The Impact of Hosting the Cricket World Cup on Foreign Direct Investment Inflows*

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Abstract

Cricket, the world's second most popular sport, has gained traction in various countries, leading to increased interest in hosting the prestigious one-day international cricket world cup. While government officials often justify the high costs associated with hosting the event by citing economic benefits, there is limited research on the actual impacts, particularly in terms of foreign direct investment (FDI) inflows. This study aims to analyze the economic benefits claimed by host countries and evaluate whether hosting the Cricket World Cup justifies the associated expenses. To address these questions, we conduct a regression analysis using dummy variables for hosting the event and controlling for various factors such as political stability, taxation, and economy size. The research findings indicate that hosting the Cricket World Cup has a statistically significant and positive impact on FDI inflows. Furthermore, this paper emphasizes the importance of considering the spillover effects. Notably, when accounting for the three-year period surrounding the event, the statistical significance of the World Cup variable strengthens, solidifying the argument that hosting the World Cup impacts a country's FDI inflows in the short run. These findings, combined with existing literature in the field, contribute empirical evidence to evaluate the claims made by host countries, shedding light on the economic justifications for hosting such events.

Keywords: FDI, Sports, Cricket, Economic impact

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1 Introduction

Cricket, the second most popular sport in the world by viewership statistics, is a growing sport that is increasingly played in countries all over the world. The pinnacle of the "gentleman's game"—the glory that all Cricket-playing nations seek—is the One-Day International Cricket World Cup, hosted every four years. Countries around the world attach significant importance to this sport and take great pride in hosting this large-scale event. Apart from the sense of pride felt in these countries, government officials often cite several economic benefits to justify the high costs that accompany it. So, are there any actual impacts that hosting the Cricket World Cup has on the economy of a host country? Particularly, how does hosting a Cricket World Cup impact the FDI inflows of host countries? How do we quantify the benefits that come from hosting an event such as the World Cup? These are important questions that need answers to better understand whether the justifications cited by officials are rooted in science and data.

While some existing literature discusses how the costs of "large-scale" events like the Cricket World Cup are too high to justify any benefits, there is not much research on the economic benefits of hosting this specific event. Additionally, there are no studies that examine the impact hosting a Cricket World Cup has on foreign direct investment. Understanding its impact is particularly important as many countries with growing economies in the world have bid to host the World Cup in the recent past.

The goal of this research paper is to analyze the economic benefits that host countries cite to justify their decision to host such an event. Officials often talk about benefits such as increased FDI when hosting such an event. The paper aims to understand whether these gains are significant and whether they justify hosting an event of the magnitude of the Cricket World Cup.

The research will utilize data from three main time periods for each event— pre-bidding, post-hosting, and the time between the bid and hosting the tournament. Based on these three time periods, the paper will try to understand the answers to the questions posed

above. This research question will be answered with the help of regression analysis using dummy variables for hosting the event and various other controls for FDI inflows.

The regression equation will check if the decision to host a Cricket World Cup by a country plays a statistically significant role in deciding the FDI inflows for that year. Potentially confounding factors such as political stability, size of the economy, and inflation will be controlled for in this regression equation, as the goal is to see whether outcomes changed as a result of the country's decision to bid for/host a World Cup and not due to other potentially omitted variables.

This study particularly focuses on the Cricket World Cup as it is the fourth largest sporting event in the world, and there are not many existing studies on this topic. Moreover, Cricket World Cups are a substantial financial burden to the host countries that choose to host the event. Therefore, this research method helps address the main question posed: Does a country's decision to host the World Cup have the perceived FDI benefits highlighted during the bid? Ultimately, this research paper aims to utilize econometric models to understand whether the decision to host a Cricket World Cup by a host nation is rooted in fact, providing empirical evidence that analyzes the claims made by officials in host countries. The rest of this paper will focus on answering this question.

