country	0.65	0.52	0.62	0.9	0.39	0.91	0.85
L5.Hosting Country - L5.Bidding Country	0.47	0.4	0.18	0.87	0.48	0.55	0.65
L6.Hosting Country - L6.Bidding Country	0.53	0.74	0.29	0.56	0.48	0.68	0.30
L7.Hosting Country - L7.Bidding Country	0.13	0.58	0.20	0.72	0.90	0.86	0.27

Notes: Robust standard errors in paranthesis;
**significantly different from zero at 95% confidence;
*significantly different from zero at 90% confidence.

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APPENDIX

Table A1. Hosting and Bidding Countries for Olympic Games

List of Hosting and Bidding Countries for Summer Olympic Games		
Hosting Country	**Year**	**Bidding Country**
Canada	1976	Russia. USA
Russia	1980	United States
USA	1984	
Republic of Korea	1988	Japan
Spain	1992	Australia. France. Netherlands. Serbia. United Kingdom
United States	1996	Australia. Canada. Greece. Serbia. United Kingdom
Australia	2000	China. Germany. Turkey. United Kingdom
Greece	2004	Argentina. Italy. South Africa. Sweden
China	2008	Turkey. Japan. France. Canada

List of Hosting and Bidding Countries for Winter Olympic Games		
Hosting Country	**Year**	**Bidding Country**
USA. Austria	1976	Switzerland. Finland. Canada
USA	1980	Canada
Yugoslavia	1984	Sweden. Japan
Canada	1988	Italy. Sweden
France	1992	USA. Germany. Italy. Sweden. Norway. Bulgaria
Norway	1994	USA. Sweden. Bulgaria
Japan	1998	Italy. Spain. Sweden. USA
USA	2002	Sweden. Canada. Switzerland
Italy	2006	Switzerland
Canada	2010	Switzerland. Korea Republik. Austria

Table A2. Hosting and Bidding Countries for Football Championships

List of Hosting and Bidding Countries for World Cup		
Hosting Country	**Year**	**Bidding Country**
Argentina	1978	Mexico
Spain	1982	Germany
Mexico	1986	Colombia. Canada. USA
Italy	1990	United Kingdom. Greece. Russia
USA	1994	Brazil. Morocco
France	1998	Morocco. Switzerland
Japan/Korea Republic	2002	Mexico
Germany	2006	Brazil. United Kingdom. Morocco. South Africa
South Africa	2010	Egypt. Libya/Tunisia. Morocco

List of Hosting and Bidding Countries for UEFA EURO Championships		
Hosting Country	**Year**	**Bidding Country**
Yugoslavia	1976	Belgium. Netherlands
Italy	1980	
France	1984	Germany
Germany	1988	United Kingdom. Netherlands
Sweden	1992	Spain
United Kingdom	1996	
Belgium/Netherlands	2000	Spain. Austria
Portugal	2004	Austria. Hungary
Austria/Switzerland	2008	Greece/Turkey. Hungary
Poland/Ukraine	2012	Croatia/Hungary. Greece. Italy. Turkey