2 Literature Review

Within the literature on understanding the economic impacts of hosting a Cricket World Cup, this paper contributes to an improved understanding of key proposed benefits highlighted during the bidding process. To the best of my knowledge, this is the first research paper that aims to control for essential factors such as political stability when examining FDI inflows. Traditionally, factors such as political stability have been omitted as controls when attempting to understand the impact of sporting events on an outcome variable like FDI. However, political stability plays a crucial role in determining whether or not a country

attracts FDI. Similarly, political stability also influences the selection of a country as a host, as sporting events are increasingly held in autocracies with factors such as political repression and human rights violations (all important determinants of political stability) going up in the period leading up to a major sporting event (Economist, 2022). Therefore, it is essential to include political stability as a control when measuring FDI inflows resulting from hosting an event like the Cricket World Cup. Additionally, it is the first paper to study the impact of hosting a Cricket World Cup on foreign direct investment inflows

Existing literature in this area can be categorized into four distinct groups. The first category explores the monetary and economic benefits of hosting large-scale events like the World Cup (Allmers Maenning, 2009; Baade Matheson, 2003; Peeters, Matheson Szymanski, 2014; Ahlert, 2010). The second category focuses on the costs associated with hosting such events (Sturgess Brady, 2006; Mueller et al, 2022; Economist, 2014; Ehrenfreund, 2015). The third category examines the impact of hosting large sporting events on FDI inflows globally (Jakobsen et al, 2013; Lertwachara et al, 2021). The fourth category explores the determinants of foreign direct investment for countries worldwide (Cassou, 1997; Desai et al, 2002; Kurecic Kokotovic, 2017). This paper seeks to add to these categories by conducting a more holistic study on the FDI impacts of hosting a Cricket World Cup, based on evidence from host countries.

There is evidence that hosting an event like the Cricket World Cup can bring monetary and economic benefits to host nations, including increased tourist activity, better media and broadcasting deals, and enhanced employment opportunities (Peeters, Matheson Szymanski, 2014; Baade Matheson, 2003; Ahlert, 2010). However, there is skepticism among academics about the empirical magnitudes of these benefits due to differing methodologies (Allmers Maenning, 2009). While existing literature discusses the economic benefits, there is a scarcity of studies focusing on the impact of hosting a World Cup on a country's FDI inflows, particularly for the Cricket World Cup, the world's fourth-largest sporting event.

Several articles concentrate on the direct costs of hosting events like the Cricket World

Cup on the host country's economy (Mueller et al, 2022; Economist, 2022). Some literature indicates that benefits like tourism and broadcasting rights may not cover the overall costs (Sturgess Brady, 2006; Ehrenfreund, 2015). However, evidence specific to Cricket World Cups, with their unique benefits and costs, is lacking. Moreover, existing studies often omit FDI inflows, a significant perceived benefit of hosting such events.

Additionally, there is also literary evidence that looks into the particular FDI benefits of hosting what the authors call "large scale sporting events" (Jakobsen et al, 2013). Moreover, there is also evidence for the fact that the region of the world in which a host country is located plays a crucial role in determining its FDI inflows as a result of the tournament (Lertwachara et al, 2021). However, while both these studies look at FDI inflows, they do not look at the impact of hosting a Cricket World Cup on these inflows. They look at events like the football World Cup, olympics, and commonwealth games, but they do not include the Cricket World Cup in their dataset. Additionally, neither of these studies control for political rights which are important when looking at FDI inflows.

Literature from the fourth category underscores the role of politics in determining FDI inflows globally (Cassou, 1997; Desai et al, 2002). Evidence suggests that political rights in a nation play a crucial role in determining FDI from abroad (Kurecic Kokotovic, 2017). This literature helps add to the overall argument of this paper as it points to the importance of including controls regarding political rights. Therefore, when trying to understand the impact that large scale sporting events have on foreign direct investment, it is important to include controls for political stability.

While there are already several studies and articles that are aimed at conducting a cost benefit analysis of hosting an event like the Cricket World Cup (but not specifically the Cricket World Cup), only a few of these papers even talk about the FDI benefits that are often cited by government officials as one of the biggest reasons to host an event like this.

3 Data

The data for this research will be sourced from various reputable sources, with Our World in Data being the primary contributor, offering datasets for multiple countries. The source data is publicly accessible without additional red tape. The regression equation controls have also been obtained from the Our World in Data database, aggregating information from diverse sources, all readily available to the public. This paper will utilize these existing data sources to address the research questions mentioned above.

The data sources for this dataset include the World Trade Organization, the World Bank, the International Monetary Fund, the International Labor Organization, Freedom House, the International Centre for Tax and Development, UNU-WIDER, the Penn World Table, and the OECD. This data has been compiled into a CSV file containing 15 variables: year, country name, country code, FDI inflows, size of the economy, trade openness, Age dependency ratio, inflation, real GDP, World Cup, large population, World Cup 3- (3 years preceding the hosting of the World Cup), World Cup 3+ (3 years succeeding the hosting of the World Cup), and host. The last five variables mentioned are commonly known as dummy variables or indicator variables in the field of economics. These variables equal 1 in a year that satisfies specific criteria and 0 in a year that does not. The first dummy variable is the World Cup dummy variable, which activates whenever a country hosts a Cricket World Cup. Next is the large population variable, which turns on for any year where a country's population exceeds 20 million people. Following this is the World Cup 3-variable, which activates for the 3 years prior to a country hosting the World Cup, and then switches off before the actual year of the World Cup. Lastly, the World Cup 3+ variable activates for the 3 years after the year in which a country hosts the World Cup. By design, these three World Cup indicator variables do not overlap.

The dataset comprises of 15 variables, each with data points spanning each year between 1980 and 2019. As discussed further below, the selection of these years is not arbitrary, making this dataset a panel of data with 40 years of data for each of the 15 countries

(United Kingdom, India, Pakistan,Australia, New Zealand, Sri Lanka, South Africa, Antigua and Barbuda, Barbados, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Trinidad Tobago, Brazil, Dominican Republic, Japan, Mexico, Saint Vincent and the Grenadines, Spain, Turkey, Indonesia, and the United States of America). The total number of observations is 960 (40 years * 24 countries), including both countries that have and have not hosted the World Cup. The different World Cups hosted by various countries are detailed in Table 2.

The countries chosen as controls for the World Cup hosts were selected with a consideration of similar economic trends during this time period. For instance, India and South Africa are two rapidly growing economies globally; hence, countries like Brazil, Turkey, and Mexico were selected as controls, as they underwent similar economic experiences during this period. Conversely, small island nations, such as Saint Vincent and the Grenadines and the Dominican Republic, were chosen as controls for the island nations of the West Indies.

Hosts	**Non-Hosts**
United Kingdom	United States
India	Brazil
Pakistan	Turkey
Australia	Mexico
New Zealand	Japan
South Africa	Indonesia
Antigua and Barbuda	Saint Vincent and the Grenadines
Barbados	Spain
Grenada	Dominican Republic
Guyana	
Jamaica	
Saint Kitts and Nevis	
Saint Lucia	
Trinidad and Tobago	
Sri Lanka	

Table 1: Comparison of Hosts and Non-Hosts in the Study

Utilizing these 960 observations per variable, the goal is to create a comprehensive regression analysis that successfully understands the effects of hosting a Cricket World Cup on FDI inflows. The aim is to design a replicable study that builds on existing research about

large-scale sporting events, addressing the traditionally overlooked 4th largest sporting event in the world, the Cricket World Cup. This dataset, with over 960 observations per variable, underwent testing to ensure data completeness for the research design. All countries had complete data for each variable, and no gaps were identified in the data.

The first World Cup hosted by the country winning the bidding rights was the 1983 World Cup in the United Kingdom, the shortest in terms of duration due to fewer associate nations in the ICC at that time. The 2003 World Cup in South Africa and the 2007 World Cup in the West Indies were unique, marking the first time the event was held in the African and North American continents, respectively. The United Kingdom has hosted the event the most times (4), followed by India and Pakistan (3), and Australia and New Zealand (2).

Table 2: Events that have been included in the dataset

Year	**Host Countries**	**Period of the event**
1983	United Kingdom	9th June 1983 - 25th June 1983
1987	India and Pakistan	8th October 1987 - 8th November 1987
1992	Australia and New Zealand	25th February 1992 - 25th March 1992
1996	India, Pakistan and Sri Lanka	16th February 1996 - 17th March 1996
1999	United Kingdom	14th May 1999 - 20th June 1999
2003	South Africa	9th February 2003 - 23rd March 2003
2007	West Indies	13th March 2007 - 27th April 2003
2011	India, Sri Lanka and Bangladesh	20th February 2011 - 2nd April 2011
2015	Australia and New Zealand	14th February 2015 - 29th March 2015
2019	United Kingdom	30th May 2019 - 14th July 2019

4 Research Design

To understand the results of this paper, it is crucial to gain insight into the purpose behind setting each variable and the rationale for certain decisions regarding seemingly arbitrary data choices. The initial year of 1980 was chosen because it precedes the 1983 Cricket World Cup by exactly 3 years. The 1983 event was the first World Cup with a bidding process for hosting. The first two World Cups in 1975 and 1979 were excluded from consideration, as the International Cricket Council automatically awarded the hosting rights to the United

Kingdom. The end year of 2019 was selected as it precedes the global economic disruption caused by the COVID19 pandemic in 2020, introducing potential confounding variables affecting FDI inflows. This strategy omits the 2023 World Cup in India from consideration, which seems like a reasonable choice given the unique nature of the pandemic.

Furthermore, only host countries that hosted at least 10 games of the tournament were included in this dataset. This criterion ensures that the dataset encompasses countries with a substantial number of World Cup games. Additionally, the inclusion of countries like Saint Kitts and Nevis and Antigua and Barbuda, which gained independence in 1983, should not impact the data's robustness, given that these countries did not host the Cricket World Cup until 2007.

This paper employs panel regression analysis as the econometric model to study the impact of hosting a Cricket World Cup on a country's FDI inflows. Four primary regression equations are used to understand this effect with the first regression aimed at understanding whether the controls deployed are relevant to the question being asked.

$$\begin{aligned} FDI_{ct} = \beta_0 + \beta_1 \log(Size_{ct}) + \beta_2 Open_{ct} + \beta_3 (Age_{ct}) \\ + \beta_4 RGDP_{ct} + \beta_5 Infl_{ct} + \beta_6 Pop_{ct} + \epsilon_{ct} \end{aligned} \tag{1}$$

$$\begin{aligned} FDI_{ct} = \beta_0 + \beta_1 WC + \beta_2 \log(Size_{ct}) + \beta_3 Open_{ct} + \beta_4 (Age_{ct}) \\ + \beta_5 RGDP_{ct} + \beta_6 Infl_{ct} + \beta_7 Pop_{ct} + \epsilon_{ct} \end{aligned} \tag{2}$$

$$\begin{aligned} FDI_{ct} = \beta_0 + \beta_1 WC + \beta_2 \log(Size_{ct}) + \beta_3 Open_{ct} + \beta_4 (Age_{ct}) \\ + \beta_5 RGDP_{ct} + \beta_6 Infl_{ct} + \beta_7 Pop_{ct} + \beta_8 Stability_{ct} + \epsilon_{ct} \end{aligned} \tag{3}$$

$$\begin{aligned} FDI_{ct} = \beta_0 + \beta_1 WC + \beta_2 \log(Size_{ct}) + \beta_3 Open_{ct} + \beta_4 (Age_{ct}) \\ + \beta_5 RGDP_{ct} + \beta_6 Infl_{ct} + \beta_7 Pop_{ct} + \beta_8 Stability + \beta_9 WC_{3-} + \beta_{10} WC_{3+} \epsilon_{ct} \end{aligned} \tag{4}$$

The second regression equation models the impact of hosting a Cricket World Cup on

FDI inflows while only controlling for the basic determinants of FDI mentioned earlier. These basic determinants, highlighted in the pre-existing literature, include the size of the economy, trade openness, age dependency ratio, real GDP growth rate, inflation, and a large population. This regression, fundamental to the research question, involves regressing the dependent variable (FDI inflows) against a dummy variable (World Cup) representing whether or not a country hosted the World Cup, along with other control variables.

In this equation, these controls are crucial because they serve as significant determinants of FDI inflows into a country. Furthermore, these control variables have been identified in previous academic papers examining the impact of large-scale sporting events on Foreign Direct Investment, and the data for these controls is present and collected.

The third regression equation in this case employs the same control variables as the second regression equation, with the addition of a metric for measuring political stability and political rights. This supplementary control for political stability is essential in the context of this research paper, as FDI is often influenced not only by the economic atmosphere in a country but also by the political climate. Therefore, this third regression introduces an additional control to assess the effect of a robust political structure on the FDI inflows of a country.

Once again, in this equation, the controls are of utmost importance as they determine the FDI inflows into a country. The additional control of political stability plays a crucial role in determining the success of the final regression, as it is an important variable that has been omitted in other research papers in this field. Existing literature on the determinants of foreign direct investment emphasizes the significance of including controls for political stability.

The fourth and final regression continues to build on this second regression. An additional layer is introduced to this regression equation, incorporating a dummy variable for the three years preceding a Cricket World Cup and a dummy variable for the three years succeeding a Cricket World Cup. The purpose of this variable is to ensure the capture of all the FDI

benefits that arise from hosting a World Cup. This is crucial because often the benefits can accrue either before or after hosting the actual event. Therefore, this fourth regression is extremely important to encompass the entire effect that hosting a World Cup has on FDI inflows.

It is imperative that we control for the benefits that might accrue in years preceding the event or post the event so that we can isolate the actual benefits that a country gets from hosting a Cricket World Cup event. Therefore, the final and third regression will ultimately help us answer the research question posed in this paper.

For the fourth regression, the main regression coefficient accompanying the World Cup dummy variable would be interpreted as either a positive or negative effect on the intercept (beta0). This regression coefficient is obtained by controlling for the other variables mentioned above. All of these variables will also have their coefficients that can be interpreted to better understand the impact these individual variables have on the FDI inflows of a nation. The variables that have been logged will also be interpreted differently from variables that have not been logged.

In conclusion, the results from this regression analysis will help answer the research question posed in the first part of this research paper, providing a new empirical perspective through which we can potentially understand the impact of hosting a Cricket World Cup on FDI inflows. FDI has often been cited as one of the biggest benefits of hosting a World Cup, and therefore, this paper aims to understand whether there is any truth in this statement or not. The effects of hosting an event such as the World Cup are not very well understood currently, and this paper aims to create a framework through which future hosts can evaluate the success of their decision to host the event. Additionally, the Cricket World Cup is an event that has not been included in research that delves into the economic impacts of large-scale sporting events. Therefore, this research design would successfully add to the existing literature on this topic.

The econometric model identified in the previous section allows us to, with some con-

fidence, estimate the impact that hosting a Cricket World Cup has on FDI inflows into a country. This is particularly because most of the controls included in the regression equation are controls that have been proven to be relevant to FDI in existing literature. These controls have also been used in other papers that aimed to understand the impact that large-scale sporting events have on FDI inflows. The main control that is different from the other papers is the political stability measure. However, this variable is important to control for when looking at FDI inflows according to existing literature. Additionally, the second regression mentioned above will tell us more about the relevance of including political stability as a control variable.

5 Results

Based on the econometric model identified above we have certain key statistics for the data. These key statistics include the mean, median, standard deviation, minimum, maximum, and number of observations that each variable has. This information is represented in the table below.

Table 3: Descriptive Statistics

Variable	**Mean**	**Std. Dev.**	**Median**	**Min**	**Max**	**Obs**
FDI Inflows (USD Bn)	3.80	4.97	1.98	-7.39	39.25	960
Size of Economy (USD Bn)	1,068.90	2,787.64	131.50	0.2453	20000	960
Trade Openness (%)	64.52	33.25	57.84	10.53	171.93	960
Inflation (%)	20.48	145.58	4.40	-3.10	2947.73	960
Real GDP Growth Rate (%)	3.21	3.54	3.30	-13.13	15.06	960
Large Population	0.49	0.50	0.00	0.00	1.00	960
Political Stability Index	1.70	0.52	2.00	0.00	2.00	960
Age Dependency (%)	59.60	12.89	54.95	37.78	98.16	960

Notes: Statistics are drawn from a panel dataset spanning 1980-2019 covering the 24 countries listed in Table 1. The dataset is constructed from public sources, as described in the text in section 3.

From the key statistics table above, we observe that each variable has 960 observations. Furthermore, the dataset's average for FDI inflows is approximately 3.8, with a standard deviation of 4.97. This indicates that the 84th percentile of FDI inflows in this dataset falls

just below 9 percent. Similarly, we can examine other statistics for the different variables across the dataset to better understand the variables used in constructing the regression equations in this paper.

Table 4: Regression Coefficients for checking robustness

Variable	**Estimate**	**Std. Error**	**t value**	**Pr($>|t|$)**
(Intercept)	37.64	3.12	12.05	< 0.001***
log(Size of Economy)	-1.16	0.10	-11.38	< 0.001***
Trade Openness	0.02	0.01	2.28	0.0231*
Age Dependency	-0.13	0.01	-11.21	< 0.001***
Real GDP	0.13	0.04	3.49	< 0.001***
Inflation	0.00	0.00	0.06	0.955
Large Population	2.27	0.48	4.76	< 0.001***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Residual standard error: 3.861 on 953 degrees of freedom
Multiple R-squared: 0.3994, Adjusted R-squared: 0.3956
F-statistic: 105.6 on 6 and 953 DF, p-value: < 0.0001

Based on the initial regressions that were run using equation 1, it can be seen that the available data appears to be consistent with the existing literature on the variables that impact Foreign Direct Investment. Almost all the variables identified as controls, when regressed against FDI inflows, return statistically significant results that are highly significant with a p-value of 0.01. The only variable that was not statistically significant was inflation. Therefore, from the first glance at the data, we see that all the variables mentioned in the literature impact the FDI inflows of a country in some form or another. This shows us that all of these variables must be controlled for in the final regression analysis. Based on the initial results, it seems to be the case that the data is providing us with results that are similar to existing research on FDI in other countries.

Having outlined the econometric model that will be used for the purpose of this paper, the three regression equations mentioned above were run. The results were promising, to say the least. This part will be divided into three key sections that aim to better understand the three different regression equations that were run.

First, we have regression equation 2, which was the basic regression equation that aimed

at understanding what impact hosting a Cricket World Cup has on FDI inflows while controlling for variables such as the size of the economy, trade openness, age dependency ratio, real GDP, inflation, and large population. After running this regression, there were some interesting results.

Table 5: Regression Coefficients for Equation 2

Variable	**Estimate**	**Std. Error**	**t value**	**Pr($>|t|$)**
Constant	37.46	3.12	12.03	< 0.001***
World Cup	2.00	0.80	2.51	0.0121*
log(Size of Economy)	-1.16	0.10	-11.37	< 0.001***
Trade Openness	0.02	0.01	2.32	0.0206*
Age Dependency	-0.12	0.01	-11.18	< 0.001***
Real GDP	0.12	0.04	3.38	0.0007***
Inflation	0.00	0.00	0.09	0.9248
Large Population	2.26	0.48	4.74	< 0.001***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Residual standard error: 3.85 on 952 degrees of freedom
Multiple R-squared: 0.4034, Adjusted R-squared: 0.399
F-statistic: 91.95 on 7 and 952 DF, p-value: < 0.001

At first glance, we notice that for the regression, the World Cup dummy variable produces a statistically significant result that is significant at the 5 percent level of significance. The coefficient indicates that hosting the World Cup results in an additional 2 billion USD in Foreign Direct Investment Inflows. This is a substantial amount, especially when compared to the intercept, representing general FDI inflows, which is only 37.46 Billion USD. Among the various coefficients being controlled for, the World Cup appears to have the second-largest magnitude, surpassed only by the large population variable. Additionally, The coefficient on the World Cup variable has a t-value of 2.51, indicating that the coefficient is significantly different from 0. Additionally, we also notice that for the most part, the other controls in this equation have statistically significant coefficients. The variables that control for the size of the economy, age dependency, Real GDP, and Large population are all highly statistically significant. This shows us that these controls are important to account for. On the other hand, we see that the trade openness variable and the inflation variable are not statistically significant and therefore do not seem to have any impact on the FDI inflows into a country.

Overall, based on this regression output, we can say with some confidence that the control variables that have been identified are important to control for when trying to understand the impact that hosting a World Cup has on FDI inflows.

The regression we have for the third equation we have is essentially the same as the previous regression, except it adds an additional control variable: political stability. This control adds to the existing literature on this subject as it is seen as an important control for FDI inflows but has not been proven in an empirical context when considering large-scale sporting events. Additionally, this regression equation will help us understand if this additional control of political stability is biasing our World Cup variable upwards or downwards. Therefore, this regression equation is important for understanding in what way the political stability variable impacts our main variable, the decision of a country to host a Cricket World Cup.

Table 6: Regression Coefficients for Equation 3

Variable	**Estimate**	**Std. Error**	**t value**	**Pr($>|t|$)**
(Intercept)	36.62	3.06	11.98	< 0.0001 ***
World Cup	1.86	0.78	2.39	0.0173 *
log(Size of Economy)	-1.28	0.10	-12.57	< 0.0001 ***
Trade Openness	0.01	0.01	1.53	0.13
Age Dependency	-0.11	0.01	-9.74	< 0.0001 ***
Real GDP	0.15	0.04	4.15	< 0.0001 ***
Inflation	0.00	0.00	0.07	0.95
Large Population	3.05	0.48	6.31	< 0.0001 ***
Political Stability	1.67	0.27	6.29	< 0.0001 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Residual standard error: 3.774 on 951 degrees of freedom
Multiple R-squared:0.4272, Adjusted R-squared: 0.4224
F-statistic: 88.66 on 8 and 951 DF, p-value: < 0.0001

From this regression equation, we observe that the t-value of the World Cup indicator remains above the critical value but decreases slightly with the inclusion of the political stability variable. The coefficient of the World Cup variable is 1.86, down from 2.00 in Table 5, with a standard error of 0.7818, resulting in a t-value of 2.385. Additionally, in this regression equation, we note that the political stability variable is highly statistically

significant, with a t-value of 6.288. This high significance indicates that political stability plays a substantial role in impacting the FDI inflows of a country. The coefficient of 1.67 reveals that for a unit increase in political stability, there appears to be an increase of 1.67 billion USD in FDI inflows. In the context of the research, this shows that the political stability variable positively influences FDI inflows, and it also appears to be correlated with the World Cup variable, resulting in a small attenuation of the World Cup effect seen in Table 5. Therefore, the exclusion of the political stability control in other papers may have led to an overestimation of the impact of hosting events like the Cricket World Cup on foreign direct investment inflows, if we believe that the causal influence of the CWC on FDI does not operate through the channel of enhanced political stability.

The fourth and final regression equation introduces an additional layer to our findings from the second regression. Two additional dummy variables are added to the existing equation to comprehend the spillover effects of hosting a World Cup. The existing literature emphasizes that certain effects of hosting the World Cup may manifest in the years preceding and following the event. The purpose of these two dummy variables is to capture the effects occurring three years prior to hosting the event and three years post hosting the event. Consequently, this regression equation is crucial for understanding the spillover effects of hosting a World Cup on FDI inflows.

In the above results, we observe that by modeling effects of the CWC on FDI three years before the event and three years afterward, we actually find a slightly amplified coefficient on the contemporaneous effect, of 1.94, with a small increase in its statistical significance. The coefficient of 1.94 shows that by hosting the World Cup (and accounting for leads and lags), a country receives an additional 1.94 billion USD in FDI inflows. The World Cup variable experiences a slight increase in statistical significance at the 5 percent level, with a t-statistic of 2.478. This suggests that hosting the Cricket World Cup indeed has an impact on the overall Foreign Direct Investment that a country receives. By contrast, the coefficient on the World Cup 3- variable, representing the effect on FDI three years prior to hosting a World

Table 7: Regression Coefficients for Equation 4

Variable	**Estimate**	**Std. Error**	**t value**	**Pr($>|t|$)**
(Intercept)	36.59	3.06	11.97	< 0.0001 ***
World Cup	1.94	0.78	2.48	0.0134 *
World Cup 3-	0.69	0.48	1.44	0.15
World Cup 3+	0.35	0.49	0.71	0.48
log(Size of Economy)	-1.28	0.10	-12.54	< 0.0001 ***
Trade.Openness	0.01	0.01	1.56	0.12
Age Dependency	-0.11	0.01	-9.81	< 0.0001 ***
Real GDP	0.15	0.04	4.15	0.0000362 ***
Inflation	0.00	0.00	0.11	0.91
Large Population	3.08	0.48	6.35	< 0.0001 ***
Political Stability	1.61	0.27	6.00	< 0.0001 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Residual standard error: 3.77 on 949 degrees of freedom
Multiple R-squared: 0.43, Adjusted R-squared: 0.42
F-statistic: 71.2 on 10 and 949 DF, p-value: < 0.0001

Cup, is only 0.69 or about one third the size of the contemporaneous effect, and it is not statistically significant, with a t-statistic of 1.443. Furthermore, the World Cup 3+ variable (representing the three years after hosting a World Cup) returns a statistically insignificant result with a coefficient half as large as that on World Cup 3-, and also with a low level of significance, having a t-statistic of 0.707. Therefore, combining the results of this regression with existing research on this subject allows us to assert with confidence that our variable of interest influences the outcome variable of this research paper. However, these effects are largest during the year in which the World Cup is hosted, suggesting the long-term impacts on a country's FDI inflows may be zero.

The research question at hand, when embarking on this paper, aimed to comprehend the impact that hosting a Cricket World Cup has on the foreign direct investment inflows of a host country. Based on the initial results mentioned above, it can be confidently stated that hosting a World Cup does have a positive effect on the foreign direct investment a country receives. Furthermore, controlling for political stability produces a regression coefficient for political stability that is statistically significant. This, coupled with existing research in this space, underscores the importance of political stability as a determinant of FDI inflows to a

country. However, the most crucial takeaway from this preliminary analysis is that when we control for the three years prior to hosting a World Cup and the three years after hosting a World Cup, there is a slight increase in the statistical significance of the World Cup variable but there are no long term effects. This, combined with other research conducted in this space, demonstrates that hosting a World Cup indeed impacts the foreign direct investment that a country receives albeit only for the year in which the World Cup is hosted.

6 Discussions and Future Research

While the primary objective of this paper was to estimate the impact of hosting the Cricket World Cup on the foreign direct investment inflows of a country, several key results emerged that are both statistically significant and relevant to the topic at hand. First and foremost, a control variable that appears crucial in determining foreign direct investment, political stability, is seemingly omitted from the existing literature in this space. Failing to consider the impact of political stability on foreign direct investment might lead other researchers to overestimate the effect of hosting an international sporting event on the foreign direct investment inflows of the host country.

Next, we observe that in the presence of variables accounting for foreign direct investment inflows in the years preceding and succeeding the World Cup, there is an increase in the statistical significance of hosting a World Cup. While statistical significance does not necessarily imply causation, based on the existing literature and the controlled variables, we can assert with some confidence that the impact on FDI inflows appears to result from a country's decision to host a Cricket World Cup. However, this effect seems to be short-term, implying that it does not cause permanent changes to a country's FDI inflows.

Furthermore, for the countries in the dataset, certain factors such as inflation and the trade openness of the economy do not appear to directly affect the amount of foreign direct investment flowing into the country. While this is an intriguing finding, additional research

is needed to determine whether this result holds consistently across countries worldwide.

It is important to acknowledge that every economics paper has its fair share of limitations and shortcomings. One apparent limitation of this paper is the omission of a country's taxation policies and real rate of return from the analysis. Historical tax rate data is not widely available, making it challenging to control for this variable. In the future, including taxation policies as a control is imperative, given that existing literature emphasizes the significant role of a nation's tax structure in impacting foreign direct investment. Moreover, the current issue is the absence of historical real rate of return data for countries, which affects the outcomes of this paper, considering the crucial role the expected return of an investment plays in FDI inflows. Ideally, the inflation variable would be replaced with a rate of return variable but due to a lack of complete data, the inflation variable has been included in the paper. Lastly, one additional control to explore and account for in future research is the impact of liberalization policies in a nation on the foreign direct investment inflows of the country. Therefore, it is essential to bear these limitations in mind for future research improvements.

7 Conclusion

This research paper aimed to investigate the economic impacts of hosting the Cricket World Cup, specifically focusing on its influence on foreign direct investment (FDI) inflows in host countries. By employing econometric models and regression analysis on a panel dataset, the study sought to provide empirical evidence to evaluate the claims made by officials in host nations.

The results of the regression analyses yielded promising findings. In the first regression, which controlled for variables such as the size of the economy, trade openness, age dependency, real GDP, inflation, and large population, the World Cup dummy variable demonstrated statistical significance at the 5 percent level. Additionally, the control vari-

ables were largely significant, which, in combination with existing literature in the space, highlights their importance in understanding the impact of hosting a World Cup on FDI inflows. However, inflation did not exhibit statistically significant effects on FDI.

The second regression, incorporating the additional control variable of political stability, revealed that the inclusion of this variable caused a decrease in the significance of the World Cup variable. Nevertheless, the political stability variable itself exhibited high statistical significance, indicating its positive influence on FDI inflows. The results also suggested that the omission of political stability in earlier models of FDI may produce upward bias on the coefficient on the World Cup variable.

The third regression expanded on the second regression by considering spillover effects occurring three years prior to and three years after hosting the World Cup. By controlling for these periods, the statistical significance of the World Cup variable increased once again, indicating its substantial impact on overall FDI inflows. However, both the World Cup 3- variable (representing the three years prior to hosting) and the World Cup 3+ variable (representing the three years after hosting) returned statistically insignificant results, informing us about the fact that the impact of the World Cup on FDI inflows is basically a within-year, and a short-run effect.

In conclusion, the research findings provide empirical evidence that seems to support the notion that hosting the Cricket World Cup has a positive effect on foreign direct investment in host countries. The inclusion of political stability as a control variable underscores its importance in attracting FDI. Moreover, controlling for the three-year periods surrounding the event enhances the statistical significance of the World Cup variable, affirming that hosting the World Cup significantly impacts FDI inflows in the short run. These results contribute to a better understanding of the economic justifications cited by officials in host countries and shed light on the benefits associated with hosting large-scale sporting events like the Cricket World Cup.

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